		ECPGR – Phase X		
		***Long Term goal**: Stakeholders in Europe collaboratively, rationally and effectively conserve ex situ and in situ PGRFA, provide access and increase sustainable use*		
		(General) Objectives (2023)	Outputs (2023)	Activities
PGR Strategy for Europe	Title of sub-section and/or section (3 and 4)	**X** **See Table 1**		
	Objectives (By 2030)/ Targets	**X**	**X**	
		See Tables 2.1-2.6 *(related to sub-sections under section 2 of the PGR Strategy)*		
	Approaches			**X** (*not shown)*

Table 1: Matching ECPGR Phase X Objectives with Titles of sections and sub-sections of the PGR Strategy for Europe

Thematic	ECPGR Phase X – Objectives	PGR Strategy for Europe - Titles of sub-sections/sections
In situ conservation of CWR and WFP	To improve in situ conservation and use of crop wild relatives	**Expanding *in situ* conservation of crop wild relatives and wild food plants** • Surveying and inventorying CWR and other wild plant genetic resources for food and agriculture • Strengthening in situ conservation and management of crop wild relatives and wild food plants
On-farm PGR conservation and management	To promote on-farm conservation and management of European PGRFA diversity	**Promoting On-farm plant genetic resources conservation and management** • Surveying and inventorying on-farm plant genetic resources for food and agriculture • Supporting on-farm plant genetic resources conservation and management
Ex situ conservation	To efficiently conserve and provide access to unique germplasm in Europe through AEGIS and the European Collection	**Consolidating and sustaining *ex situ* conservation** • Strengthening *ex situ* coordinated conservation capacities in Europe • Expanding the coverage of genetic diversity in European genebanks
Sustainable use	To promote use of PGRFA	**Promoting sustainable use of PGR** • Facilitate availability to all stakeholders of genetic diversity from European *ex situ* and *in situ* conservation sites

		• Facilitate access to information about plant genetic resources targeted to specific user-groups • Expanding phenotyping and genotyping characterization and evaluation of European PGR • Supporting use of CWR genetic resources in pre-breeding and in research for discovering useful traits • Supporting use of PGR in participatory and decentralised breeding efforts for the development of innovative locally-adapted populations • Promoting diversification of crop production for sustainable and resilient agri-food systems through a revised regulatory framework
Documentation	To provide passport and phenotypic information of actively conserved European PGRFA diversity ex situ and in situ through the EURISCO catalogue	**Strengthening a comprehensive information system for plant genetic resources for food and agriculture** • Strengthen and support EURISCO and its National Focal Points network to ensure the provision of passport data for all accessions of National Collections • Increase availability of reliable phenotypic data via EURISCO and the community of National Focal Points • Assure interoperability of EURISCO with other information systems by adopting the FAIR principles
Monitoring	N/A – *Monitoring of ECPGR operations is embedded in the Phase review that takes place during the Steering Committee meetings*	**Developing a system to monitor European conservation and sustainable use of PGR** • Defining and implementing relevant sets of indicators for monitoring genetic diversity conservation and sustainable use • Establishing a system to ensure the effective transfer and the analysis of relevant information from local to European levels

Yellow and green highlights → Components that appear in both documents: Phase X and PGR Strategy for Europe
Blue highlight → components that are identified only in the PGR Strategy
Outputs in bold have been ***partially*** or **largely** completed during Phase X

Tables 2.1 to 2.6: Matching Objectives and Outputs of ECPGR Phase X with Objectives and targets of PGR Strategy for Europe

Table 2.1	ECPGR Phase X Objectives	ECPGR Phase X Outputs	PGR Strategy for Europe Objectives	PGR Strategy for Europe Targets
***In situ* CWR (+ WFP) conservation**	To improve in situ conservation and use of crop wild relatives	1. **National CWR conservation strategies produced** 2. **Regional (European) CWR conservation strategies produced** 3. Integrated European strategy for CWR conservation produced 4.National and European MAWP network established 5. National and European MAWP Networks operational 6. Germplasm of national and European MAWPs networks effectively utilized	By 2030, Europe has significantly **increased** its **CWR and 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. By 2030, the European countries have elaborated and approved **National CWR and WFP conservation strategies**, and set up and manage a network for *in situ* management of priority CWR populations as part of an integrated CWR conservation strategy for Europe, in which active and sustainable long-term *in situ* conservation actions are implemented at national level.	1. All countries in Europe have included CWR and WFP conservation in national PGR programmes and actions 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 *in situ* network of CWR 3. Europe has a coherent, comprehensive, coordinated and centralized documentation of CWR and WFP *in situ* diversity. 4. CWR priority populations within the European network of CWR are managed and monitored following agreed guidelines for the *in situ* management of CWR populations. 5. *In situ* conserved CWR populations are safely backed-up in *ex situ* collections and made available to users.

