

TECHNICAL AND FINANCIAL REPORT 2022 EUROPEAN FOREST GENETIC RESOURCES PROGRAMME (EUFORGEN) PHASE VI (2020–2024)



European Forest Genetic Resources Programme (EUFORGEN) Phase VI (2020–2024)

TECHNICAL AND FINANCIAL REPORT 2022

Michele Bozzano, Anna-Maria Farsakoglou, Sarah Adams and Lidwina Koop EUFORGEN Secretariat European Forest Institute

Table of Contents

1.		cutive Summary	
2.		oduction	
3.		ORGEN membership	
4.	Imp	lementation of EUFORGEN Phase VI	
-	.1 enRe	Improved Pan-European Strategy for the conservation of FGR integrated with othese domains (fully achieved)	
4	.2	Upgraded EUFGIS Information System, including linking with FOREMATIS and the	
d	ecisi	on support tool for the management of the genetic conservation units' network	
		ing – 2021-2025)	8
4	.3	Upgraded website, including monitoring of FGR conservation (partially achieved –	
0	ngoi	ng)	
4	.4	Minimum requirements for dynamic and static <i>ex situ</i> conservation (ongoing –	
р	lann	ed 2023-24)	9
	.5	Report on strategies for the adaptation of CGUs to climate change (including	0
		ed migration) (planned 2022-2024)	
	.6 DN4 (Guidelines for nurseries, seed centres, and policy makers on production and use c planned 2022-23)	
	.7	Identification of policy, research, and forest management needs, related to FGR	.9
-		ved – ongoing)	10
•		opean information system on forest genetic resources (EUFGIS)	
	.1	Data Sharing Agreement (DSA)	
	.1	Trainings and workshops	
6.		n for the dissemination of the report on "Genetic aspects linked to production and	12
		prest reproductive material"	17
7.		ivities of the EUFORGEN Steering Committee	
	.1	The New EU Forest Strategy for 2030	
	.1	Revision of the Plant and Forest Reproductive Material (FRM) Legislation	
	.2 .3	EU Working Party on Forestry discussed the need to support EUFORGEN	
		ivities of the EUFORGEN's Discussion Platforms	
9.		ivities of the EUFORGEN Secretariat	
		Inputs to the Forest Europe process and related work	
	.2	Collaboration with the OECD Scheme for the Certification of FRM	
-	.2	Staff of the EUFORGEN Secretariat	
		ancial summary for 2022	
		tributions to European initiatives and projects	
	1.1	GenRes Bridge Project	
	1.2	FORGENIUS Project	
	1.3	More information on FORGENIUS is available at www.forgenius.eu OptFORESTS	10
	-	t	19
	-	lications and reports	
		ernal events and meetings	
		Progress against the Implementation Plan for Phase VI	
		Financial reports 2022	
		•	

1. Executive Summary

The European Forest Genetic Resources Programme (EUFORGEN) is an international cooperation programme promoting the conservation and sustainable use of forest genetic resources in Europe as an integral part of sustainable forest management. As of 31 December 2022, EUFORGEN has a total of 27 member countries, which are collaborating to conserve and utilize forest tree genetic resources and manage forest tree species' populations for production of forest reproductive material. Through EUFORGEN, European countries in 2021 launched the **Forest Genetic Resources Strategy for Europe**. This document reports EUFORGEN's activities in 2022, including those of the Steering and Advisory Committees and the Secretariat. Its financial reporting demonstrates prudent financial management, and ongoing implementation through **Discussion Platforms** and **Working Groups**. It also articulates EUFORGEN's current phase VI specific objectives of i) **Facilitating knowledge sharing** and **communicating with key stakeholders** on forest genetic resources in Europe; ii) **Coordinating and monitoring European forest genetic resources conservation**, and iii) **Promoting appropriate use** of forest genetic resources.

The report provides an account of significant progress towards the seven EUFORGEN Phase VI deliverables of: i) An improved Pan-European Strategy for the conservation of FGR integrated with other GenRes domains (Achieved); ii) An upgraded EUFGIS Information system including linking with FOREMATIS and the decision support tool for the management of the genetic conservation units' network; iii) An upgraded website, including monitoring of FGR conservation; iv) A list of minimum requirements for dynamic and static *ex situ* conservation; v) A Report on strategies for the adaptation to climate change (including assisted migration); vi) Guidelines for nurseries, seed centres, policy makers on production and use of FRM; and vii) Identified Policy, Research and forest management needs, related to FGR.

The report also outlines the inputs to the Forest Europe process and related work, as well as the collaboration with the OECD Scheme for the Certification of FRM, and with FAO. It provides an update on EUFORGEN's human and financial resources. The report goes on to describe EUFORGEN's contributions and collaboration to European initiatives and projects, including the FORGENIUS and OptFORESTS projects. Finally, the report lists those publications and reports which the programme has delivered. **The annexes provide more details of progress against the Implementation Plan for Phase VI.**

2. Introduction

The European Forest Genetic Resources Programme (EUFORGEN) is an international cooperation programme promoting the conservation and sustainable use of forest genetic resources in Europe as an integral part of sustainable forest management. The Programme was established in 1994, following the adoption of the 1990 Resolution S2¹ by the 1st Forest Europe², Ministerial Conference. Forest Europe, the pan-European voluntary high-level political process for intergovernmental dialogue and cooperation on forest policies in Europe, develops common strategies for its 46 signatories on how to protect and sustainably manage their forests. In 2015, at the 7th Ministerial Conference, signatory countries committed to "continue pan-European collaboration on forest genetic resources through the European Forest Genetic Resources Programme (EUFORGEN)"³. This is a clear recognition of EUFORGEN's effectiveness and its distinctive and valuable role in conserving forest genetic diversity and contributing to sustainable resource management. In the same Ministerial Resolution, countries also committed to "promote national implementation of strategies and guidelines for dynamic conservation and appropriate use of forest genetic resources under changing climate conditions," referencing the strategies⁴ and guidelines⁵ developed by EUFORGEN over the past decade.

In 2021, at the 8th Forest Europe Ministerial Conference, signatory countries further committed to "recognise the need for dynamic conservation and utilization of forest tree genetic resources and management of forest tree species populations for production of forest reproductive material (as reflected in the updated pan-European indicator for sustainable forest management 4.6 genetic resources⁶) and continue pan-European collaboration on forest genetic resources through the European forest genetic resources programme to this end."⁷

European Countries, through EUFORGEN, in 2021 launched the **Forest Genetic Resources Strategy for Europe**⁸, a policy document that provides the framework for enabling the transition to effective genetic resources conservation and sustainable use in the European Region. The Strategy presents an *implementation plan* outlining *actions* to address all the *key commitments* to improving the conservation and sustainable use of European forest genetic resources.

EUFORGEN is financed by its member countries and its activities are mainly carried out by experts from the member countries. The EUFORGEN Steering Committee is composed of National Coordinators from all member countries, and it has overall responsibility for the Programme.

