

Tables 1 to 6: Objectives and targets of the [Plant Genetic Resources Strategy for Europe](#) (PGR Strategy) and associated priorities for ECPGR Phase XI

Tables correspond to the objectives as identified in section 2 (Conserving and sustainably using plant genetic resources) of the PGR strategy.

Priorities are indicated as follows: **P1 – high** (starting or continuing at the beginning of Phase XI); **P2 – medium** (based on mid-term progress in the implementation of P1 activities and depending on available funds, could be supported by ECPGR in the 2nd part of Phase XI); **P3 – low** (Activities are too premature to be supported by ECPGR in Phase XI and should be considered for implementation during Phase XII)

Priorities highlighted in **green** (P1) or **blue** (P2) are open for possible Grant Scheme funding in 2024

Table 1: Expanding *in situ* conservation of crop wild relatives and wild food plants

PGR Strategy for Europe Objectives	PGR Strategy for Europe Targets	Responsibility (main level/responsible bodies)	Type of action that ECPGR could undertake	Potential sources of funding to cover the ECPGR action	Executive Committee (ExCo) proposal for activities to be included in Phase XI work plan
By 2030, Europe has significantly increased its Crop Wild Relatives (CWR) and Wild Food Plants (WFP) inventories to enable a more comprehensive view of available CWR and WFP genetic diversity, to better understand how this diversity is distributed across the region and its neighbouring countries, and to identify which are the priority populations to actively conserve.	1. All countries in Europe have included CWR and WFP conservation in national PGR programmes and actions	National	Support of Crop Wild Relatives WG activities contributing to Target 1	National funds/ European Commission (EC) project or external donor/ ECPGR Grant	<ul style="list-style-type: none"> • P1 - Disseminate methodologies and support documents and organize webinars on how to do diversity and gap analysis and how to develop National CWR strategies. • P1 - Develop or improve an ECPGR CWR Portal compiling links to existing national checklists and inventories and the respective diversity and gap analysis to determine priority CWR populations. • P2 - Work towards the preparation of an online map of European hotspots. • P3 - CWR Working Group to develop Wild Food Plants conservation guidelines.
	2. All countries in Europe have identified CWR priority taxa and populations – including those in protected areas – forming the basis of their national and a European <i>in situ</i> network of CWR	National	Support of Crop Wild Relatives WG activities contributing to Target 2	National funds EC project or external donor ECPGR Grant	<ul style="list-style-type: none"> • P1 - Extend the list of countries that prepare (or have already prepared) national inventories or lists for CWR priority taxa and provide <i>in situ</i> population data to EURISCO.
By 2030, the European countries have elaborated and approved National CWR and WFP conservation strategies , and set up and manage a network for <i>in situ</i> management of priority CWR populations as part of an integrated CWR conservation strategy for Europe, in which active and sustainable long-term <i>in situ</i> conservation actions are implemented at national level.	3. Europe has a coherent, comprehensive, coordinated and centralized documentation of CWR and WFP <i>in situ</i> diversity.	European/ EURISCO/ Doc&Info WG/Crop Wild Relatives WG	Implement extension of EURISCO	ECPGR-EURISCO budget line / German-funded project	<ul style="list-style-type: none"> • P1 - Extension of EURISCO is being implemented through German-funded ECPGR project. • P2 - Manage and update continuously the CWR <i>in situ</i> section in EURISCO.
	4. CWR priority populations within the European network of CWR are managed and monitored following agreed guidelines for the <i>in situ</i> management of CWR populations.	National and Crop Wild Relatives WG	Agree on demographic and monitoring techniques. Monitoring as proof of concept	National funds/ ECPGR Grant / EC project	<ul style="list-style-type: none"> • P2 - Working Group to obtain an ECPGR agreement on minimum quality standards for <i>in situ</i> management of PGR, and develop a monitoring and reporting system. (also based on PRO-GRACE activity, which has planned to “develop methods and minimum quality standards for <i>in situ</i> including CWR and WFP”- see below). • P3 - Implement the above-mentioned monitoring and reporting system.
	5. <i>In situ</i> conserved CWR populations are safely backed-up in <i>ex situ</i> collections and made available to users.	National	Coordination/monitoring by Crop Wild Relatives WG	National funds/ ECPGR Grant	<ul style="list-style-type: none"> • P2 - Working Group to cooperate and advise the countries to implement the necessary safety back-up for a number of populations with the support of genebanks' network.

