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PRELIMINARY FIRST REPORT ON THE IMPLEMENTATION OF *THE GLOBAL PLAN OF ACTION FOR THE CONSERVATION, SUSTAINABLE USE AND DEVELOPMENT OF FOREST GENETIC RESOURCES*

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Appendix I: Guidelines for the preparation of country progress reports on the implementation of *The Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources*

Appendix II: Reporting guidelines for regional networks and international organizations on their contributions to the implementation of *The Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources*

I. INTRODUCTION

1. At its Sixteenth Regular Session, the Commission on Genetic Resources for Food and Agriculture (the Commission) adopted targets, indicators and verifiers for forest genetic resources to be used as assessment tools for monitoring the implementation of the *Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources* (Global Plan of Action), as well as a monitoring schedule.¹ It requested FAO to prepare draft guidelines for the preparation of country progress reports and reporting guidelines for regional networks and international organizations.² It also requested FAO to invite regional networks on forest genetic resources and relevant international organizations to report on their contributions to the implementation of the Global Plan of Action.

2. This document presents the findings of the *Preliminary First Report on the implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources*. The guidelines for the preparation of country progress reports are presented in *Appendix I* and the reporting guidelines for regional networks and international organizations in *Appendix II* to this document.

II. PREPARATORY PROCESS

3. In the beginning of 2017, FAO prepared draft reporting guidelines, including a questionnaire and a glossary of technical terms, for the submission of country progress reports. As requested by the Commission³, FAO consulted in March 2017 the Intergovernmental Technical Working Group on Forest Genetic Resources (the Working Group) and the National Focal Points on forest genetic resources (NFPs), by electronic means, on the draft reporting guidelines and received comments from 11 countries⁴.

4. Countries could report through a dedicated online reporting system by completing the questionnaire made available online on the Open Foris platform. To facilitate the answering of species-specific questions, the list of species countries had reported earlier for *The State of the World's Forest Genetic Resources* was revised to reflect recent changes in taxonomy and to exclude minor shrub species that may be considered only marginally as “forest genetic resources”. The updated list, including approximately 6,600 species, was incorporated into the online reporting system.

5. The filled online questionnaire was considered as the country progress report. As of April 2018, a total of 41 countries and 1 regional network had submitted their progress reports. Two other countries were still in the process of completing the questionnaire.

List of countries (41) which submitted their progress report (as of April 2018)

Africa (6)	Burkina Faso, Morocco, Madagascar, Mauritania, Niger, Swaziland	Near East (1)	Lebanon
Asia (7)	China, India, Japan, Republic of Korea, Lao People Democratic Republic, Sri Lanka, Thailand	North America (2)	Canada, United States of America

¹ CGRFA-16/17/Report, paragraph 74.

² CGRFA-16/17/Report, paragraph 75.

³ CGRFA-16/17/Report, paragraph 75.

⁴ Australia, Brazil, Czechia, Denmark, Finland, France, Germany, Morocco, Norway, Sweden, United States of America

Europe (20)	Armenia, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Iceland, Ireland, Lithuania, Luxembourg, Norway, Poland, Sweden, Switzerland, Turkey	South West Pacific (2)	Australia, Vanuatu
Latin America and the Caribbean (3)	Chile, Ecuador, Mexico		

6. Concerning regional networks on forest genetic resources and relevant international organizations, a report was received from the European Forest Genetic Resources Programme on its contributions to the implementation of the Global Plan of Action. Bioversity International informed the Secretariat on its interest to prepare a report, and that the Latin America Forest Genetic Resources Network (LAFORGEN), coordinated by Bioversity, has no activities to report. OECD and its Forest Seed and Plant Scheme also informed the Secretariat on its intention to submit a report.

III. RESPONSES OF COUNTRIES TO THE GLOBAL PLAN OF ACTION

7. All 41 reporting countries answered Part A of the questionnaire which focused on policy responses of countries to the Global Plan of Action. The findings are presented in the following sections based on Targets A.1, A.2, A.3 and A.4, and related indicators and verifiers.

Target A.1: Availability of data and information on FGR is increased

Indicator A.1.1: Extent of national FGR inventories or similar arrangements	
Verifier A.1.1.1: Number and list of countries with operational national FGR inventories or similar arrangements	
Number of countries with operational national FGR inventories:	30

8. In these 30 countries, national FGR inventories were established between 1951 and 2016. Three countries (France, Luxembourg and Sweden) reported having established them in 2013 or after. The most common areas of work or activities covered by the inventories were conservation of FGR (in 26 countries), research and development efforts (25) and production of forest reproductive material (23), followed by FGR transferred internationally (14) and other activities (5). One country (Madagascar) reported that a process for establishing a national FGR inventory has been initiated. The table below shows the list of countries, by regions, with reported operational national FGR inventories.