⁷ Bratislava Ministerial Declaration "The Future We Want: The Forests We Need" <u>https://foresteurope.org/wp-</u>

¹ Strasbourg Resolution S2 "Conservation of Forest Genetic Resources" <u>foresteurope.org/wp-content/uploads/2022/01/strasbourg_resolution_s1.pdf</u> ² Originally the Ministerial Conference on the Protection of Forests in Europe <u>www.foresteurope.org</u>

³ Madrid Ministerial Resolution M2, "Protection of forests in a changing environment" <u>https://foresteurope.org/about/ministerial-</u> <u>conferences/madrid</u>

⁴ Pan-European strategy for genetic conservation of forest trees <u>www.euforgen.org/forest-genetic-resources/conservation/pan-european-</u> <u>strategy</u>

⁵ <u>https://www.euforgen.org/publications/technical-guidelines/</u>

⁶ Dynamic conservation and utilization of forest tree genetic resources: indicators for *in situ* and *ex situ* genetic conservation and forest reproductive material. <u>www.euforgen.org/publications/publication/dynamic-conservation-and-utilization-of-forest-tree-genetic-resources-indicators-for-in-situ</u>

content/uploads/2017/08/Bratislava-Ministerial-Declaration.pdf

⁸ Forest Genetic Resources Strategy for Europe. <u>www.euforgen.org/FGRStrategy4Europe</u>

In 2019, the Steering Committee developed the "EUFORGEN - Strategic objectives and implementation plan for Phase VI"⁹, which is guiding EUFORGEN activities for the period 2020-2024. The overall goal of EUFORGEN is to promote conservation and sustainable use of forest genetic resources in Europe as an integral part of sustainable forest management, and to serve as a platform for pan-European collaboration in this area.

The specific objectives for Phase VI of the Programme are to:

- Facilitate knowledge sharing and communicate with key stakeholders on forest genetic resources in Europe. This will involve maintaining and developing EUFGIS¹⁰ and using that and other sources of information to contribute to reports such as the State of Europe's Forests reports¹¹. EUFORGEN will also facilitate knowledge sharing and learning among relevant actors, and promote the importance of genetic diversity and outputs of EUFORGEN to policymakers, forestry professionals and practitioners on the ground, and within the wider scientific community and society.
- 2. **Coordinate and monitor the conservation** of forest genetic resources in Europe. This objective requires EUFORGEN to monitor implementation of the pan-European genetic conservation strategy and update the strategy. It also contributes to implementing activities that address regional-level priorities of FAO Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources.
- 3. **Promote the appropriate use of forest genetic resources** by preparing science-based guidelines and recommendations to improve genetic conservation in forest management. The work under this objective also entails analysis of policy issues to recommend changes when they conflict with the appropriate use of FGR.

The Governance of EUFORGEN is organized in (i) the **Steering Committee** which has overall responsibility for the Programme. This is composed of National Coordinators from all member countries; (ii) the **Advisory Committee**, nominated by the Steering Committee to support the Secretariat in preparing the Steering Committee meetings and to identify issues of strategic importance to EUFORGEN, and (iii) the **Secretariat** which manages the Programme and coordinates its activities.

During Phase VI, EUFORGEN carries out its activities through: (i) **Discussion Platforms**, where national experts (one per member country) meet, share, discuss and analyse relevant issues, share perspectives, and identify needs, and (ii) **Working Groups**, where selected experts (4-8 members) develop specific outputs. Some planned discussion platforms and working groups activities were postponed after spring 2022 due to COVID-19 travel and meeting limitations.

This document reports EUFORGEN's activities in 2022. It also includes a summary of expenditures and financial contributions.

3. EUFORGEN membership

As of 31 December 2022, EUFORGEN had a total of 27 member countries (Austria, Belgium,

⁹ EUFORGEN Strategic objectives and implementation plan for Phase VI (2020-2024) -

www.euforgen.org/fileadmin/templates/euforgen.org/upload/Documents/EUFORGEN_PhaseVI_Objectives_and_Plan.pdf

¹⁰ European Information System on Forest Genetic Resources <u>www.eufgis.org</u>

¹¹ State of Europe's Forests <u>https://foresteurope.org/state-of-europes-forests/</u>

Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Lithuania, Luxemburg, Malta, the Netherlands, Norway, Poland, Portugal, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, the United Kingdom). Portugal signed the Letter of Agreement in July 2022.

The Steering Committee, during its meeting in November 2022, decided to declare publicly the support of the EUFORGEN community to Ukraine and to invite Ukraine to join EUFORGEN Phase VI, waiving the fees for current and next Phase of EUFORGEN.

The Secretariat is maintaining an active dialogue with non-member countries in Europe to facilitate their membership.

4. Implementation of EUFORGEN Phase VI

In the Implementation Plan for Phase VI¹², the Steering Committee has defined the following deliverables for the phase:

- 1. An improved Pan-European Strategy for the conservation of FGR integrated with other GenRes domains (fully achieved)
- 2. An upgraded EUFGIS Information system including linking with FOREMATIS and the decision support tool for the management of the genetic conservation units' network (ongoing 2021-2025 through the FORGENIUS and OptFORESTS projects)
- 3. An upgraded website, including monitoring of FGR conservation (partially achieved ongoing)
- 4. A list of minimum requirements for dynamic and static *ex situ* conservation (ongoing planned 2023-24)
- 5. A Report on strategies for the adaptation to climate change (planned 2022-2024)
- 6. Guidelines for nurseries, seed centres, policy makers on production and use of FRM (ongoing)
- 7. Identified Policy, Research and forest management needs, related to FGR. (achieved ongoing)

The seven subchapters below provide a detailed report on progress in finalizing each deliverable, while Annex 1 provides the status of implementation for all the activities as of 31 December 2022.

4.1 Improved Pan-European Strategy for the conservation of FGR integrated with other GenRes domains (fully achieved)

The Strategy was finalised in 2021 and launched at a high-level policy event organized in collaboration with the GenRes Bridge Project, simultaneously with the overarching *Genetic Resources Strategy for Europe* and the other two domain-specific Strategies (for plants and animals) which were presented.

The strategy is available online at www.euforgen.org/FGRStrategy4Europe

¹² Strategic objectives and implementation plan for Phase VI: <u>https://www.euforgen.org/fileadmin/templates/euforgen.org/upload/Documents/EUFORGEN_PhaseVI_Objectives_and_Plan.pdf</u>

The Secretariat has started the dissemination (social media and promotion at relevant events). The dissemination of this EUFORGEN milestone achievement will continue for the whole Phase VI.

Frank Wolter (Luxembourg) presented on 28 April 2022 the Strategy at the the <u>European Union</u> <u>Council Working Party on Forestry</u> who discussed the need for long-term support for the EUFORGEN Programme, as recommended in the Strategy itself. In November 2022, the European Commission was invited (by Member States) to become a member of EUFORGEN. See Section 7.3 below for more information.

4.2 Upgraded EUFGIS Information System, including linking with FOREMATIS and the decision support tool for the management of the genetic conservation units' network (ongoing – 2021-2025)

As highlighted in previous reporting and in the "EUFORGEN - Strategic objectives and implementation plan for Phase VI", the EUFGIS Information System is obsolete and urgently needs restructuring and upgrading both the technology and its associated services (for data providers, national authorities, and the broader conservation community). The EUFGIS upgrade and the integration of the decision-support tool will be implemented through the H2020 EU-Funded project FORGENIUS¹³ (2021-2025), which is supporting the EUFGIS upgrade and the creation of a new series of services for end-users.

The Beta-Version of the new EUFGIS will be presented to the National Focal Points in February 2023 during a training workshop on data curation, organised back-to-back with the Discussion Platform on "GCU Network management in case of biotic outbreaks: the case study of ash dieback". The beta interface will also be presented to the EUFORGEN National Coordinators in April/May 2023.

The work will continue until the end of the FORGENIUS project (2025) and several other interactions and trainings with the EUFGIS Focal Points will be organized.