Table 2.2	ECPGR Phase X Objectives	ECPGR Phase X Outputs	PGR Strategy for Europe Objectives	PGR Strategy for Europe Targets
On-farm PGR conservation and management	To promote on-farm conservation and management of European PGRFA diversity	1. Snapshot inventory of the European on-farm diversity (landraces, obsolete cultivars and conservation varieties) carried out 2. European on-farm diversity and trends monitored 3. **Good practices for on-farm management and conservation and adding value promoted** 4. **Definition of Most Appropriate Areas (MAPAs) sites of on-farm cultivated plant diversity discussed** and implemented 5. Obstacles to on-farm conservation and management analysed and solutions proposed	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. By 2030, valuable landraces' identified diversity is comprehensively conserved on-farm, complemented with ex situ back-ups, and is made available for sustainable use.	1. All countries in Europe include on-farm PGR conservation and management in national programmes and actions. 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. 3. All landraces recorded in the European Inventory have ex situ backup in national genebanks. 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.

Table 2.3	ECPGR Phase X Objectives	ECPGR Phase X Outputs	PGR Strategy for Europe Objectives	PGR Strategy for Europe Targets
***Ex situ* conservation**	To efficiently conserve and provide access to unique germplasm in Europe through AEGIS and the European Collection	1. **New membership agreements & Associate Member Agreements signed** 2. European Collection represents the European ex situ PGR diversity 3. ***European accessions properly maintained*** 4. ***Issues limiting access to material explored and addressed (e.g. phytosanitary issues)*** 5. **Options and opportunities for a cryopreservation network explored** 6. ***AEGIS Quality System (AQUAS) operational*** 7. Capacity building schemes for Associate Members (AMs) operational 8. Funds mobilized to help Associate Members to implement AQUAS	By 2030, the **PGR 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 *ex situ* 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. 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 plant breeding that contributes to the continuous adaptation of European agriculture to current and future needs.	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. 2. Up to one third of European genebanks have been AEGIS-certified (100 – 150, including all those with more than 1000 accessions), relying when needed on a capacity-building and support system to facilitate their upgrading to reach the AEGIS certification level. 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 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. 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

Table 2.4	ECPGR Phase X Objectives	ECPGR Phase X Outputs	PGR Strategy for Europe Objectives	PGR Strategy for Europe Targets
Documentation	To provide passport and phenotypic information of actively conserved European PGRFA diversity ex situ and in situ through the EURISCO catalogue	1 ***All National Focal Points (NFPs) update national ex situ inventories effectively and timely***. 2 ***C&E data in EURISCO included, with high quality and wide coverage*** 3 ***Inclusion of relevant in situ CWR data in EURISCO realized*** 4 ***Users' expectations explored and functionalities of EURISCO increased***	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 *in situ* community in providing access to their data. EURISCO grows to become a respected, well-known and well-used repository of European PGR passport data. 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. By 2030, EURISCO comprehensively **applies the 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**.	1 The EURISCO network of National Focal Points is optimally supported. 2 EURISCO contains high-quality passport data of all European *ex situ* collections, progressively extended to include actively-managed *in situ* CWR populations and appropriate on-farm landraces data. 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. 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. 5 Both data in EURISCO and the associated IT infrastructure are compliant with the FAIR principles, allowing a better use of the data by a wide community of users across sectors and domains. 6 EURISCO becomes a trustable repository in the arena of European and Global open-access databases with acceptably high governance and data-management standards

Table 2.5	ECPGR Phase X Objectives	ECPGR Phase X Outputs	PGR Strategy for Europe Objectives	PGR Strategy for Europe Targets
Sustainable use	To promote use of PGRFA	1. **European Evaluation Network for PGRFA developed** 2. Facilitated use and consumption of crop species and varieties or landraces by consumers 3. ***Working Groups' structure and composition provide entire range of expertise required for efficient (ex/in situ) conservation and promotion of the use/consumption of all crops***	By 2030, assure access to well-documented genetic diversity that is conserved ex situ and, where and as appropriate, in situ in Europe. By 2030, PGR crop portals for European crops have been established and maintained. 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. By 2030, achieve a coordinated and systematic use of CWR genetic diversity in research and crop improvement. 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. 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.	1 - Collections of PGR in Europe are increasingly characterized and evaluated under standard conditions, as well as genotyped with suitable sets of molecular markers. 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. 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. 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.

Table 2.6	ECPGR Phase X Objectives	ECPGR Phase X Outputs	PGR Strategy for Europe Objectives	PGR Strategy for Europe Targets
Monitoring	N/A	N/A	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 By 2030: 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. ii) Trends in the conservation and sustainable use of PGR are assessed, analysed and published every 5 years and necessary corrective measures are proposed.	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. 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. 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. 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, policy-makers and the wider public. 3 - Europe is actively and efficiently contributing to international reports on monitoring of conservation and use of genetic resources.