List of countries with operational national FGR inventories or similar arrangements

Africa (3)	Burkina Faso, Morocco, Niger	Near East (0)	-
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Asia (7)	China, India, Japan, Republic of Korea, Lao People Democratic Republic, Sri Lanka, Thailand	North America (2)	Canada, United States of America
Europe (16)	Bulgaria, Cyprus, Czechia, Denmark, Estonia, France, Germany, Iceland, Ireland, Lithuania, Luxembourg, Norway, Poland, Sweden, Switzerland, Turkey	South West Pacific (1)	Australia
Latin America and the Caribbean (1)	Chile		

Indicator A.1.2: Extent of up-to-date national FGR information systems	
Verifier A.1.2.1: Number and list of countries with up-to-date national FGR information system(s) or other similar arrangements	
Number of countries with up-to-date national FGR information systems:	26

9. In these 26 countries, national FGR information systems were established between 1930 and 2016. Five countries (Bulgaria, India, Mexico, Luxembourg and Sweden) reported having established them in 2013 or after. The most common areas of work or activities recorded by the information systems were conservation of FGR (in 22 countries), production of forest reproductive material (21), research and development efforts (20) and followed by FGR transferred internationally (11) and other activities (4). Six countries (Burkina Faso, Ecuador, Iceland, Madagascar, Swaziland and Switzerland) reported that a process for establishing a national FGR information system has been initiated. The table below shows the list of countries, by regions, with up-to date national FGR information systems.

List of countries with up-to-date national FGR information systems

Africa (2)	Morocco, Niger	Near East (0)	-
Asia (5)	China, India, Japan, Republic of Korea, Sri Lanka	North America (2)	Canada, United States of America
Europe (15)	Bulgaria, Croatia, Denmark, Estonia, Finland, France, Germany, Ireland, Lithuania, Luxembourg, Norway, Poland, Sweden, Switzerland, Turkey	South West Pacific (1)	Australia
Latin America and	Chile, Mexico		

the Caribbean (2)			
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Target A.2: National *in situ* and *ex situ* systems for FGR conservation are strengthened

Indicator A.2.1: Extent of national <i>in situ</i> conservation systems	
Verifier A.2.1.1: Number and list of countries with operational national <i>in situ</i> conservation systems	
Number of countries with operational national <i>in situ</i> conservation systems:	36

10. In these 36 countries, national *in situ* conservation systems were established between 1885 and 2016. Three countries (Mexico, Luxembourg and Sweden) reported having established them in 2013 or after. The most common components of the conservation systems were *in situ* conservation units of FGR (in 30 countries), protected areas (31), forests managed for production of wood and/or non-wood products (27), followed by other components (3). One country (Burkina Faso) reported that a process for establishing a national *in situ* conservation system has been initiated. The table below shows the list of countries, by regions, with reported operational national *in situ* conservation systems.

List of countries with operational national *in situ* conservation systems.

Africa (4)	Morocco, Madagascar, Mauritania, Niger,	Near East (1)	Lebanon
Asia (7)	China, India, Japan, Republic of Korea, Lao People Democratic Republic, Sri Lanka, Thailand	North America (1)	Canada
Europe (19)	Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Iceland, Ireland, Lithuania, Luxembourg, Norway, Poland, Sweden, Switzerland, Turkey	South West Pacific (1)	Australia
Latin America and the Caribbean (3)	Chile, Ecuador, Mexico		

Indicator A.2.2: Extent of national <i>ex situ</i> conservation systems	
Verifier A.2.2.1: Number and list of countries with operational national <i>ex situ</i> conservation systems	

Number of countries with operational national <i>ex situ</i> conservation systems:	31
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11. In these 31 countries, national *ex situ* conservation systems were established between 1951 and 2011. The most common components of the conservation systems were field collections (in 26 countries), storage facilities for seed, pollen other tissue (27) and *ex situ* conservation stands (26), followed by followed by other components (4). Three countries (Bulgaria, Lebanon and Swaziland) reported that a process for establishing a national *ex situ* conservation system has been initiated. The table below shows the list of countries, by regions, with reported operational national *ex situ* conservation systems.

List of countries with operational national *ex situ* conservation systems.

Africa (3)	Burkina Faso, Morocco, Madagascar	Near East (0)	-
Asia (7)	China, India, Japan, Republic of Korea, Lao People Democratic Republic, Sri Lanka, Thailand	North America (1)	Canada
Europe (16)	Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Ireland, Lithuania, Luxembourg, Norway, Poland, Sweden, Switzerland, Turkey	South West Pacific (1)	Australia
Latin America and the Caribbean (3)	Chile, Ecuador, Mexico		

Target A.3: Tree seed and breeding programmes, as well as extension efforts on FGR use, are reinforced, including for conservation collections

Indicator A.3.1: Extent of national tree seed programmes	
Verifier A.3.1.1: Number and list of countries with operational national tree seed programmes or similar arrangements	
Number countries with operational national tree seed programmes:	29

12. In these 29 countries, national tree seed programmes were established between 1895 and 2017. One country (Japan) reported having established them in 2013 or after. Five countries (Bulgaria, France, Lebanon, Niger and Vanuatu) reported that a process for establishing a national tree seed programme has been initiated. The table below shows the list of countries, by regions, with reported operational national tree seed programmes.

List of countries with operational national tree seed programmes.