The semantic linking of EUFGIS with FOREMATIS will be undertaken in the framework of the H-Europe Project OptFORESTS (see section 10.3 below for more information).

4.3 Upgraded website, including monitoring of FGR conservation (partially achieved – ongoing)

In 2020 the website was upgraded to reflect the revised visual image of the Programme. Its content was re-organized and upgraded. As the upgrade of EUFGIS and associated services will progress, relevant parts will be integrated in the EUFORGEN website, to include a visual interface for the FGR conservation monitoring, following the revised indicator 4.6¹⁴. This is scheduled for 2023-24.

¹³ FORGENIUS - Improving access to FORest GENetic Resources Information and Services for End-USers www.forgenius.eu

¹⁴ Dynamic conservation and utilization of forest tree genetic resources: indicators for in situ and ex situ genetic conservation and forest reproductive material - <u>www.euforgen.org/publications/publication/dynamic-conservation-and-utilization-of-forest-tree-genetic-resources-indicators-for-in-situ/</u>

4.4 Minimum requirements for dynamic and static *ex situ* conservation (ongoing – planned 2023-24)

In 2021, the EUFORGEN Secretariat launched a survey on "Forest Genetic Resources conservation data status in Europe, on the EUFGIS upgrade and on static *ex situ* genetic conservation".

The part of the survey on "*Ex situ* Forest Genetic Conservation Status in Europe" aimed to evaluate the current state of *ex situ* FGR Conservation and existing practices, management procedures and other linked elements in Europe. The results of the survey will act as the basis for EUFORGEN's work to define the minimum requirements for *ex situ* Forest Genetic Resources Conservation, which will be used in future FGR reporting in Europe.

The work, originally planned for 2020-21 was postponed due to COVID-19 traveling and meeting limitations. It has been re-scheduled for 2023-24.

At the 17th meeting of the EUFORGEN Steering Committee in November 2022, a Task Force was established to define the mandate for the working group that will develop the minimum requirements for static and dynamic *ex situ* conservation. This Task Force will define the mandate for the Working Group that will be validated by the Steering Committee.

4.5 Report on strategies for the adaptation of CGUs to climate change (including assisted migration) (planned 2022-2024)

In October 2022 the first *EUFORGEN Discussion Platform* on "Adaptation of the Genetic Conservation Units to Climate Change" initiated the work related to the definition of the topic. The meeting participants discussed existing knowledge, identified what is required to be addressed during EUFORGEN's Phase VI and VII, mostly through Working Groups.

The Discussion Platform formulated several possible activities to be implemented and the Secretariat suggested a possible timeframe under which these can be implemented . The report was submitted to the Steering Committee to define the Working Group(s) which will implement the selected activities.

4.6 Guidelines for nurseries, seed centres, and policy makers on production and use of FRM (planned 2022-23)

The Steering Committee decided in 2019 that, once the report "Genetic aspects linked to production and use of forest reproductive material" was released, the Secretariat, supported by one or more Working Groups, would transform relevant messages from the report into a format, suitable for several target audiences (e.g., practitioners, nurseries, seed centres, policy makers). Formats will include executive summaries, videos, and so forth as appropriate. The report was finally released at the end of 2020 and the activities postponed due to the worsening of the 2020 Pandemic situation.

The Secretariat, in 2022, divided the content of the Report into six themes and initiated the development of six packages of dissemination material (See section 6 for details of the dissemination plan). The six identified themes are:

1. Silviculture measures and their role in mitigating the effects of climate change

How different regeneration strategies can affect or influence genetic diversity of forest stands

2. Forest Reproductive Materials and Forest Basic Materials

Management of categories and types to face expected future uncertainties

3. Seed orchards - why do we need them?

4. Forest tree breeding strategies to address climate change challenges

5. Seed harvesting, treatment, storage, and nursery practices

How management practices can affect or influence genetic diversity of forest reproductive materials

6. The influence of forest management methods on the genetic structure of forest tree populations

How do the methods used for establishing and managing forests affect forest genetic diversity?

Theme 5 was presented as draft during the Steering Committee meeting in November 2022 and the Steering Committee nominated six working groups (one for each theme) to verify that the content of the theme accurately reflects the content of the original FRM publication.

In 2022 the Secretariat also developed a draft *brief for policy makers* based on the report, which was circulated to the Steering Committee for feedback. The Steering Committee commented the draft and suggested to develop a shorter version of the brief. The Secretariat will present the shorter version at the next meeting of the Steering Committee.

4.7 Identification of policy, research, and forest management needs, related to FGR (achieved – ongoing)

At the end of Phase V the EUFORGEN programme organized a science-to-policy event¹⁵ aiming to present and discuss the relevance and implications of recent research findings and guidelines for policy and practice. The main focus was the role of forest tree biodiversity, in particular genetic diversity, for the adaptation of forests to climate and land use change. Subsequently, in January 2020, the Secretariat, in collaboration with the GenTree Project organized a consultation, involving stakeholders from a broad range of European countries, aiming to identify research and actions needs in Europe. The Secretariat then disseminated the output of the consultation to implementing agencies and to the EC.

The Steering Committee decided to evaluate the outcomes of Phase VI and of FORGENIUS before assessing further research needs.

5. European information system on forest genetic resources (EUFGIS)

EUFGIS makes geo-referenced data available on the Genetic Conservation Units (GCUs) of

¹⁵ Genetic resources - The key to adaptation of forests to global change <u>www.euforgen.org/about-us/events/event/genetic-resources-the-key-to-adaptation-of-forests-to-global-change/</u>

forest trees in Europe. The data are provided and updated by the National Focal Points¹⁶ in line with the pan-European minimum requirements¹⁷ and data standards¹⁸ for these units. The data standards and the minimum requirements were developed as part of the EUFGIS project¹⁹ (2007–2011). The portal²⁰ and the intranet²¹ have been maintained by EUFORGEN after the EU-supported project ended. EUFGIS will be upgraded and a decision-support tool integrated into it through the H2020 EU-Funded project FORGENIUS (see section 11.2 below).

In 2022, the National Focal Points continued compiling new data on the units and uploading the data on the EUFGIS portal. At the end of 2022, the EUFGIS portal contained data on 3200 units and 107 tree species in 35 countries. The units harbour a total of 3930 tree populations. 36 countries have nominated their National Focal Points²⁴.

The core network of dynamic genetic conservation units (following the definitions of the "*Pan-European strategy for genetic conservation of forest trees and establishment of the core network*"²²), was identified for all 107 tree species present in the Information System.

During the reporting period, the Secretariat continued to maintain and improve EUFGIS, Intranet and Portal. The Secretariat also continued providing helpdesk support to the EUFGIS National Focal Points.

5.1 Data Sharing Agreement (DSA)

EUFGIS makes an important contribution to documenting and monitoring the FGR status. This information system is central to reporting on Europe a range of international policy commitments and critically, provides a point of entry for users of genetic resources. These commitments include the Forest Europe process and the FAO Global Plan of Action on FGR (GPA-FGR).

To date, data have been transferred from the National Focal Points to the European Forest Institute (EFI) without any formal agreement regulating such transfers and allowing EFI to host and share the data. To address this gap in regulation, EFI has been limiting the general public's access to this data.

In order to provide a comprehensive service, allowing access to all data (unless limited by privacy restrictions) EFI is preparing a Data Sharing Agreement (DSA) concerning the transfer of data to EUFGIS and the management and use of that data once transferred.