Table 2: On-farm plant genetic resources conservation and management

PGR Strategy for Europe Objectives	PGR Strategy for Europe Targets	Responsibility (main level/ responsible bodies)	Type of action that ECPGR could undertake	Potential sources of funding to cover the ECPGR action	ExCo proposal for activities to be included in Phase XI workplan
<p>By 2030, an inventory of on-farm landraces has been made in Europe, based on national inventories, compiled in close collaboration with local actors and organizations and with periodic updating.</p> <p>By 2030, valuable landraces' identified diversity is comprehensively conserved on-farm, complemented with <i>ex situ</i> back-ups, and is made available for sustainable use.</p>	<p>1. All countries in Europe include on-farm PGR conservation and management in national programmes and actions.</p>	<p>National</p>	<p>Support of On-farm WG activities contributing to Target 1</p>	<p>National funds/ EC project or external donor/ ECPGR grant</p>	<ul style="list-style-type: none"> • P1 - Develop or improve an ECPGR Portal compiling links to existing national on-farm conservation and management strategies, programmes and initiatives. • P1 – Carry out a survey to identify and describe ongoing on-farm PGR conservation and use examples at national and regional levels (Objectives; history; material and methods; links between <i>ex situ</i> and on-farm management; strengths, weaknesses and opportunities). Focus on arable crops, vegetables, small fruits and top fruits (e.g. orchard meadows).
	<p>2. A European Inventory of on-farm genetic diversity is formally established; a minimum set of passport and characterization descriptors for data exchange is defined.</p>	<p>EURISCO/ Doc&Info WG/On-farm WG</p>	<p>Design extension of EURISCO and implement it</p>	<p>ECPGR-EURISCO budget line/ ECPGR grant/ External donor</p>	<ul style="list-style-type: none"> • P2 - Set up a TF involving EURISCO/ Doc&Info WG/On-farm WG to design the structure and requirements for a European Inventory of on-farm landraces (also based on methods and standards developed by PRO-GRACE for inventorying <i>in situ</i> maintained PGR) – Expertise on all types of crops should be present in the TF. • P3 - Implement the necessary platform to receive on-farm data. • P2 - Provide training workshops on the existing methodologies and criteria for identifying material to be inventoried. • P3 - Support on-farm inventory compilation in pilot countries and provision of data to the centralized platform.
	<p>3. All landraces recorded in the European Inventory have <i>ex situ</i> backup in national genebanks.</p>	<p>National</p>	<p>Coordination/monitoring by On-farm WG</p>	<p>National funds/ ECPGR Grant</p>	<ul style="list-style-type: none"> • P3 - Working Group to coordinate the necessary safety back-up for a number of pilot countries and selected on-farm landraces.
	<p>4. Conservation and management guidelines for on-farm landraces have been defined in the context of the European collaborative programme and are implemented at local level.</p>	<p>National and On-farm WG, in collaboration with stakeholders¹ that are engaged in diverse conservation and management schemes</p>	<p>Coordination/monitoring by On-Farm WG</p>	<p>National funds/ ECPGR Grant</p>	<ul style="list-style-type: none"> • P1 - Working Group to advise and support the implementation of conservation and management guidelines in a number of countries for selected crops.

¹ Including farmers, amateur gardeners, farmer/gardener networks, seed savers, researchers, local communities, genebanks, community seed bank, NGOs, etc.