Africa (4)	Burkina Faso, Morocco, Madagascar, Swaziland	Near East (0)	-
Asia (7)	China, India, Japan, Republic of Korea, Lao People Democratic Republic, Sri Lanka, Thailand	North America (2)	Canada, United States of America
Europe (13)	Croatia, Czechia, Denmark, Estonia, Finland, Germany, Iceland, Ireland, Luxembourg, Norway, Poland, Sweden, Switzerland	South West Pacific (1)	Australia
Latin America and the Caribbean (2)	Chile, Mexico		

Indicator A.3.2: Extent of tree breeding programmes**Verifier A.3.2.1: Number and list of countries with operational tree breeding programmes**

Number of countries with operational tree breeding programmes:	30
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13. In these 30 countries, the main stakeholder groups operating tree breeding programmes were public entities (in 27 countries), private companies (13) and public-private partnerships (12), followed by other stakeholders. Two countries (Bulgaria and Turkey) reported that a process for establishing a tree breeding programme has been initiated. The table below shows the list of countries, by regions, with reported operational tree breeding programmes.

List of countries with operational tree breeding programmes.

Africa (3)	Burkina Faso, Morocco, Madagascar,	Near East (0)	-
Asia (7)	China, India, Japan, Republic of Korea, Lao People Democratic Republic, Sri Lanka, Thailand	North America (2)	Canada, United States of America
Europe (14)	Armenia, Croatia, Czechia, Denmark, Estonia, Finland, France, Germany, Iceland, Ireland, Lithuania, Norway, Poland, Sweden	South West Pacific (1)	Australia
Latin America and	Chile, Ecuador, Mexico		

the Caribbean (3)			
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Indicator A.3.3: Extent of extension efforts promoting appropriate use of FGR	
Verifier A.3.3.1: Number and list of countries with ongoing extension programmes or activities on FGR use	
Number of countries with ongoing extension programmes or activities on FGR use:	28

14. In these 28 countries, national extension programmes or activities were initiated between 1915 and 2017. The extensions efforts target forest owners (in 23 countries), farmers (16), local communities (16), followed by other FGR users (13). Five countries (Czechia, Ecuador, Ireland, Japan and Lithuania) reported having established such programmes in 2013 or after. Two countries (Burkina Faso and Morocco) reported that a process for establishing an extension programme on FGR use has been initiated. The table below shows the list of countries, by regions, with ongoing extension programmes or activities on FGR use.

List of countries with ongoing extension programmes or activities on FGR use.

Africa (3)	Madagascar, Niger, Swaziland	Near East (0)	-
Asia (7)	China, India, Japan, Republic of Korea, Lao People Democratic Republic, Sri Lanka, Thailand	North America (2)	Canada, United States of America
Europe (13)	Croatia, Czechia, Denmark, Estonia, Finland, France, Germany, Iceland, Ireland, Lithuania, Norway, Poland, Sweden	South West Pacific (1)	Vanuatu
Latin America and the Caribbean (2)	Ecuador, Mexico		

Target A.4: National coordination mechanisms on FGR are created, and national strategies for FGR conservation and use are developed and implemented

Indicator A.4.1: Extent of national coordination mechanisms on FGR	
Verifier A.4.1.1: Number and list of countries with national coordination mechanisms on FGR	
Number of countries with national coordination mechanisms on FGR:	25

15. In these 25 countries, national coordination mechanisms on FGR were established between 1951 and 2017. The main stakeholders involved in the national coordination mechanisms were relevant ministries (in 21 countries), research organizations (21) and other stakeholders (14), followed by private sector (11), governmental organizations (11), non-governmental organizations (10), forest owners (2) and farmers (1). Four countries (Ireland, Japan, Luxembourg and Mexico) reported having established such a mechanism in 2013 or after. Five countries (Lao People Democratic Republic, Morocco, Niger, Sri Lanka and Swaziland) reported that a process for establishing a national coordination mechanism on FGR has been initiated. The table below shows the list of countries, by regions, with national coordination mechanisms on FGR.

List of countries with national coordination mechanisms on FGR.

Africa (2)	Burkina Faso, Madagascar,	Near East (0)	-
Asia (5)	China, India, Japan, Republic of Korea, Thailand	North America (2)	Canada, United States of America
Europe (15)	Croatia, Cyprus, Czechia, Denmark, Finland, France, Germany, Iceland, Ireland, Lithuania, Luxembourg, Norway, Poland, Sweden, Turkey	South West Pacific (0)	-
Latin America and the Caribbean (1)	Mexico		

Indicator A.4.2: Extent of national strategies for FGR conservation and use	
Verifier A.4.2.1: Number and list of countries implementing national strategies for FGR conservation and use	
Number of countries implementing national strategies for FGR conservation and use:	23

16. In these 23 countries, national strategies for FGR conservation and use were prepared between 1951 and 2017. The national strategies mainly covered conservation of FGR (in 21 countries) and use of FGR (19), and to a lesser degree development of FGR (12). Five countries (Ecuador, India, Ireland, Japan and Sweden) reported having established such a mechanism in 2013 or after. Five countries (Bulgaria, Burkina Faso, Iceland, Mauritania, Morocco and Switzerland) reported that a process for preparing a national strategy for FGR has been initiated. The table below shows the list of countries, by regions, implementing national strategies for FGR.