To enhance its effectiveness and impact, EUFGIS requires further development to enable access to both reliable data and information required to monitor conservation and threat/risk

¹⁶ Current list of nominated National Focal Points http://portal.eufgis.org/data-providers/

¹⁷ Pan-European minimum requirements for dynamic gene

conservation units of forest trees: <u>http://portal.eufgis.org/fileadmin/templates/eufgis.org/documents/EUFGIS_Minimum_requirements.pdf</u> ¹⁸ Data standards for dynamic gene conservation units of forest trees to be included into the EUFGIS

information system: http://portal.eufgis.org/fileadmin/templates/eufgis.org/documents/EUFGIS_DataStandards.pdf ¹⁹ EUFGIS Project website: http://www.eufgis.org

²⁰ EUFGIS Portal: <u>http://portal.eufgis.org</u>

²¹ EUFGIS Intranet: <u>http://intranet.eufgis.org</u>

²²Pan-European strategy for genetic conservation of forest trees and establishment of a core network of dynamic conservation units www.euforgen.org/publications/publication/pan-european-strategy-for-genetic-conservation-of-forest-trees-and-establishment-of-a-corenetwork-o/

status. Interoperability of EUFGIS data with data from other research areas is fundamental to promote greater integration of FGR into wider research and development areas. This would help to address inter-disciplinary questions that may arise in relation to the implementation of the various policies that are relevant to forestry and biodiversity.

Linking EUFGIS with other relevant information systems in Europe is therefore strategic. This will not be possible until the rights of the Information System manager (EFI) are formally recognized by the data providers (the countries) to be able to share data with third parties and to provide access to such data.

Through the FORGENIUS Project (see chapter 11.2 below) EUFGIS will be completely restructured. This will be an important upgrade, creating a new set of services. It will characterize all GCUs using a broad range of data, derived from existing environmental and climatic databases and available forest reproductive material. The FORGENIUS project will also characterize several GCUs with genetic and phenotypic data. This upgrade will be an important step forwards, creating new services for all European countries and for the scientific community.

Additionally, the new EUFGIS will also allow uploading data on those GCUs that are relevant at national level, but do not meet the minimum requirements at the European level. This aims to provide an important service to the member countries and to allow all countries to be able to fully use the functionalities of the new Information System for national benefits. This will imply that EFI will hold data on behalf of the countries, and that this facility will need to be regulated. There will be different levels of data visualization, and the National Focal Points will still be able to contribute to regulating Information System access.

After the FORGENIUS project ends, EUFORGEN will maintain the upgraded Information System ensuring its long-term availability and maintenance under the Forest Europe mandate.

The DSA draft 1 was submitted to the EUFORGEN National Coordinators in November 2021. The draft was used for national-level consultations, and to define the appropriate signatory for the DSA. The first consultation started in November 2021 ended in January 2022. There was a devoted session regarding the DSA during the 16th SC meeting in December 2021. The second draft was prepared in March 2022; this draft integrated comments and feedback received from the countries. The revised draft was circulated in May 2022, and additional inputs provided by member countries. In November 2022 a consolidated version was presented to the Steering Committee meeting The amended version was shared with the member countries for signature in early 2023.

5.2 Trainings and workshops

The next EUFGIS Focal Point training session will be organised on 23 February 2023 in Ahrensburg, Germany when the beta-version of the new EUFGIS will be presented.

6. Plan for the dissemination of the report on "Genetic aspects linked to production and use of forest reproductive material"

The Secretariat has prepared (i) a plan for dissemination of products for practitioners targeted

towards forest managers, nursery managers, seed collectors, etc. and (ii) a draft policy brief.

Each package will contain 1 (short) video leading into the theme + 1 text with the main content (text + graphics) + 1 factsheet/poster/leaflet/infographic.

7. Activities of the EUFORGEN Steering Committee

During the reported period, the Steering Committee met three times:

- 1. On 10 March 2022, an *ad hoc* meeting of the EUFORGEN Steering Committee took place as an online meeting. The purpose of this meeting was to inform the Steering Committee about the establishment of EFI's Genetic Resources Facility (EFIGEN), and to give an update on the EUFORGEN workplan for the coming six months.
- 2. On 14 June 2022, the Extraordinary meeting of the EUFORGEN Steering Committee took place as an online meeting. The scope of the meeting was to present the annual financial and technical reports 2020-2021.
- 3. The 17th meeting of the EUFORGEN Steering Committee, 8-9 November 2022, took place as an online meeting. The Steering Committee reviewed the programme workplan and agreed on the next activities. During the meeting, the Steering Committee decided to declare publicly its support to Ukraine and to invite Ukraine to join EUFORGEN Phase VI, waiving the fees for the current and next Phase of EUFORGEN. Additionally, the Steering Committee committee to identify relevant actions, once the landscape will be accessible again, to support the activities related to the conservation and sustainable use of FGR in the Country.

7.1 The New EU Forest Strategy for 2030

During its 16th meeting, the Steering Committee established a Task Force (Heino Konrad (Austria), Mari Rusanen (Finland), Frank Wolter (Luxembourg), Hojka Kraigher (Slovenia)) to draft an open letter, which was then revised by the whole Steering Committee and submitted to the relevant offices of the European Commission.

In March 2022, the EUFORGEN Steering Committee released the *Open Letter on the role for EUFORGEN in the new EU Forest Strategy for 2030*²³. In the Open Letter, the EUFORGEN Steering Committee indicated the areas in which the EUFORGEN programme's mandate and ongoing work could contribute to, and support the implementation of, the new EU Forest Strategy for 2030, through its research and coordination in forest genetic resources. EUFORGEN could play a crucial and unique role in science-policy-practice dialogue on forest genetic resources, in particular identifying appropriate actions and coordinating discussion among relevant actors.

7.2 Revision of the Plant and Forest Reproductive Material (FRM) Legislation

During the 16th Steering Committee meeting, Diana Charels (European Commission - DG SANTE) presented the roadmap for the revision of the FRM legislation and presented a

²³ Open letter on the role for the EUFORGEN Programme in the framework of the new EU Forest Strategy for 2030. <u>http://www.euforgen.org/about-us/news/news-detail/open-letter-the-role-for-the-euforgen-programme-in-the-framework-of-the-new-eu-forest-strategy-for</u>

guidance sought on the Revision of the FRM legislation, with specific questions to the EUFORGEN Steering Committee. The Steering Committee replied to the questions and developed a position paper, which was then submitted to DG SANTE. The development of the position paper and the replies, were coordinated and drafted by a Task Force, composed by Felipe Pérez (Spain), Heino Konrad (Austria), Hojka Kraigher (Slovenia) Alain Servais (Belgium) and Aðalsteinn Sigurgeirsson (Iceland).

As per information received from the EC in October 2022, the new Plant and Forest Reproductive Material legislation will keep forest reproductive material separated from the rest. The Process was delayed and is expected to be finalized by mid-2023. DG SANTE will be invited to present the revision to the Steering Committee meeting, as soon as significant progresses will be made.

7.3 EU Working Party on Forestry discussed the need to support EUFORGEN

European Countries, through EUFORGEN, in 2021 launched the **Forest Genetic Resources Strategy for Europe**²⁴, which provides the framework for enabling the transition to effective genetic resources conservation and sustainable use in the European Region. The Strategy presents an *implementation plan* presenting *actions* to address all the *key commitments* to improve the conservation and sustainable use of European forest genetic resources. The strategy, identifies 28 key commitments, to be implemented by the European countries individually and through the EUFORGEN Programme, and includes one recommendation for the European Commission: "The European Commission is urged to provide direct funding to the EUFORGEN Programme in order to strengthen its capacity and ensure the participation of all European countries".