Table 3: Consolidating and sustaining ex situ conservation

PGR Strategy for Europe Objectives	PGR Strategy for Europe Targets	Responsibility (main level/ responsible bodies)	Type of action that ECPGR could undertake	Potential sources of funding to cover the ECPGR action	ExCo proposal for activities to be included in Phase XI workplan
<p>By 2030, the GR diversity in European genebanks is conserved reliably and made accessible for sustainable use, by improving the efficiency and efficacy of the European genebank infrastructure. Thus, the European <i>ex situ</i> conservation system will be raised to a level of excellence in terms of i) long-term quality (conservation management, viability, genetic integrity and phytosanitary protection), and ii) accessibility of conserved material to users, thereby positioning Europe as a primary contributor to the global PGR conservation and use effort.</p> <p>By 2030 European genebanks ensure the long-term conservation of PGR and provide access to appropriate samples of the genetic diversity that has occurred and/or is still occurring in European agriculture and in-nature. This covers the diversity needed for direct use, research and</p>	<p>1. The AEGIS Certification System, guaranteeing the quality of genebank operations, has been developed and is widely recognized and implemented in Europe through a decentralized network of AEGIS-certified genebanks.</p>	<p>Task Force / Steering Committee</p>	<p>Develop the Certification System</p>	<p>EU- funded project (currently through PRO-Grace project) External donor</p>	<ul style="list-style-type: none"> • P1 - A blueprint for a genebank quality certification system will be a deliverable of PRO-Grace project (Month 18 = Month 6 of Phase XI)².
	<p>2. Up to one third of European genebanks have been AEGIS-certified (100–150, including all those with more than 1,000 accessions), relying when needed on a capacity-building and support system to facilitate their upgrading to reach the AEGIS certification level.</p>	<p>National/Task Force/ Crop and Cryo WGs/ Secretariat</p>	<p>Implement Certification System and capacity-building services, including cryo, phytosanitary and duplication</p>	<p>National Funds EU-funded project External donor ECPGR Grant /AEGIS budget line</p>	<ul style="list-style-type: none"> • P1 - Certification system to be implemented, based on agreed mechanism delivered by PRO-Grace. (Possible role of ECPGR Secretariat - Budget may not be necessary) • P1 - Capacity building services to be organized within the framework of the genebank managers' network, also based on blueprint provided by PRO-Grace at Month 22= Month 12 of Phase XI)³.
	<p>3. The coordinated European collection (i.e. the combined collections of AEGIS-certified genebanks) contains a substantial part of the accessions conserved in European genebanks. All these accessions are conserved to AQUAS standards (see section 2.3.1) and fully available from the AEGIS-certified genebanks via a request system through EURISCO. All AEGIS material is safety-duplicated possibly in another European country and/or in the Svalbard Seed Vault and/or at one of the CGIAR Centres</p>	<p>National/Genebanks EURISCO</p>	<p>Implement genebank review system</p>	<p>National Funds ECPGR Grant/ EURISCO budget lines</p>	<ul style="list-style-type: none"> • P1 - Support to countries to identify and include material into AEGIS, including regeneration and safety-duplication. • P1 - Implementation of genebank review system by the network of genebank managers, taking into account Crop Trust certification experience and global strategies. • P2 - Extension of EURISCO to include a centralized genebank ordering system.

² PRO-Grace has a Work Package dedicated to “Quality-certified *ex situ* and *in situ* management” with a task to “Clearly define minimum quality standards for the essential genebank [management] (including DNA barcoding, sampling of heterogeneous accessions, minimization of genetic drift, long-term conservation, phytosanitary assessment, minimum information provided, availability of the materials)”. Deliverable will be “a blueprint for a quality certification system comprising the quality standards, a quality management system and an auditing and certification system. These components will incorporate, as appropriate, already available standards and systems (FAO Genebank Standards, ECPGR’s AQUAS, Crop Trust’s experiences in the CGIAR Genebank Platform, IPK, CGN), as well as standards for quality management systems (ISO 9001). Please note: A “blueprint” is a “detailed plan”.

³ One of the PRO-Grace planned deliverable is “A blueprint for a capacity building programme, supporting genebanks and in situ/on farm conservation networks in reaching minimum quality standards and allowing genebanks to become certified”.