List of countries implementing national strategies for FGR conservation and use.

Africa (2)	Madagascar, Niger	Near East (0)	-
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Asia (4)	China, India, Japan, Republic of Korea	North America (2)	Canada, United States of America
Europe (11)	Cyprus, Czechia, Denmark, Finland, France, Germany, Ireland, Lithuania, Luxembourg, Norway, Sweden	South West Pacific (2)	Australia, Vanuatu
Latin America and the Caribbean (2)	Ecuador, Mexico		

Indicator A.4.3: Extent to which national strategies contribute to the implementation of regional or sub-regional FGR conservation strategies	
Verifier A.4.3.1: Number and list of countries whose national strategy contribute to the implementation of regional or sub-regional FGR conservation strategy	
Number of countries whose national strategy contribute to the implementation of regional or sub-regional FGR conservation strategy:	12

17. Of those countries which have national strategies for FGR, 12 countries reported that their national strategy contributes to regional or sub-regional FGR conservation strategies. Four countries (Burkina Faso, Cyprus, Thailand and Switzerland) reported that a process for aligning their national strategy (or the one under preparation) with a regional or sub-regional FGR conservation strategy has been initiated. The table below shows the list of countries, by regions, whose national strategy contributes to the implementation of a regional or sub-regional FGR conservation strategy.

List of countries whose national strategy contribute to the implementation of regional or sub-regional FGR conservation strategy.

Africa (1)	Niger	Near East (0)	-
Asia (3)	China, India, Japan, Republic of Korea	North America (1)	United States of America
Europe (6)	Czechia, Finland, Germany, Ireland, Norway, Sweden,	South West Pacific (0)	-
Latin America and the Caribbean (0)	-		

IV. STATE OF CONSERVATION, USE AND DEVELOPMENT OF FOREST GENETIC RESOURCES

19. Of the 41 reporting countries, 39 answered Part B of the questionnaire which focused on the state of conservation, use and development of FGR. Many countries indicated in their progress reports that they did not have all species-specific information available. The findings are presented in the following sections based on Targets B.1, B.2, B.3 and B.4, and related indicators and verifiers.

Target B.1: Forest genetic resources are regularly assessed and characterized

Indicator B.1.1: Assessment of FGR	
Verifier B.1.1.1: Number and list of species for which an up-to-date national distribution range is available	
Number of species for which an up-to-date national distribution range is available:	797*

* Net number of species reported globally

Number of species, by region and country, for which an up-to-date national distribution range is available.

Africa (87)*	Burkina Faso (25), Morocco (10), Madagascar (40), Mauritania (2), Niger (2), Swaziland (14)
Asia (152)*	China (1), India (9), Japan (3), Republic of Korea (125), Lao People Democratic Republic (5), Sri Lanka (0), Thailand (18)
Europe (169)*	Armenia (0), Bulgaria (54), Croatia (14), Cyprus (11), Czechia (38), Denmark (4), Estonia (10), Finland (16), France (76), Georgia (0), Germany (70), Iceland (10), Ireland (25), Lithuania (17), Luxembourg (39), Norway (23), Poland (23), Sweden (21), Switzerland (89), Turkey (8)
Latin America and the Caribbean (202)*	Chile (174), Ecuador (8), Mexico (21)
Near East (48)*	Lebanon (48)
North America (124)*	Canada (69), United States of America (86)
South West Pacific (113)*	Australia (112), Vanuatu (1)

*Net number of species reported by regions (i.e. without duplicates)

Indicator B.1.2: Characterization of FGR
Verifier B.1.2.1: Number and list of species which have been characterized based on non-molecular information (e.g. provenance trials, ecological or climatic zonation)

Number and list of species which have been characterized based on non-molecular information (e.g. provenance trials, ecological or climatic zonation):	730
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* Net number of species reported globally

Number of species, by region and country, which have been characterized based on non-molecular information.

Africa (73)*	Burkina Faso (36), Morocco (8), Madagascar (18), Mauritania (2), Niger (2), Swaziland (15)
Asia (222)*	China (16), India (73), Japan (3), Republic of Korea (125), Lao People Democratic Republic (5), Sri Lanka (0), Thailand (19)
Europe (153)*	Armenia (0), Bulgaria (54), Croatia (6), Cyprus (2), Czechia (18), Denmark (7), Estonia (3), Finland (4), France (76), Georgia (0), Germany (40), Iceland (10), Ireland (18), Lithuania (20), Luxembourg (39), Norway (6), Poland (20), Sweden (13), Switzerland (89), Turkey (8)
Latin America and the Caribbean (233)*	Chile (174), Ecuador (41), Mexico (21)
Near East (32)*	Lebanon (32)
North America (85)*	Canada (68), United States of America (31)
South West Pacific (37)*	Australia (37), Vanuatu (0)

*Net number of species reported by regions (i.e. without duplicates)

Verifier B.1.2.2: Number and list of species which have been characterized based on molecular information (e.g. range-wide sampling of populations for molecular marker studies)	
Number of species which have been characterized based on molecular information (e.g. range-wide sampling of populations for molecular marker studies):	378*

* Net number of species reported globally

Number of species, by region and country, which have been characterized based on molecular information.