Following up on the latter recommendation, the Secretariat, prepared the documentation that was proposed by Luxembourg, Italy, Slovenia, and Spain and was accepted by the French Presidency as an agenda point at the EU Working Party on Forestry on 28 April 2022. During the discussion Finland, Hungary, the Netherlands, and Czech Republic supported the initiative.

In November 2022 the EU Working Party on Forestry asked the Commission to evaluate the possibility for the EU to become a funding member of the Programme.

8. Activities of the EUFORGEN's Discussion Platforms

The Discussion Platforms are instruments to develop EUFORGEN's workplan. A Discussion Platform is composed of country representatives, nominated by each EUFORGEN member country, and its aim is to: raise and discuss relevant issues that need a pan-European perspective; maintain the overall knowledge and understanding of issues relevant to FGR in Europe; and plan how to build capacity among the members of the forum. A Discussion Platform meets at least one time in person.

The first EUFORGEN Discussion Platform on "Adaptation of the Genetic Conservation Units to Climate Change", met in Amsterdam the Netherlands, on 18-20 October 2022. The meeting was attended by 19 participants (plus the Secretariat) from 19 European countries. The main focus of the meeting was to identify the existing knowledge regarding adaptation of GCUs to

²⁴ Forest Genetic Resources Strategy for Europe. <u>www.euforgen.org/FGRStrategy4Europe</u>

climate change, discuss how this knowledge can be implemented to benefit adaptation and arrive at a consensus regarding the current knowledge gaps and research needs, along with several recommendations for further actions.

The Discussion Platform: (i) identified **existing knowledge relevant to the topic** that should be addressed during EUFORGEN's Phase VI and VII and/or as part of ongoing projects, mostly through Working Groups; (ii) identified **research needs**, supporting the ongoing "research needs identification" activity of the EUFORGEN Steering Committee; (iii) made **recommendations** relevant to the adaptation of the GCUs to climate change; (iv) suggested **communications** to be implemented by the EUFORGEN Secretariat and the EUFORGEN community as part of the ongoing communication and dissemination activities. The full report of the event was made available to National Coordinators.

9. Activities of the EUFORGEN Secretariat

The secretariat coordinates the implementation of the Programme and its activities following the work plan developed by the Steering Committee. In particular, during 2022 the Secretariat has (i) prepared annual technical and financial reports (2020-21 and drafted 2022); (ii) liaised between the Steering Committee and the working groups and Discussion Platforms; (iii) organised meetings of a Discussion Patform (in presence) and of several Task Forces (virtual) and two virtual meetings of the Steering Committee. The Secretariat is also maintaining the EUFORGEN website and the EUFGIS Information System.

In 2022 the Secretariat has also coordinated the preparation of the background documents for the EU Working Party meeting and the collaboration with ongoing projects and initiatives.

The EUFORGEN Secretariat has also maintained communication channels with relevant stakeholders and represented the Programme in relevant meetings. A full list of external events is provided in section 13.

9.1 Inputs to the Forest Europe process and related work

The EUFORGEN Secretariat, in collaboration with the *FOREST EUROPE Liaison Unit Bonn* and its *FoRISK* mechanism, organized a webinar entitled "**Manage to Conserve - Forest Genetic Resource conservation as part of Sustainable Forest Management**" which took place on 11 October.

The event was attended by representatives from Forest Europe signatory countries and observer organizations.

The event, in addition to raising the awareness on the importance of FGR as integral part of SFM, had two main objectives:

- 1. Kicking off the work of the Discussion Platform on adaptation of GCUs to Climate Change (Its final recommendations will be presented to the Forest Europe Process in two years) and
- 2. Raising the awareness on the risk of losing genetic resources when preventing any kind of management of old growth forests.

Following the general presentation on EUFORGEN and the FGR Strategy (by the Secretariat), a Panel composed of Mari Rusanen (representing the EUFORGEN Programme), Felipe Pérez

Martín (representative of a Forest Europe Signatory country), Marjana Westergren (representative of the IUFRO Division II), Brigitte Musch (representative of a National Forest Organisation) and Peter Löffler (representative of the EC) discussed the issue and made reccomendations

An article about the event²⁵ is available at the EUFORGEN's website under the News section; the recording of the event is available at: www.youtube.com/watch?v=vaNcdxBwZW0

In addition to the webinar, the Secretariat attended the following events relating to Forest Europe:

- Expert Group meeting of the Forest Europe "Forest Risk Knowledge Mechanism" on 19-20 January 2022 online
- Sustainable Forest Management (SFM) Think Tank meeting of Forest Europe on 22-23 February 2022 - online
- Expert Group meeting of the Forest Europe "Forest Risk Knowledge Mechanism" (Workstream 2 of the FOREST EUROPE Work Programme 2021 2024) on 31 May 1 June 2022 online
- Forest Europe High-Level Policy Dialogue on 30 August online
- Forest Europe Expert Level meeting on 31 August online
- FOREST EUROPE session (25 of October from 9 11 am CET) during the joint workshop "Develop, adopt and transfer innovative solutions and actions to prevent and control wildfires" in cooperation with Silva Mediterranea (FAO) and FOREST EUROPE in Antalya, Türkiye from 24 – 27 October 2022 - online

9.2 Collaboration with the OECD Scheme for the Certification of FRM

The EUFORGEN Secretariat is collaborating with the Secretariat of the OECD Scheme for the Certification of Forest Reproductive Material to develop a joint communication strategy on relevant common issues. The purpose is to disseminate the relevant findings of the working group report on Genetic aspects linked to production and use of forest reproductive material (FRM)²⁶. The foreseen joint communication materials will explain the importance of selecting suitable FRM in the face of climate change and of developing policies and regulations to enable the appropriate FRM use by expanding it beyond the endogenous material, when needed.

In addition, a follow-up is planned to one of the "*Recommendations with Policy Relevance*"²⁷, released by the EUFORGEN programme 2019, which was a call to "Monitor adaptation and evolutionary potential of transferred forest reproductive material". It specifically suggested creating "an online information system for geo-referenced records of the origin, movement and use of forest reproductive material", "to record the production, marketing and end use of

²⁶ <u>http://www.euforgen.org/publications/publication/genetic-aspects-linked-to-production-and-use-of-forest-reproductive-material-frm/</u>

²⁵ https://www.euforgen.org/about-us/news/news-detail/euforgen-forest-europe-webinar-forest-genetic-resource-conservation-as-part-ofsustainable-forest/

²⁷www.euforgen.org/fileadmin/templates/euforgen.org/upload/Documents/LeafletBrux_EUFORGEN_messages.pdf

the forest reproductive material and, where available, performance data". As this topic is of relevance for both OECD and EUFORGEN, the two Secretariats are coordinating in order to make a proper assessment on the needs and the willingness of countries to contribute and to benefit as much as possible from the digitalization transition that is currently affecting the sector.

The EUFORGEN Coordinator attended the Technical Working Group Meeting of the OECD Forest Seed and Plant Scheme for the Certification of Forest Reproductive Material Moving in International Trade on 10-11 May 2022 in Ahrensburg, Germany.

