

IN SITU AND ON-FARM CONSERVATION NETWORK

3.8. In situ and On-farm Conservation Network

WGs: On-farm Conservation and Management; Wild Species Conservation in Genetic Reserves.

The *In situ* and On-farm Conservation Network Coordinating Group consisted of seven members: Nigel Maxted, United Kingdom (Network Coordinator); Lothar Frese, Germany; Paul Freudenthaler, Austria; José Iriondo, Spain; Valeria Negri, Italy; Zdeněk Stehno, Czech Republic; and Jens Weibull, Sweden.

The First Meeting of the two Working Groups on “Wild Species Conservation in Genetic Reserves” and “On-farm Conservation and Management” was held in Funchal, Madeira, Portugal, on 16 September 2010, jointly with the final meeting of the project “An Integrated European *In Situ* Management Work Plan: Implementing Genetic Reserves and On Farm Concepts” (AEGRO).

The WGs were involved in the activities of the AEGRO project, which has developed methodologies for *in situ* management of both crop wild relatives (CWRs) and landraces (LRs). The former methodology is complemented by the CWR *In Situ* Strategy Helpdesk which is available online at <http://aegro.jki.bund.de/aegro/>. It assists national PGR programmes with the systematic identification of candidate genetic reserve sites. The next step towards progress in data management consisted in the integration of the Population Level Information System (PLIS) into the Crop Wild Relative Information System (CWRIS) and in building a European inventory of landraces. The PGR Secure project “Novel characterization of crop wild relative and landrace resources as a basis for improved crop breeding”, funded under the EU Seventh Framework Programme (FP7) will further address these needs. This project will include, *inter alia*, the establishment of Europe-wide national CWR and landrace checklists and European inventories, as well as national and generic strategies for European CWR and landrace conservation actions, as well as developing improved methodologies for conserved CWR and landrace diversity within breeding programmes.

The On-farm Conservation and Management WG reviewed the national experiences on threats to landraces, inventories and promoting use. Creating a clearing-house mechanism for landraces (i.e. a European inventory) will be facilitated by the availability of the draft standards prepared by the WG (see http://www.ecpgr.cgiar.org/Networks/Insitu_onfarm/Docs/OnfarmDescr_DRAFT271107.pdf) which represent a solid base for developing agreed standards and of a specific Web site (see www.sharinginformation.eu/) which can be used in reaching European stakeholders and institutions aware of landraces maintained on-farm.

The On-farm Conservation and Management WG and the Wild Species Conservation in Genetic Reserves WG surveyed the status of progress of National CWR and LR conservation in each of the participants’ countries by reviewing national progress towards the establishment of specific indicators of maintenance. The results presented indicate for the majority of European countries that very few had made significant progress, except that the majority of countries had some *ex situ* samples of CWR germplasm in the genebanks. The WGs used a “Horizon Scanning” exercise to identify likely priorities for the future. Notable among the results of the short-term CWR priority setting were the requirements for systematic genetic reserve implementation to conserve *in situ* CWR diversity at both individual national and European scales, wherever possible the integration of *in situ* CWR conservation into on-farm initiatives, the undertaking of national genetic gap analysis of CWR species as a basis for the establishment of national CWR conservation action plans, the incorporation of legislative protection for CWR species and genetic diversity at both national and European levels and promotion of closer conservationist/breeder links and through that link, to enhance CWR diversity utilization. For short-term LR priority the production of national LR inventories and the generation and implementation of a National LR Conservation Strategy is of the highest priority. While in terms of the priorities between 2020 and 2035 identified by horizon scanning, the likely highest priority CWR issues are implementing a European network of CWR genetic reserves (most likely in association with the existing Natura 2000 network of protected areas), systematic IUCN Red Listing of European CWR species and complementing the current criteria to take into account threat assessment of intra-specific genetic diversity, promotion of more-participatory management and monitoring

models for CWR conservation, and improving national CWR inventories and prioritization of inventory on economic value to better address breeders' demands. The longer-term priority issues for LR were identified as improved European and national legislation to promote LR on-farm conservation, research into the value of unique crop diversity held within European home gardens, the establishment of a European on-farm inventory of LR, former breeders' varieties and farm saved seeds, the development of participatory management and monitoring models for LR conservation and the promotion of biodiversity-friendly agriculture systems.

The Madeira proceedings will be published in 2011 (Maxted et al. 2011, see section on Publications).

The project proposal for "Novel characterization of crop wild relatives and landraces resources as a basis for improved crop breeding" (**PGR Secure**), submitted in January 2010 to the EU FP7 funding scheme for Collaborative Projects (KBBE.2010.1.1-03 - Characterization of biodiversity resources for crop wild relatives to improve crops by breeding) was successful and is due to start in 2011.

Outlook for 2011: The **PGR Secure** project will organize a joint workshop with ECPGR on crop wild relatives and landraces in Palanga, Lithuania, 7-9 September 2011. The workshop will involve the members of the Wild Species Conservation in Genetic Reserves and On-farm Conservation and Management Working Groups, as well as National Inventory Focal Points, offering training and guidance.

The focus of the National Inventory Focal Points will be:

1. To provide training and guidance on the creation and updating of the national CWR and LR inventories.
2. To make progress on the mechanisms to upload CWR and LR data onto EURISCO.

As large part of the funds allocated to this Network were spent for the meeting in Madeira, and also considering that PGR Secure will be a framework to make progress with the Networks workplan, the Second Meeting of the WG on On-farm Conservation and Management, that was planned for September 2012, was cancelled by decision of the SC at its 12th Meeting in Bratislava.