Africa (19)*	Burkina Faso (6), Morocco (6), Madagascar (7), Mauritania (0), Niger (0), Swaziland (0)
Asia (159)*	China (16), India (99), Japan (3), Republic of Korea (38), Lao People Democratic Republic (1), Sri Lanka (0), Thailand (12)

Europe (76)*	Armenia (0), Bulgaria (2), Croatia (7), Cyprus (2), Czechia (10), Denmark (2), Estonia (2), Finland (7), France (29), Georgia (0), Germany (48), Iceland (3), Ireland (4), Lithuania (5), Luxembourg (8), Norway (6), Poland (11), Sweden (8), Switzerland (11), Turkey (8)
Latin America and the Caribbean (41)*	Chile (11), Ecuador (11), Mexico (21)
Near East (6)*	Lebanon (6)
North America (69)*	Canada (61), United States of America (80)
South West Pacific (41)*	Australia (40), Vanuatu (1)

*Net number of species reported by regions (i.e. without duplicates)

Target B.2: Forest genetic resources are conserved *in situ*, and complementary *ex situ* measures have been implemented

Indicator B.2.1: Amount FGR conserved <i>in situ</i>	
Verifier B.2.1.1: Number and list of species included in <i>in situ</i> conservation programmes	
Number species included in <i>in situ</i> conservation programmes:	555*

* Net number of species reported globally

Number of species, by regions and countries, included in *in situ* conservation programmes.

Africa (73)*	Burkina Faso (17), Morocco (9), Madagascar (34), Mauritania (2), Niger (2), Swaziland (14)
Asia (144)*	China (5), India (83), Japan (3), Republic of Korea (49), Lao People Democratic Republic (2), Sri Lanka (5), Thailand (3)
Europe (98)*	Armenia (0), Bulgaria (25), Croatia (15), Cyprus (9), Czechia (14), Denmark (4), Estonia (3), Finland (8), France (6), Georgia (0), Germany (72), Iceland (1), Ireland (4), Lithuania (12), Luxembourg (6), Norway (10), Poland (14), Sweden (25), Switzerland (14), Turkey (7)
Latin America and the Caribbean (120)*	Chile (87), Ecuador (14), Mexico (21)
Near East (36)*	Lebanon (36)
North America (88)*	Canada (65), United States of America (36)
South West Pacific (33)*	Australia (33), Vanuatu (0)

*Net number of species reported by regions (i.e. without duplicates)

Verifier B.2.1.2: Number of *in situ* conservation units by species**Verifier B.2.1.3: Area (ha) designated and managed for *in situ* conservation by species**

20. All reported (555) species are not listed here due to space limitations. The table below shows the five most commonly conserved (*in situ*) species by regions.

Number of *in situ* conservation units and their area (ha) for the five most commonly conserved species by regions.

Region	Species	No. <i>in situ</i> conservati on units	Area (ha)
Africa	<i>Acacia senegal</i>	52	406327
	<i>Borassus aethiopum</i>	12	30025
	<i>Cedrus atlantica</i>	22	30000
	<i>Quercus suber</i>	35	3500
	<i>Pinus halepensis</i>	21	2700
Asia	<i>Dalbergia obtusifolia</i>	n/a	103619
	<i>Pinus densiflora</i>	143	31805
	<i>Dracaena cochinchinensis</i>	3	19790
	<i>Tectona grandis</i>	227	15614
	<i>Quercus mongolica</i>	76	11778
Europe	<i>Fagus sylvatica</i>	1284	65763
	<i>Picea abies</i>	718	58271
	<i>Pinus sylvestris</i>	1226	33012
	<i>Abies alba</i>	249	21138
	<i>Quercus petraea</i>	566	16420
Latin America and the Caribbean	<i>Nothofagus betuloides</i>	29	2753949
	<i>Tepualia stipularis</i>	19	2377501
	<i>Drimys winteri</i>	30	1885728
	<i>Pilgerodendron uvifera</i>	14	1079120
	<i>Nothofagus nitida</i>	23	842343
Near East	<i>Quercus coccifera</i>	9	n/a
	<i>Quercus infectoria</i>	9	n/a
	<i>Pistacia palaestina</i>	8	n/a
	<i>Cedrus libani</i>	7	n/a
	<i>Styrax officinalis</i>	7	n/a
North America	<i>Pseudotsuga menziesii</i>	81	3881636
	<i>Pinus contorta</i>	69	3575434
	<i>Abies lasiocarpa</i>	55	3544108
	<i>Tsuga mertensiana</i>	30	1959604

	<i>Acer saccharum</i>	56	1630067
South West Pacific	-		
(no data reported for these verifiers)	-		
	-		
	-		
	-		

Indicator B.2.2: Amount FGR conserved <i>ex situ</i>	
Verifier B.2.2.1: Number and list of species included in <i>ex situ</i> conservation programmes	
Number of species included in <i>ex situ</i> conservation programmes:	610

* Net number of species reported globally

Number of species, by regions and countries, included in *ex situ* conservation programmes.