The EUFORGEN Researcher attended the Annual Meeting of the OECD Forest Seed and Plant Scheme for the Certification of Forest Reproductive Material Moving in International Trade on 4-5 October 2022 in Paris, France.

9.3 Staff of the EUFORGEN Secretariat

During the reported period, the permanent staff of the Secretariat were Michele Bozzano (Coordinator), Anna Maria Farsakoglou (Researcher), Lidwina Koop (Administrative Officer) and Edoardo Esposito (scientific support). From July 2022, two EFI staff members, Sarah Adams (Communications Manager) and Gerard Fernandez (Communications Officer), joined the Secretariat to provide their support in all communications activities.

The Secretariat carried out part of the work through collaboration with external consultants and temporary staff, depending on the workload, tasks and the required expertise.

10. Financial summary for 2022

In January 2022, the opening balance of the EUFORGEN trust fund was €392,222. The closing balance of the trust fund for 2022 is €408,629 and carried forward to the next year (2023) of Phase VI of EUFORGEN.

Total financial contributions received from Member Countries for the year 2022 were €331,250. Contributions for 2023 were received in 2022 for a total of €7,500.

The budget planned for Phase VI, excluding external funding, amounts to $\leq 1,792,150$, equivalent to approximately $\leq 360,000$ per year. The overall actual expenses for 2022 ($\leq 322,343$) results lower than the planned budget. This decrease is mainly due to the reduction of the costs related to events being organized online during the first semester, due to the Covid situation, and part of the staff time was covered by the FORGENIUS project.

Staff costs in 2022 were around €199,000 and remain the main cost category, representing approximately 73 % of the total. These costs are higher than 2021 because the staff was increased with the communication persons. However, these costs were lower than the budget for 2022. This reduction was mainly due to fewer Secretariat staff during the first half of the year and part of the staff time was covered by the FORGENIUS project.

Travel costs for 2022 were $\leq 6,191$ and significantly lower than foreseen in the budget. The main reason for this deviation is that few travels took place in 2022.

The expenditures in 2022 regarding the discussion platform amounting \in 25,405 related to the meeting of the Discussion platform on adaptation to climate change, in October 2022.

Finally, other direct costs, such as Public Awareness, Communication, Publications and dissemination, represented € 41,581, approximately 16% of the total expenditures. These expenses included mainly the production of dissemination material for FRM, editing, proofreading, layout services, web maintenance and server hosting, etc..

The detailed financial report for 2022 is available in the Annex 2 to this report.

11. Contributions to European initiatives and projects

11.1 GenRes Bridge Project

The project "GenRes Bridge – Joining forces for genetic resources and biodiversity management" ended on 31 December 2021.

The overall aim of the project was to develop an overarching integrated strategy for genetic resources in Europe. The EUFORGEN Secretariat, represented by the European Forest Institute (EFI) was the coordinator of the consortium composed of 17 partners.

GenRes Bridge capitalized on the knowledge, strategies, tools and infrastructures developed individually in the crop, forest and animal domains over the past few decades by the three pan-European GenRes networks: EUFORGEN, ECPGR²⁸ (European Cooperative Programme for Plant Genetic Resources), and ERFP²⁹ (The European Regional Focal Point for Animal Genetic Resources)

The Genetic Resources Strategy for Europe was presented by the EUFORGEN Coordinator at the EU Working Party on Genetic Resources in Brussels on 20 June 2022.

More information on GenRes Bridge is available at <u>www.genresbridge.eu</u>

11.2 FORGENIUS Project

The FORGENIUS H2020 project³⁰ aims to increase the quantity and quality of data in the EUFGIS information system using multiple descriptors from genomic, phenotypic, remote-sensing and predictive models, and to make data and analytical tools available in operationally-useful and harmonized standards as a service for users in the fields of conservation, breeding and forest management.

FORGENIUS provides insights into the diversity of European forests and their resilience to climate change. The project uses state-of-the-art technology and knowledge in plant and evolutionary biology, ecology, remote-sensing, genomics, genetics, modelling, and forestry. It aims to upgrade EUFGIS, by adding new types of data and information on the Genetic Conservation Units (GCUs). FORGENIUS will allow a significant upgrade of EUFGIS that will be the key to invent new, adaptive strategies to preserve GCUs at the continental level.

FORGENIUS is:

²⁸ http://www.ecpgr.cgiar.org/

²⁹ https://www.rfp-europe.org/

³⁰ Funded from the European Union's Horizon 2020 research and innovation programme under grant agreement No 862221 - www.forgenius.eu

- i. assessing genetic, phenotypic, and environmental diversity, as well as resilience of GCUs under climate change
- ii. providing scientific evidence to support management decisions that promote the resilience and adaptability of GCUs
- iii. characterizing the entire network of GCUs presently in EUFGIS (and any that are entered in future) and their genetic resources.
- iv. creating innovative data accessibility and modelling services for users within and outside the forest genetic resources conservation communities.

In addition to characterizing the GCUs, FORGENIUS is upgrading EUFGIS itself. The project will develop a totally new interface and adopt new technologies to run the information system and associated services. FORGENIUS will also generate new data and indices that will integrate with and complement existing information. The expanded EUFGIS will be a new tool for national authorities responsible for the management of the network of GCUs in each country, as well as for the wider conservation community.

- The EUFORGEN Coordinator and the EUFORGEN Researcher attended the first annual conference of the FORGENIUS project in Edinburgh, Scotland on 29 March 1 April 2022.
- A webinar was organized to present the FORGENIUS project to the National Coordinators on 14 June 2022. The webinar is published on the EUFORGEN YouTube channel³¹.
- The first review meeting took place on 28 September 2022 in Brussels, Belgium.

More information on FORGENIUS is available at www.forgenius.eu

11.3 OptFORESTS Project

The OptFORESTS Horizon Europe project "Harnessing forest genetic resources for increasing options in the face of environmental and societal challenge - HORIZON-CL6-2022-BIODIV-01-07" was awarded in summer 2022. The Grant Agreement was signed on 6 October 2022 and the project started on 1 November 2022, and will run for five years until 31 October 2027.

The OptFORESTS project aims to work towards the future adaptation of forests by harnessing Forest Genetic Resources (FGR), and supporting their conservation and sustainable use through the following main lines of work and objectives:

- Conducting research on the selection of diverse forest reproductive material (FRM), including mixtures, adapted to future climates
- Fostering sustainable use and resilience of natural forests
- Helping expand and diversify nursery production

³¹ <u>https://youtu.be/ZTX3qV1XPYU</u>

- Developing nature-based solutions (NBS), tools (e.g, expanded Information Systems) and cultural trajectories to promote forest biodiversity and ecosystem services
- Demonstrating biodiversity solutions

As main work stream activities, OptFORESTS will carry out genetics, modelling, stakeholder surveys, expert panels and socio-economic analyses. These will be complemented by studying the effects of silviculture and landscape heterogeneity on genetic diversity and the development of new silvicultural options for genetically mixed forests, to be implemented through training software (marteloscopes) and long-term demonstration plots. Other action lines of OptFORESTS will include assessment of the European nursery sector, forecasting of future FRM needs, development of plant production technologies and cooperation between nurseries.

The EUFORGEN Secretariat will facilitate the dissemination and exploitation of project results to achieve long-term impacts on the FGR community in Europe and beyond. Other functions within OptFORESTS will be to establish synergies and links between tools and systems already created in the field of forest genetics, such as EUFGIS and the European Commission's Forest Reproductive Material Information System (FOREMATIS).