PGR Strategy for Europe Objectives	PGR Strategy for Europe Targets	Responsibility (main level/ responsible bodies)	Type of action that ECPGR could undertake	Potential sources of funding to cover the ECPGR action	ExCo proposal for activities to be included in Phase XI workplan
<p>plant breeding that contributes to the continuous adaptation of European agriculture to current and future needs.</p>	<p>4. A comprehensive assessment of European plant genetic resources and diversity required by users for present and future needs in food and agriculture and the corresponding gaps in the conservation system has been completed and is regularly updated.</p>	<p>National and regional (Crop WGs)</p>	<p>Crop by crop assessment</p>	<p>National funds/External donor / ECPGR Grant</p>	<ul style="list-style-type: none"> • P2 - Crop Working Groups to develop methodology to assess crop diversity required and gaps in the conservation system in cooperation with users, as a dynamic process, for current and future needs.
	<p>5. The genetic diversity maintained in European AEGIS-certified genebanks includes: i) the vast majority of the European landraces; ii) a wide range of CWR diversity of crops grown in Europe; iii) a representative selection of developed varieties, and iv) other relevant material related to crops grown in Europe, including WFP</p>	<p>National and regional (Crop WGs)</p>	<p>Crop by crop assessment</p>	<p>National funds / External donor / ECPGR Grant</p>	<ul style="list-style-type: none"> • P2 - Crop WGs, in collaboration with CWR and On-farm WGs, assess and remedy to gaps in <i>ex situ</i> genebanks, including through collecting missions. • P2 - An exhaustive inventory of the genetic diversity conserved in all national or local genebanks maintaining and characterizing GR – outside the network of AEGIS certified genebanks – is made to enlarge the potential of European genetic diversity to be conserved in a long-term perspective. • P3 - <i>Countries encourage the development of cooperative work between their national AEGIS – certified genebanks and other local or national genebanks to ensure that all original genetic diversity held in genebanks outside AEGIS-certified ones be conserved in a long-term perspective.</i>

Table 4: Strengthening a comprehensive information system for plant genetic resources for food and agriculture (Documentation)