Africa (48)*	Burkina Faso (14), Morocco (6), Madagascar (27), Mauritania (0), Niger (1), Swaziland (3)
Asia (308)*	China (14), India (172), Japan (3), Republic of Korea (122), Lao People Democratic Republic (3), Sri Lanka (10), Thailand (18)
Europe (77)*	Armenia (0), Bulgaria (0), Croatia (6), Cyprus (4), Czechia (19), Denmark (4), Estonia (4), Finland (15), France (8), Georgia (0), Germany (56), Iceland (3), Ireland (19), Lithuania (12), Luxembourg (11), Norway (2), Poland (34), Sweden (2), Switzerland (5), Turkey (7)
Latin America and the Caribbean (111)*	Chile (11), Ecuador (84), Mexico (21)
Near East (1)*	Lebanon (1)
North America (90)*	Canada (59), United States of America (48)
South West Pacific (44)*	Australia (43), Vanuatu (1)

*Net number of species reported by regions (i.e. without duplicates)

Verifier B.2.2.2: Number of <i>ex situ</i> conservation units by species
Verifier B.2.2.3: Area (ha) designated and managed for <i>ex situ</i> conservation by species
Verifier B.2.2.4: Number of <i>ex situ</i> accessions (in seed and clone banks) by species

21. All reported species are not listed here due to space limitations. The table below shows five most commonly conserved (*ex situ*) species and the number of their *ex situ* accessions by regions.

Number of *ex situ* conservation units, their area (ha) and number of *ex situ* accessions for the five most commonly conserved species by regions.

Region	Species	No. <i>ex situ</i> conservati on units	Area (ha)	No. of <i>ex situ</i> accessions
Africa	<i>Pinus kesiya</i>	8	78	0
	<i>Anogeissus leiocarpus</i>	2	20	2
	<i>Pinus halepensis</i>	3	15	66
	<i>Vitellaria paradoxa</i>	5	15	4
	<i>Jatropha curcas</i>	5	15	3
Asia	<i>Tectona grandis</i>	90	2250	1160
	<i>Eucalyptus camaldulensis</i>	254	413	85
	<i>Pinus kesiya</i>	8	324	5
	<i>Dalbergia sissoo</i>	62	269	663
	<i>Eucalyptus tereticornis</i>	35	260	10
Europe	<i>Fagus sylvatica</i>	614	6739	154
	<i>Pinus sylvestris</i>	4626	58731	7795
	<i>Quercus robur</i>	484	4523	1920
	<i>Picea abies</i>	516	4317	4757
	<i>Larix decidua</i>	366	4191	1343
Latin America and the Caribbean	<i>Pinus radiata</i>	158	646	6
	<i>Eucalyptus globulus</i>	133	428	6
	<i>Eucalyptus nitens</i>	70	181	5
	<i>Nothofagus alpina</i>	7	14	1009
	<i>Nothofagus pumilio</i>	2	13	n/a
Near East (No data reported for these verifiers)	-			
	-			
	-			
	-			
	-			
North America	<i>Picea glauca</i>	n/a	n/a	2873
	<i>Picea mariana</i>	n/a	n/a	1470
	<i>Pseudotsuga menziesii</i>	n/a	n/a	1244
	<i>Juglans cinerea</i>	n/a	n/a	640
	<i>Pinus albicaulis</i>	n/a	n/a	535
South West Pacific (Data reported for one species only)	<i>Santalum austrocaledonicum</i>	n/a	2	5
	-			
	-			
	-			
	-			

Target B.3: Use and development of FGR are enhanced

Indicator B.3.1: Species included in tree seed and breeding programmes (including international breeding cooperation and efforts carried out by the private sector)	
Verifier B.3.1.1: Number and list of species included in national tree seed programmes	
Number of species included in national tree seed programmes:	490*

* Net number of species reported globally

Number of species included in national tree seed programmes.

Africa (90)*	Burkina Faso (15), Morocco (8), Madagascar (56), Mauritania (0), Niger (0), Swaziland (14)
Asia (117)*	China (3), India (2), Japan (3), Republic of Korea (87), Lao People Democratic Republic (3), Sri Lanka (11), Thailand (14)
Europe (85)*	Armenia (0), Bulgaria (0), Croatia (23), Cyprus (0), Czechia (37), Denmark (0), Estonia (9), Finland (3), France (29), Georgia (0), Germany (39), Iceland (2), Ireland (18), Lithuania (0), Luxembourg (0), Norway (3), Poland (35), Sweden (7), Switzerland (7), Turkey (3)
Latin America and the Caribbean (54)*	Chile (28), Ecuador (5), Mexico (21)
Near East (0)*	Lebanon (0)
North America (95)*	Canada (51), United States of America (60)
South West Pacific (115)*	Australia (114), Vanuatu (1)

*Net number of species reported by regions (i.e. without duplicates)

Verifier B.3.1.2: Number and list of species included in tree breeding programmes	
Number of species included in tree breeding programmes:	281*

* Net number of species reported globally

Number of species included in tree breeding programmes by regions and countries.