The kick-off meeting took place on 22-24 November in Vienna, Austria.

An article about the project³² is available as news in the EUFORGEN's website.

More information on the OptFORESTS project is available at: www.optforests.eu

12. Publications and reports

List of EUFORGEN publications produced/released during the reported period

- EUFORGEN Newsletter, April 2022 issue³³
- Report of the 17th EUFORGEN Steering Committee meeting³⁴
- EUFORGEN Newsletter, December 2022 issue³⁵

List of relevant publications produced/released during the reported period

Vajana, E., Bozzano, M., Marchi, M. and Piotti, A., 2022. On the Inclusion of Adaptive Potential in Species Distribution Models: Towards a Genomic-Informed Approach to Forest Management and Conservation. Environments, 10(1), p.3.

Picard, N., Marchi, M., Serra-Varela, M.J., Westergren, M., Cavers, S., Notivol, E., Piotti, A.,

 $^{^{32}\} https://www.euforgen.org/about-us/news/news-detail/euforgen-forest-europe-webinar-forest-genetic-resource-conservation-as-part-of-sustainable-forest/$

³³ EUFORGEN newsletter - April 2022 (mailchi.mp)

³⁴ EUFORGEN Steering Committee: Report of the Seventeenth meeting: EUFORGEN - European forest genetic resources programme

³⁵ EUFORGEN newsletter - December 2022 (mailchi.mp)

Alizoti, P., Bozzano, M., González-Martínez, S.C. and Grivet, D., 2022. Marginality indices for biodiversity conservation in forest trees. Ecological Indicators, 143, p.109367.

Fady, B., Bozzano, M. 2020. Effective population size does not make a practical indicator of genetic diversity in forest trees. Biological Conservation 253(3):108904. DOI: 10.1016/j.biocon.2020.108904

13. External events and meetings

During 2022, the Secretariat attended several events that created awareness about recent outputs of the Programme and introduced EUFORGEN's work to new audiences. A list of key events is presented below.

- GenRes Bridge final review meeting, 23-25 February, online.
- FORGENIUS Annual meeting, 29 March 1 April, Edinburgh, Scotland
- Advisory group on Food Chain and Animal and Plant Health working group on Seeds and Propagating materials 18 February 2022, online meeting
- Working Group on the revision of the PRM legislation forest reproductive material E9 March online
- Biodiversa+ Enlarged Stakeholders Board meeting, 1 April 2022, online.
- Biodiversa+ Advisory Board meeting on 23 May, online.
- XV World Forestry congress May 2022 <u>https://wfc2021korea.org/sub02/side_events.html</u> - online
- Technical Working Group Meeting of the OECD Forest Seed and Plant Scheme for the Certification of Forest Reproductive Material Moving in International Trade. 10-11 May 2022, Ahrensburg, Germany.
- Expert Group meetings on the Forest Europe "Forest Risk Knowledge Mechanism", several online interactions
- EU Working Party on Genetic Resources Brussels on 20 June 2022
- B4EST Final conference, Managing Forest Genetic Resources (FGR) for an uncertain future. 20-23 June 2022, Lisbon, Portugal
- Forest Europe High-Level Policy Dialogue on 29 August and Expert Level meeting on 30 August online
- EIONET TG-Forests, several online interactions
- Nordgen Forest conference, 27 September online presentation
- FORGENIUS review meeting, 28 September, Brussels, Belgium
- The forests of southern Europe facing climate change and the challenges of the market, 29 September, Bordeaux, France
- OECD Forest Seed and Plant Scheme 2022 Annual Meeting, 4-5 October, Paris, France
- Forest Europe online webinar, Forest Europe Forest Risk/EUFORGEN" initiative, "Manage to Conserve Forest Genetic Resource conservation as part of Sustainable Forest Management" 11 October – online.
- Global Forest and Tree Restoration, 11 13 October 2022, Rome, Italy
- OptForests Project Kick-off meeting, 22-24 November, Vienna, Austria

Annex 1 Progress against the Implementation Plan for Phase VI

The three tables below (one for each Strategic Objective) present the planned activities for EUFORGEN Phase VI, and the status of their implementation, as of 31 December 2022.

Strategic Objective 1: Facilitate knowledge sharing and communicate with key stakeholders Status colour coding: achieved, ongoing, planned, pending

Operational Objective	Activities Phase VI	Responsibility	Time frame	means of verification	Status as of 31 December 2022 / Date of achievement
Facilitate knowledge sharing and	SC meetings with invited observers from non-member countries	S +NC	ongoing	agenda, list of participants and minutes of the meeting	Achieved – ongoing 1 Steering Committee meeting organized (<u>8-9 November</u> <u>2022</u>) and one ad hoc meeting on 10 March 2022.
learning among relevant Actors (eg	Advisory Committee meetings	S +NC	ongoing	agenda, list of participants and minutes of the meeting	Achieved – ongoing AC consulted in preparation for the Steering Committees - Ongoing
scientists, national competent authorities,	Support the preparation of new project proposals	S	ongoing	number of Project consortia where the Secretariat is involved in early stages	Achieved – <mark>ongoing</mark> (one project proposal preparation supported in 2021)
practitioners and policymakers)	Identify country experts with knowledge on specific tree species and topics	S +NCs	ongoing	Interface developed / number of species with identified reference person	Pending

Operational Objective	Activities Phase VI	Responsibility	Time frame	means of verification	Status as of 31 December 2022 / Date of achievement
	Cross border collaboration with non-European Neighbor Countries	S+NC	ongoing	list of event and initiatives	Achieved FGRS4 Europe includes actions for Neighbour countries
Communicat e the	Communicate the programme results to stakeholders)	S + EFI comms unit	2024	list of events, presentation and leaflets released and disseminated	Achieved – <mark>ongoing</mark>
importance of genetic diversity and outputs of EUFORGEN	Establish/strengthe n communication channels with relevant policy makers	S + NCs	ongoing	# of high level meeting where EUFORGEN is represented. with reference to EUFORGEN in relevant policy documents	Achieved – <mark>ongoing</mark> EUFORGEN represented at X Forest Europe, X OECD, X ITWG-FGR, X CGR-FA FAO.
to policymakers , forestry professionals and	Promotion campaigns raising awareness on the FGR conservation strategy;			number and list of leaflets and infographics, evidence of their dissemination	Ongoing
practitioners on the ground, wider scientific community and society	Get coverage of the topic of FGR in international media by strengthening media partnerships and developing products of interest to media	S		list of relevant events and coverage	Pending

Operational Objective	Activities Phase VI	Responsibility	Time frame	means of verification	Status as of 31 December 2022 / Date of achievement
	Present EUFORGEN, its activities and products outside the circle of forest geneticists	S	ongoing	list of selected scientific and practical events	<mark>Achieved – ongoing</mark> Forest Europe
	Maintain or strengthen communication channels with key actors such as Forest Europe, OECD FRM, FAO CGRFA, FAO ITWFGR, IPBES, CBD	S + AC	ongoing	list of Forest Europe, OECD FRM, FAO CGRFA, FAO ITWFGR, IPBES, CBD and other relevant events attended by Secretariat and AC	Achieved – ongoing Forest Europe, OECD FRM, FAO CGRFA, FAO ITWFGR , JRC, Bioversity, ECPGR, ERFP
Maintain and further develop the EUFGIS information system and contribute to the further development of the distribution	Connecting EUFGIS with FOREMATIS IS to provide information of the availability of FRM to potential users	S	2021	feature in place and results operative	Ongoing will be a new functionality of the revised EUFGIS (point below) testing example available in existing interface at: <u>https://www.euforgen.org/me</u> <u>mber-</u> <u>countries/luxembourg/?showF</u> <u>orematis=true</u>

