



NordGen
Nordic Genetic Resource Center



norden
Nordic Council of Ministers



**NordGen Annual Review
2008**

In September 2007, the International Technical Conference on Animal Genetic Resources for Food and Agriculture was held in Interlaken, Switzerland. Two important documents aiming at preventing the genetic erosion of farm animal biodiversity and promoting the sustainable use of genetic resources were adopted: The Global Plan of Action for Animal Genetic Resources and the Interlaken Declaration on Animal Genetic Resources.

A new direction for farm animal genetic resources

BROAD ATTENDANCE

A total of 109 countries sent their delegations to the Interlaken Conference. The main organizer of the conference was FAO – the Food and Agriculture Organization of the United Nations.

Earlier in the 2000s, a total of 169 FAO member countries delivered their country reports on national animal genetic resources and their utilization and conservation to FAO. These reports contained the information that formed the basis for the FAO publication ‘The State of the World’s Animal Genetic Resources for Food and Agriculture’ published in 2007, but also they provided constructive and crucial information for planning the conference and designing the two Interlaken documents.

THE INTERLAKEN DECLARATION ON ANIMAL GENETIC RESOURCES

The Interlaken Declaration consists of 20 distinct statements on farm animal genetic resources and their importance.

In the Declaration, the sovereign rights of each state over its own animal genetic resources for food and agriculture are recognized. The Declaration reminds us that agricultural genetic resources are a part of our cultural heritage.

In the Declaration, negative effects of the extinction of local farm animal breeds on animal biodiversity are highlighted. In the long run, this is assumed to increase risks in the security of food production and diminish resources for rural livelihoods. In addition, it is pointed out that animal genetic resources are actually underutilized. Only a limited share of the global genetic diversity existing in each farm animal species is effectively used to produce food: genetically similar black-and-white Holstein cows are milked and the same chicken hybrids lay eggs in different parts of the world. Typically without prior testing of their adaptability and profitability for different biogeographic and production circumstances, while locally adapted breeds and their genes and gene combinations no longer have anymore economic importance in food production or rural development.



Black-sided Nordland Cattle, Norway



Light Sussex Photo: Liv Lønne Dille



Peasant goat, Ingelstad land race park, Sweden Photo: Lars Erik Wallin

The Interlaken Declaration emphasizes conservation through sustainable use of animal genetic resources. Also the active role of scientific research is acknowledged in order to increase our knowledge on animal genetic resources and their utilization in different environments and production conditions. Moreover, the Declaration clearly points out that there are major gaps in financial sources, inventories and characterizations of animal genetic resources, sustainable utilization, development and conservation. According to the Declaration, many actions need to be taken both at international and national levels in order to meet the requirements for sustainability in the utilization and conservation of animal genetic resources.

THE GLOBAL PLAN OF ACTION FOR ANIMAL GENETIC RESOURCES

The Global Plan of Action accepted at the Interlaken Conference lists many useful measures to be implemented in international and national strategies in order to prevent genetic erosion and improve the sustainable use of animal genetic resources. The needs of future food production and agriculture should be considered when actions and decisions are implemented now and in the near future on utilization and conservation.

The Global Plan of Action for Animal Genetic Resources has four main goals that should be implemented in policies on conservation and utilization of genetic resources:

- The characterization and inventory of current genetic resources and identification of risks and trends in the use of genetic resources. In practice, production and other traits of different breeds need to be characterized, the trend in census sizes followed, the parentage of individuals within each breed recorded and effects of socio-economic and cultural aspects followed on e.g. the popularity of different breeds.
- The sustainable development and use of animal genetic resources. The measures given in the Global Plan are hoped to promote sustainability in animal production. The considerations of food security and development of rural livelihoods are central when the sustainability of the production system is evaluated.

- The conservation of animal genetic resources through preserving genes and gene combinations of animals by conserving rare breeds, creating national policy and programmes and by establishing living and frozen gene banks (i.e. freezing semen, embryos and also oocytes in liquid nitrogen for long-term conservation purposes).
- National policies for animal genetic resources should be developed and the competence, financial resources and other relevant infrastructure and facilities of institutions responsible for genetic resources should be improved. In addition, national and international networking among these institutions should be improved.
- The Interlaken Declaration and the Global Plan of Action can be found at: www.fao.org/ag/againfo/programmes/en/genetics/angrvent2007.html

AFTER INTERLAKEN

The Global Plan of Action has been accepted by all FAO members and currently several national coordinators for the management of animal genetic resources within the FAO networks have informed FAO that the Interlaken documents will be implemented by developing national action plans. In addition, the Interlaken Conference has led to discussions on access and benefit sharing of animal genetic resources – which has had a crucial influence on the use and conservation of national plant genetic resources in the global context. The implementation of suggestions given in the Interlaken documents in strategic planning and practical work is a challenge also for the Nordic Genetic Resource Center.



Juha Kantanen