PGR Strategy for Europe Objectives	PGR Strategy for Europe Targets	Responsibility (main level/ responsible bodies)	Type of action that ECPGR could undertake	Potential sources of funding to cover the ECPGR action	ExCo proposal for activities to be included in Phase XI workplan
<p>By 2030, the NFPs are supported in their activities to collect the passport data of all PGR genebanks in their countries and upload them to EURISCO. They are trained appropriately (e.g. on data standardization and quality), and feel part of a network that provides mutual support. The NFPs play an active role in supporting the genebanks in their country in improving the quality of the data, and support actors in the <i>in situ</i> community in providing access to their data. EURISCO grows to become a respected, well-known and well-used repository of European PGR passport data.</p> <p>By 2030, provide publicly available quality phenotypic data to EURISCO that is collected using standardized methods and in collaboration with various public and private partners. EURISCO acts as the phenotypic dataset's repository.</p> <p>By 2030, EURISCO comprehensively applies the Findable-Accessible-Interoperable-Reproducible (FAIR) principles, and the NFPs are trained to also adopt the principles for local data sources (see 2.5.1). EURISCO's data governance and management are improved to reach an acceptable high standard. As a result, EURISCO becomes a trusted European and Global open-access database repository.</p>	<p>1. The EURISCO network of National Focal Points is optimally supported.</p>	<p>National / EURISCO</p>	<p>Training workshops</p>	<p>National funds / ECPGR Grant / ECPGR-EURISCO budget line</p>	<ul style="list-style-type: none"> • P1 - Training workshops for <i>ex situ</i> and <i>in situ</i> National Focal Points (NFPs). • P3 - Training workshops for on-farm NFPs.
	<p>2. EURISCO contains high-quality passport data of all European <i>ex situ</i> collections, progressively extended to include actively-managed <i>in situ</i> CWR populations and appropriate on-farm landraces data.</p>	<p>National / Subregional EURISCO</p>	<p>Training workshops</p>	<p>National funds / ECPGR Grant or ECPGR-EURISCO budget line</p>	<p>P1 - Training workshops for <i>ex situ</i> and <i>in situ</i> NFPs.</p>
	<p>3. NFPs assure access to all publicly-available quality phenotypic data related to the conserved PGR, in collaboration with various public and private partners. Access is provided initially via inclusion in EURISCO.</p>	<p>National / Subregional</p>	<p>Crop WG support for data gathering and transfer</p>	<p>National funds / ECPGR Grant</p>	<ul style="list-style-type: none"> • P1 - Compilation and transfer of existing Characterization and Evaluation data to EURISCO.
	<p>4. European genebanks and other PGR holders have improved (or can improve) their data management practices through access to, and use of facilitating tools, resources and services, having adopted (or allowing them to adopt) the FAIR principles and becoming part of the open data community.</p>	<p>Genebanks</p>	<p>Training workshops</p>	<p>External donor / ECPGR Grant or ECPGR-EURISCO budget line</p>	<p>P1 - Training workshops for genebank information system officers and <i>ex situ/in situ</i> NFPs to foster cooperation, and based on consultation with WG Chairs and the assessments of local needs reported by the NFPs.</p>
	<p>5. Both data in EURISCO and the associated IT infrastructure are compliant with the FAIR principles, allowing better use of the data by a wide community of users across sectors and domains.</p>	<p>EURISCO</p>	<p>EURISCO development</p>	<p>ECPGR-EURISCO budget line</p>	<ul style="list-style-type: none"> • P2 - Development of EURISCO, based on EURISCO work plans. (EURISCO budget)
	<p>6. EURISCO becomes a trustable repository in the arena of European and global open-access databases with acceptably high governance and data-management standards</p>	<p>EURISCO</p>	<p>EURISCO development</p>	<p>ECPGR-EURISCO budget line</p>	<ul style="list-style-type: none"> • P1 - Development of EURISCO, based on EURISCO work plans. (EURISCO budget)

The EURISCO budget can be complemented by Grant Scheme activities. Workplans are prepared annually by the EURISCO Coordinator/EURISCO Advisory Committee

Table 5: Promoting sustainable use of PGR

PGR Strategy for Europe Objectives	PGR Strategy for Europe Targets	Responsibility (main level/responsible bodies)	Type of action that ECPGR could undertake	Potential sources of funding to cover the ECPGR action	ExCo proposal for activities to be included in Phase XI workplan
<p>By 2030, assure access to well-documented genetic diversity that is conserved <i>ex situ</i> and, where and as appropriate, <i>in situ</i> in Europe.</p> <p>By 2030, PGR crop portals for European crops have been established and maintained.</p> <p>By 2030, promote and secure commitment for targeted phenotypic and genotypic characterization and evaluation of European PGR and improve digitization, harmonization, availability and exchange of existing and newly-generated PGR characterization and evaluation data for private and public actors.</p>	<p>1. Collections of PGR in Europe are increasingly characterized and evaluated under standard conditions, as well as genotyped with suitable sets of molecular markers.</p>	<p>EVA Network</p>	<p>Implement public–private partnerships</p>	<p>ECPGR Budget / EVA budget line or Grant Scheme</p> <p>ECPGR project / External donor / National funds / Support From EU-project AGENT for the Wheat/Barley EVA Network</p>	<ul style="list-style-type: none"> • P1 - Continuation of existing EVA Networks. • P1 - Support for the creation of other crops public–private partnerships, including attention to the possibility to adapt the EVA concept to perennial plants such as fruit trees.
<p>By 2030, achieve a coordinated and systematic use of CWR genetic diversity in research and crop improvement.</p> <p>By 2030, farmers and civil society actors are better enabled to add value to European landraces through participatory breeding methodologies such as evolutionary breeding, thus contributing to crop diversity in landscapes and over time.</p>	<p>2. Data and accessions in the public domain, including those with relevant agronomic and quality traits identified at molecular level, are available to users through open centralized information systems, including Crop Portals.</p>	<p>National Research Centres / Genebanks</p> <p>Doc&Info WG / EURISCO</p>	<p>Support of Crop WGs</p>	<p>National funds / EU project or External donor / ECPGR Grant</p> <p>ECPGR-EURISCO budget line</p>	<ul style="list-style-type: none"> • P2 - Based on crop-specific WG proposals, set up Crop Portals to facilitate access to information about PGR targeted to specific user groups. • P2 - Infrastructure for data provisioning of the Crop Portals from EURISCO.
<p>By 2030, more diversified European agricultural and horticultural production systems are established for the benefit of sustainable food production, entrepreneurial development, and long-term management of PGR.</p>	<p>3. A wider use of pre-breeding of CWR and participatory-breeding on landraces on-farm generates added value to the unique diversity of these materials.</p>	<p>Research consortia/ Genebanks / Stakeholders</p>	<p>Support of Crop WGs</p>	<p>EU-funded project External donor / Grant Scheme National funds</p>	<ul style="list-style-type: none"> • P2 - Promote participatory use and evaluation of PGR, especially climate-resilient and low-input, underutilized crops.
	<p>4. All elements of existing relevant legislation have been reviewed, and elements of previously developed disincentives for (small-scale) producers of diversified plant propagation material, are eliminated, where appropriate</p>	<p>Task Force involving crop and thematic WGs</p>	<p>Carry out analysis</p>	<p>External donor / ECPGR Task Force budget line</p>	<ul style="list-style-type: none"> • P2 - Set up Task Force involving crop and thematic WGs, to carry out analysis of existing legislation, including access to PGR phytosanitary issues and other legal constraints and disincentives limiting conservation and use of PGR diversity.