Operational Objective	Activities Phase VI	Responsibility	Time frame	means of verification	Status as of 31 December 2022 / Date of achievement
maps of European forest trees	Improving the functionality of EUFGIS to facilitate the national reporting efforts	S	2024	new version of EUFGIS Portal and Intranet available	Ongoing (FORGENIUS) <u>https://www.forgenius.eu/euf</u> gis
	Collaborate with the Joint Research Centre (JRC) of the European Commission in improving distribution maps, serving as a link between the FGR scientific community and JRC. Provide access to maps via EUFORGEN website	S + MC	ongoing	list of new maps where EUFORGEN's contribution is acknowledged, number of maps in EUFORGEN's website	Achieved – ongoing https://www.euforgen.org/spe cies/ new maps available from https://data.mendeley.com/da tasets/hr5h2hcgg4/9#file- 2b32e368-04f0-40d2-bb82- ac5eacdb79e8
	contribute to the preparation of FAO State of the World FGR, by providing national & Europe Region perspectives	S+ EUFGIS Focal Points + MC	2020- 2023	list and text of relevant chapters	ongoing Regional contribution submitted (S). 19 National Contribution submitted to FAO by MC.

Operational Objective	Activities Phase VI	Responsibility	Time frame	means of verification	Status as of 31 December 2022 / Date of achievement
Contribute to relevant international	Support the monitoring of the implementation of the GPA- FGR. Provide the Regional perspective	S + MC	ongoing	EUFGIS is used as source of data for National and Regional reporting	Achieved – <mark>ongoing</mark>
reporting efforts, such as the State of Europe's Forests	Contribute to the State of Europe's Forest (Responsible for report on Indicator 4.6)	S + MC	2024	data on Indicator 4.6 are provided in due time and reference to EUFORGEN and EUFGIS is made in the report	Planned
reports	Publish reports of the WG or proceedings of relevant events		2024	Reports released electronically	Planned
	make available the overview of the State of Europe's FGR report, presenting 4.6 data for all species	S + MC	2024	data on indicator 4.6 are presented for each species in EUFORGEN's website	Planned (in the framework of the upgrade of EUFGIS)

Strategic Objective 2: Coordinate conservation of forest genetic resources in Europe	
--	--

Operatio nal Objective	Activities Phase VI	Responsibility 1	Time frame	means of verification	Status as of 31 December 2022 / Date of achievement
Update the pan-	Working group to guide and support the GenRes Bridge project in updating the European strategy for the conservation of FGR	S + WG + SC	2021	composition of the WG records of the inputs to the development of the strategy. updated strategy	Achieved FGR Strategy published (2021) www.genresbridge.eu/grs4e
European conservat ion strategy also including response to large scale risks	Involve non-member countries and neighbour countries in revising the Pan- European FGR conservation strategy	S + Project partners	2021	list of non-member and neighbour countries consulted and involved in the development of the strategy	Achieved FGR Strategy published in 2021 www.euforgen.org/fileadmin/t emplates/euforgen.org/upload /Publications/Thematic public ations/FGR Strategy4Europe.p df Non-member countries consulted: Belarus, Bosnia & Herzegovina, Bulgaria, Cyprus, Georgia, Greece, Moldova, North Macedonia, Portugal, Romania , Turkey, Ukraine.

Operatio nal Objective	Activities Phase VI	Responsibility 1	Time frame	means of verification	Status as of 31 December 2022 / Date of achievement
Support National implemen tation of the GPA- FGR	attend relevant meetings of FAO ITWG- FGR and CGRFA Global and maintain the link with the Member Countries	S +AC+ NC+ SC	ongoing	list of ITWG FGR and CGRFA meetings attended by Secretariat and AC	Achieved – <mark>ongoing</mark>
Impleme	Working Group developing Minimum Requirements for static and dynamic <i>ex situ</i> conservation	WG+ NEs	<mark>2023</mark>	composition of the working group and report (minimum requirements for <i>ex situ</i> conservation)	Ongoing
Impleme nt the pan- European conservat ion	Optimize the European network of genetic conservation units (training of EUFGIS FPs)	S+ GenRes Bridge Partners+ EUFGIS FPs	2021, 2024	list of trained EUFGIS FP, agenda, report and list of recommendations for the improvement of EUFGIS	Achieved – ongoing (GenRes Bridge and FORGENIUS. Two more trainings planned before the end of the Phase)
strategy	implementation of the decision support tool for the management of the genetic conservation units' network	S+ EUFGIS FPs	2024	the tool is available and the EUFGIS information system modified. EUFGIS FPs trained	Ongoing (FORGENIUS)

Operatio nal Objective	Activities Phase VI	Responsibility 1	Time frame	means of verification	Status as of 31 December 2022 / Date of achievement
	Support the implementation of a pan-European genetic monitoring scheme with focus on the core network of GCUs	<mark>S +NCs</mark>	<mark>2024</mark>	composition of the WG, report (in case of a WG) or newly created opportunities	Pending

Strategic Objective 3: Promote the appropriate use of forest genetic resources

Operational Objective	Activities Phase VI	Responsibility ¹	Time frame	means of verification	Status as of 31 December 2022 / Date of achievement
Prepare science- based recommendations and tools for better incorporating	Discussion Platform (DP) on strategies for the adaptation to climate	MC+ S	2024	list of participants, agenda, minutes and recommendations	Achieved 18-20 October 2022, Amsterdam, The Netherlands
genetic aspects into Sustainable Forest Management practices	change WG on strategies for the adaptation to climate change	MC+ S	<mark>2021-2024</mark>	list of members, minutes of meetings, report of WG	Planned Postponed to 2023/24 due to COVID 19 traveling and meeting limitations SC to define expected output
	WG(s) building on Phase V WG on FRM - Customisation of guidelines for various audiences	MC+ S	2024	list of members, minutes of meetings, report of WG	Ongoing

Operational Objective	Activities Phase VI	Responsibility ¹	Time frame	means of verification	Status as of 31 December 2022 / Date of achievement
	workshop to identify research needs and priorities on FGR in Europe (also apply to the other objectives)	MC+ S	2020	list of participants, minutes, prioritised list of research and policy needs	Achieved GenTree final conference www.gentree-h2020.eu/ fileadmin/Gentree-uploads/ documents/GenTree stakeholders consultation 30Jan2020 report short final.pdf
	link EUFGIS with FOREMATIS (conversion of EUFGIS into a Semantic Information System)	S	2021	new Semantic EUFGIS Information system released, effectively linked to FOREMATIS	Ongoing the semantic linking will be done through the OptFORESTS project
Analyse policy issues and recommend changes when they conflict with the appropriate use of FGR	Working Group on FGR-related policies	S + SR	ongoing	list of members, minutes of meetings, recommendations of WG, reports to SC	Ongoing -

1 S=Secretariat, NC= National Coordinators, SC= Steering Committee, SR = Selected Representatives, FP = Focal Points, MC = designated Member countries representatives, AC = Advisory Committee, NE = National Expert, WG= working groups

2 FE = Forest Europe, CBD= Convention on Biological Diversity, GPA FGR = Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources ExtRev= External Review, ToC= Theory of Change

Annex 2 Financial reports 2022