

Assessment of Capacity-building Needs: Access to Genetic Resources and Benefit-sharing, Conservation and Sustainable Use of Biodiversity Important for Agriculture, Forestry and Research – Czech Republic

Project UNEP/GEF - Sub-programme: Biodiversity Enabling Activities

Project implemented under the auspices of the Ministry of the Environment from August 2004 to December 2005 focused on conservation status and access and benefit-sharing principals applied so far in the Czech Republic and proposed measures in the following **main areas**:

- Agricultural and garden crops
- Farm animals
- Forest tree species
- Botanical Gardens
- Zoological Gardens
- Fungi

The following **methods** were used to get required information, made inventory and formulate proposals:

Identification and consultation with stakeholders

Information and experience exchange during thematic workshops

Analysis of information obtained and proposal of recommendations



Valuable forests and meadows are managed in corresponding way mainly in Protected Nature Areas (Krkonoše National Park).



Biodiversity of natural meadows.

Within the Project nine workshops were organized (besides six related with application in agriculture and forestry). The results were summarized in the Project Report (in English) which is one of the total 10 publications based on the Project outcomes. Moreover several case studies and background documents were prepared by experts (in total 36 participating in the Project), including studies analysing legal aspects of genetic resources, their access and benefit-sharing and relation with intellectual property rights.



Fungi – important group of genetic resources with traditional as well as potential use.



Buckwheat (*Fagopyrum esculentum*) represents important traditional crop.

Basic steps of the Project implementation

Surveys on the present status of genetic resources in all focus areas were made.

Related stakeholders were contacted and their list compiled.

Access to genetic resources and sharing of their benefits (ABS) were analysed with respect to international activities and national capacities.

SWOT analysis was used to identify strong and weak points.

In line with international legally binding documents and national legislation, models of the Material Transfer Agreement were prepared in the sphere of agricultural crops and farm animals and their use recommended to all providers of genetic resources.

Possibility to use the IPEN system in Czech Botanic Gardens has been studied and an international workshop on this topic organized.

Analysis of the Bonn Guidelines implementation in the Czech Republic was made, with respect to general measures, role and responsibility of users and providers, participation of stakeholders, measures taken in ABS implementation and other measures.

Main outputs of the Project were summarized, strategy and further required measures proposed.

Conclusions and Proposals

Surveys done within the Project confirm that valuable genetic resources exist in the Czech Republic. Nevertheless results show differences between individual observed groups as to character of genetic resources conserved, species and intraspecies variability and number of conserved plant and/or animals or fungi, institutional and legislation status, technical conditions, safety of conservation, evaluation and documentation, regeneration measures, skilled staff and funds available, as well as awareness of genetic resources importance. Following measures are recommended for improvement.



Farm animals genetic resources are conserved often thanks to small private owners.

Status of genetic resources and their accessibility

- Enhance effectiveness in management and use of genetic resources collections.
- Better control and monitor collections health status.
- Ensure regeneration of genetic resources.
- Improve evaluation and characterization of genetic resources in collections through investment to and use of new technology (DNA methods, cryo-conservation, etc.).
- Develop systematic inventory and monitoring of genetic resources, with special attention to local breeds, landraces (farm animals, agricultural crop), clones and races.
- Enhance role of gene banks, repositories and collections in conservation and reproduction of endangered and valuable genetic resources (as to BG consider institutionalization of "National Collection").
- Intensify research and monitoring in nature protected areas.
- Amend national legislation in line with development in corresponding global conventions and European regulation.
- Develop research projects both at national level (coordination with related institutions and National Programme), as well as through participation in regional and international projects.
- Develop wider international cooperation and exchange of genetic resources, experience and information.
- Improve sectoral and central databases and registers, as well as their interlinks (genetic resources, projects, supportive programmes and funds, in Botanic Gardens digitalisation of data).
- Stabilize financial resources, guarantee valorisation due to inflation and appropriate form of providing funds.
- Promote information, education and awareness on genetic resources and their importance (school curricula, publications, workshops, media, communication between stakeholders, etc.).

Benefit-sharing of genetic resources

- Enhance reciprocal services both at national and international levels (esp. genetic resources samples, information and experience sharing).
- Extend "in kind" contribution (access to databases, conservation of genetic samples, lectures, courses, workshops and conferences, expertise).
- Intensify participation in international activities, including Czech Republic Development Assistance.



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