Africa (29)*	Burkina Faso (9), Morocco (7), Madagascar (14), Mauritania (0), Niger (0), Swaziland (0)
Asia (72)*	China (11), India (17), Japan (3), Republic of Korea (24), Lao People Democratic Republic (0), Sri Lanka (11), Thailand (14)

Europe (83)*	Armenia (0), Bulgaria (0), Croatia (6), Cyprus (0), Czechia (22), Denmark (6), Estonia (3), Finland (6), France (16), Georgia (0), Germany (34), Iceland (5), Ireland (19), Lithuania (7), Luxembourg (0), Norway (4), Poland (5), Sweden (6), Switzerland (55), Turkey (3)
Latin America and the Caribbean (37)*	Chile (11), Ecuador (7), Mexico (21)
Near East (0)*	Lebanon (0)
North America (67)*	Canada (25), United States of America (53)
South West Pacific (39)*	Australia (38), Vanuatu (1)

*Net number of species reported by regions (i.e. without duplicates)

Indicator B.3.2: Production of forest reproductive material

Verifier B.3.2.1: Area (ha) and number of seed stands by species

22. All reported species are not listed here due to space limitations. The table below shows the area and number of seed stands for five most commonly used species by regions.

Area (ha) and number of seed stands for the five most commonly used species by regions.

Region	Species	Area (ha)	No. of seed stands
Africa	<i>Cedrus atlantica</i>	3442	18
	<i>Quercus suber</i>	3030	28
	<i>Tetraclinis articulata</i>	2582	19
	<i>Pinus halepensis</i>	2574	17
	<i>Pinus pinaster</i>	1880	13
Asia	<i>Tectona grandis</i>	7241	82
	<i>Pinus roxburghii</i>	3250.2	16
	<i>Cedrus deodara</i>	1448.9	7
	<i>Pinus wallichiana</i>	1088.7	n/a
	<i>Shorea robusta</i>	489.8	4
Europe	<i>Pinus sylvestris</i>	156149	14174
	<i>Fagus sylvatica</i>	153692	8279
	<i>Picea abies</i>	83252	5821
	<i>Quercus petraea</i>	82377	4473

	<i>Abies alba</i>	29046	2885
Latin America and the Caribbean	<i>Swietenia macrophylla</i>	146	4
	<i>Cedrela odorata</i>	134	6
	<i>Pinus pseudostrobus</i>	113	7
	<i>Pinus cembroides</i>	113	7
	<i>Pinus oocarpa</i>	111	6
Near East (No data reported for these verifiers)	-		
	-		
	-		
	-		
	-		
North America	<i>Betula alleghaniensis</i>	n/a	41
	-		
	-		
	-		
	-		
South West Pacific	<i>Santalum austrocaledonicum</i>	2	6
	-		
	-		
	-		
	-		

Verifier B.3.2.2: Area (ha) and number of seed orchards by species

23. All reported species are not listed here due to space limitations. The table below shows the area and number of seed orchards for five most commonly used species by regions.

Area (ha) and number of seed orchards for the five most commonly used species by regions.

Region	Species	Area (ha)	No. of seed orchards
Africa	<i>Pinus kesiya</i>	46	6
	<i>Pinus patula</i>	5	2
	<i>Eucalyptus robusta</i>	5	2
	<i>Eucalyptus grandis</i>	5	1
	<i>Eucalyptus camaldulensis</i>	2	3
Asia	<i>Tectona grandis</i>	5569	85
	<i>Dalbergia sissoo</i>	678.2	64

	<i>Eucalyptus tereticornis</i>	518.9	139
	<i>Tamarindus indica</i>	432	n/a
	<i>Gmelina arborea</i>	418.4	30
Europe	<i>Pinus sylvestris</i>	4303	452
	<i>Picea abies</i>	1663	206
	<i>Pinus brutia</i>	655	75
	<i>Pinus nigra</i>	631	83
	<i>Larix decidua</i>	527	112
Latin America and the Caribbean	<i>Pinus radiata</i>	136	14
	<i>Eucalyptus nitens</i>	86	21
	<i>Eucalyptus globulus</i>	71	14
	<i>Pinus patula</i>	31	6
	<i>Pinus teocote</i>	8	1
Near East	-		
	-		
	-		
	-		
	-		
North America	<i>Picea glauca</i>	n/a	233
	<i>Pinus banksiana</i>	n/a	157
	<i>Picea mariana</i>	n/a	120
	<i>Tsuga heterophylla</i>	n/a	52
	<i>Pseudotsuga menziesii</i>	n/a	46
South West Pacific	<i>Eucalyptus globulus</i>	34	17
	<i>Corymbia citriodora</i>	28	12
	<i>Santalum album</i>	26	5
	<i>Eucalyptus dunnii</i>	21	13
	<i>Corymbia maculata</i>	15	9

Verifier B.3.2.3: Amount (average number per year) of planting stock produced through macro and micropropagation by species

24. All reported species are not listed here due to space limitations. The table below shows the amount of planting stock produced through macro and /or micropropagation for five most commonly produced species by regions

Amount (average number per year) of planting stock produced through macro and/or micropropagation for the five most commonly propagated species by regions.

