



Conservation of Agrobiodiversity in the Carpathians

Programme for endangered breeds and seeds

The Carpathian Mountains

The Arc of the Carpathian Mountains is situated along the Hungarian lowland plain over 1300 km length. These fold mountains which are rich in landscapes, different soils and regional climates extend across Poland, Czech Republic, Slovakia, Hungary, Ukraine and Romania. There, the farmers often lived in remote areas which were different in their environmental conditions. Due to these circumstances special breeding adaptations took place and a wide variety of domestic breeds and plant varieties developed.



The Actual Situation

Since the political changes have taken place, the states of the Carpathian Arc are forced to adapt modern techniques and structures from the Western countries. Many people migrate from the land, which enforces rationalisation and efficiency in agriculture. In this course old breeds and seeds vanish without being recorded nor appreciated in their special properties, their genetic and cultural historic value.

Already shortly after the fall of the iron curtain in the beginning of the 90ies SAVE Foundation



Participants of the workshop „Rare Breeds and Plant Varieties in the Carpathian Mountains“ 1999 after the visitation of the Suceavan gene bank Genbank in Romania.

started monitoring tours to all countries of the Carpathians and was therefore able to work intensely on the conservation e.g. of the Podgorska Red Cattle (Poland) and the Valachian Sheep (Slovakia). During these journeys many contacts were made with key persons in these countries. Finally, in the year 1999 the Monitoring Institute initiated a workshop with expert from all over the Carpathina countries in Suceava, Romania. It was the aim of this workshop to sensitise for the unique variability of the agricultural genetic heritage in the Carpathian Arc and to evaluate the situation in the single countries. Problems and measures for the protection of agrobiodiversity could be discussed with about 30 specialists and targets could be

set. Since this time there is a vivid contact between SAVE Foundation / Monitoring Institute and the national institutions in the Carpathians. A small but well functioning network came into existence, where project needs can be directly evaluated and expressed.

Carpathian Convention and perspectives

In May 2003 a historical environmental summit for the Carpathians took place in Kiev: ministers of the 7 countries bordering the Carpathians (with Serbia and Montenegro) agreed on a common convention for the conservation of the Carpathians. The Carpathian Convention shall – similar to the Alpine Convention – protect this special and ecologically sensible mountain region of Europe and promote its sustainable development. SAVE Foundation and Monitoring Institute were in the position to explain in detail the importance of the protection of agricultural genetic resources in the Carpathians at two preparative conferences. In article 11 of the convention the protection of agrobiodiversity was laid down under the title “Cultural heritage” and “Traditional Knowledge”:

For the development of regions weak in structure the original low input agriculture with its local well adapted domestic breeds and plants offers wide development chances. Suitable measures for the preservation of local breeds and seeds as well as the marketing of their tasty products (labelling) are implemented to offer new prospects to the rural people and will support also landscape management and sustainable tourism (see paper "Importance for Regional Development").

Project Structure

I. Recording of Basic Data

First the actual situation of endangered breeds and seeds in the Carpathian Arc has to be assessed. For this a **questionnaire** is elaborated and sent to the contact persons in the existing network. Further key persons and people interested in the matter shall be mobilised by surveys and contacting. Apart from that investigations in literature and internet are made. These shall especially be made in the libraries of the former Austrian-Hungarian-countries as there in the beginning of the 20th century breeding and plant cultivation were in the centre of interest. The evaluation of these **investigations** will in most cases lead to detailed **basic data**.



Tatra-dwarf-cattle: lost?

II. Search Tours and Knowledge Exchange with Experts

In a second step **situation analyses** in the region shall provide starting points for concrete conservation measures. This **exchange** of information with local experts and **search tours** as an empirical evaluation in the villages and farms are necessary to get definite actual data on the situation of single domestic breeds and cultivated plant varieties, where the basic data were unsatisfactory or not available. Search tours often lead to very rare or even officially vanished stocks. It may become necessary to **typify single breeds and seeds** within this project. Furthermore concrete conservation measures can be initiated in situ or at least can the necessities and needs be assessed. Here it must be considered that many breeds and plant varieties could not be recorded by local experts up to now.



bean varieties: a small part of the diversity of vegetables!

III. Evaluation

Due to the data and information assessed (dissemination, population size, etc.) a **status of endangerment** according to the FAO criteria is defined. Further criteria, as, for example, the conservation situation, existing activities and initiatives, supports by the governments, knowledge of the breed or seed, etc., give a frame for the estimation of a general **need for action**. This evaluation is in the form of a **report** and published on CD-Rom (in English). The results of the study is especially distributed to the key persons in the Carpathians. Local regional and over-regional public relation work in co-operation with the Carpathian Convention shall direct a focus on the issue and sensitise the public interest.

The Monitoring of Agrobiodiversity in the Carpathians is one starting point in the direction of sustainable handling the brittle situation between progress on one hand and the conservation of cultural heritage and genetic resources on the other hand. Special focus of the Project is **sustainability**. After an assessment of the situation, endangerment and need for action as well as the experiences made in the project area, it will be possible to observe and accompany the development on the long term. For this reason, an **indicator system** shall be elaborated to make a **long-term monitoring** of agrobiodiversity in the Carpathians possible. In this way an early warning can be made, when the situation becomes worse, to preserve the valuable genetic heritage on the long term.

IV. Conservation Work

With the first steps of the project an increasing consciousness for agrobiodiversity is pursued. Now, the motivation to start concrete local **conservation measures** are promoted by a **workshop**. Adapted conservation strategies and possibilities are expounded and first measures in situ are initiated.

An **emergency fond** for acutely endangered remnant populations of rare breeds and seeds makes a fast action without bureaucracy possible. Animals can be saved from slaughtering and farmers can be convinced for a further cultivation of rural species. Therefore it is necessary to have an emergency fond during the monitoring works already.



Hucul horses this old robust breed has been raised in various countries in the Carpathians (© Horejs)

Realisation of the Programme in Modules

The need for action in the Carpathians ist very large. To give an overview on the situation, the programme is divided in independent modules. If not the whole programme can be realised by one funding partner, it is possible to finance parts of it. Another advantage is the possibility to promote the single modules according to their respective capabilities.

Modules Cultivated Plants

- Module P1: Monitoring and Conservation of autochthonous cereals
- Module P2: Monitoring and Conservation of fruit and berry varieties
- Module P3: Monitoring of vanished or abandoned cultivated plants

Modules Domestic animals

- Module T1: Evaluation and Conservation of the Hucul-Horse
- Module T2: Evaluation and Conservation of the Carpathian Buffalo
- Module T3: Evaluation and Conservation of the Dorna-Cattle
- Module T4: Monitoring of vanished breeds (Mocanitsa- & Tatra-Cattle, Stokli-Pig etc.)

Accompanying papers on the single modules are attached to this project description