Specific budget lines can be made available for TF activities.

Table 6: Developing a system to monitor European conservation and sustainable use of PGR (Monitoring)

PGR Strategy for Europe Objectives	PGR Strategy for Europe Targets	Responsibility (main level/responsible bodies)	Type of action that ECPGR could undertake	Potential sources of funding to cover the ECPGR action	ExCo proposal for activities to be included in Phase XI workplan
<p>By 2030, sets of indicators of genetic resource conservation and use are developed/adapted and agreed by all stakeholders involved, and integrated and deployed within monitoring strategies to ensure that genetic diversity is maintained or increased in Europe</p> <p>By 2030:</p> <p>i) The proposed European coordination and information centre for conservation and sustainable use of agricultural genetic resources becomes the hub to gather and publish PGR conservation and use data provided by local and national networks under the guidance of ECPGR National Coordinators.</p> <p>ii) Trends in the conservation and sustainable use of PGR are assessed, analyzed and published every 5 years and necessary corrective measures are proposed.</p>	<p>1. By 2025, sets of relevant indicators and associated baseline data to be collected for monitoring activities under this Strategy, have been consensually defined by all involved stakeholders.</p> <p>2. By 2030, a sound system for the collection of all relevant baseline data has been set up and data are being actively collected and compiled, providing the baseline for further monitoring.</p> <p>1. Trends in the conservation and use of PGR in Europe are being monitored, and the information from local, national and regional levels is compiled and available via the European coordination and information centre for conservation and sustainable use of agricultural genetic resources.</p> <p>2. Information about trends in the conservation and use of PGR in Europe is readily available and regularly disseminated through different forms to PGR managers and users, policymakers and the wider public.</p> <p>3. Europe is actively and efficiently contributing to international reports on monitoring of conservation and use of genetic resources.</p>	<p>Task Force and WGs</p> <p>Next Phase XII</p> <p>Next Phase XII</p>	<p>Define and reach agreement on indicators</p>	<p>ECPGR Task Force budget line</p>	<ul style="list-style-type: none"> • P2 - Set up a Task Force involving different categories of users (breeders, farmers, NGOs, etc.), to define indicators and associated baseline data to be collected for monitoring activities under the PGR Strategy (avoiding overlap with existing monitoring mechanisms).

Only the first item relates to Phase XI. A budget line for TF activities may be created