Region	Species	No. of planting stock produced
Africa	<i>Pinus halepensis</i>	12000000
	<i>Pinus pinaster</i>	3700000
	<i>Cedrus atlantica</i>	1500000
	<i>Tetraclinis articulata</i>	700000
	<i>Argania spinosa</i>	500000
Asia	<i>Eucalyptus camaldulensis</i>	37000000
	<i>Leucaena leucocephala</i>	5000000
	<i>Casuarina equisetifolia</i>	2500000
	<i>Tectona grandis</i>	90000
	<i>Larix kaempferi</i>	20186
Europe	<i>Pinus sylvestris</i>	526002328
	<i>Picea abies</i>	331423450
	<i>Quercus robur</i>	163060300
	<i>Pinus nigra</i>	80046000
	<i>Quercus petraea</i>	57944941
Latin America and the Caribbean	<i>Pinus radiata</i>	60916000
	<i>Eucalyptus globulus</i>	27484000
	<i>Eucalyptus nitens</i>	12000000
	<i>Nothofagus alpina</i>	110000
	<i>Cedrela montana</i>	250
Near East	-	
	-	
	-	
	-	
	-	
North America	-	n/a
	-	
	-	
	-	
	-	
South West Pacific	<i>Santalum austrocaledonicum</i>	20000
	-	
	-	
	-	
	-	

Indicator B.3.3: State of tree breeding programmes**Verifier B.3.3.1: Testing and selection cycle by species**

25. All reported species are not listed here due to space limitations. The table below shows the state of most advanced breeding programmes for 12 species.

Generation number of the most advanced breeding programmes for 12 selected species.

Species	Generation number
<i>Alnus orientalis</i>	4
<i>Eucalyptus globulus</i>	4
<i>Ulmus minor</i>	3.5
<i>Araucaria cunninghamii</i>	3
<i>Eucalyptus urophylla</i>	3
<i>Pinus massoniana</i>	3
<i>Pinus pinaster</i>	3
<i>Pinus taeda</i>	3
<i>Castanea dentata</i>	2.5
<i>Eucalyptus grandis</i>	2.5
<i>Pinus elliottii</i>	2.5
<i>Pseudotsuga menziesii</i>	2.5

Target B.4: Policies and capacities supporting FGR conservation and sustainable use are strengthened**Indicator B.4.1: Integration of FGR conservation and use into relevant national policies****Verifier B.4.1.1: Number of countries which have integrated FGR conservation and use into their national forest programme and/or national forest policy**

Number of countries which have integrated FGR conservation and use into their national forest programme and/or national forest policy:	28
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26. Additionally, six countries (Georgia, Germany, Lao People Democratic Republic, Mexico, Morocco and Poland) reported that a process for integrating FGR conservation and use into their national forest programme and/or national forest policy has been initiated. Three countries (Mauritania, Sweden and United States of America) reported that this is not done because the country does not have a national forest programme and/or national forest policy.

Verifier B.4.1.2: Number of countries which have integrated FGR conservation and use into their national biodiversity action plans and/or related policies	
Number of countries which have integrated FGR conservation and use into their national biodiversity action plans and/or related policies:	33

27. One country (Vanuatu) reported that a process for integrating FGR conservation and use into their national biodiversity action plans and/or related strategies has been initiated. Three countries (Lithuania, Turkey and United States of America) reported that this is not done because the country does not have a national biodiversity action plan.

Verifier B.4.1.3: Number of countries which have integrated FGR conservation and use into their national adaptation strategies for climate change	
Number of countries which have integrated FGR conservation and use into their national adaptation strategies for climate change:	19

28. Ten countries (Australia, Czechia, Ecuador, Georgia, Germany Ireland, Mexico, Niger Poland and Sri Lanka) reported that a process for integrating FGR conservation and use into their national adaptation strategies for climate change has been initiated. Four countries (Croatia, Iceland, Lebanon and Sweden) reported that this is not done because the country does not have a national adaptation strategy for climate change.

Indicator B.4.2: Participation in regional/sub-regional collaboration on FGR	
Verifier B.4.2.1: Number of countries participating in regional/sub-regional networks on FGR	
Number of countries participating in regional/sub-regional networks on FGR:	29

29. Three countries (Lao People Democratic Republic, Morocco and Swaziland) reported that they are considering joining a regional or sub-regional network(s) on FGR.

Indicator B.4.3: Participation in international research and development cooperation on FGR	
Verifier B.4.3.1: Number of countries and national organizations participating in international R&D cooperation on FGR	
Number of countries participating in international R&D cooperation on FGR:	28

30. The number of participating national organizations per country ranged from 1 to 18. Seven countries (Armenia, Bulgaria, Chile, Luxembourg, Mauritania, Swaziland and Turkey) reported that their national organizations are currently not participating in international R&D cooperation on FGR but that they have done so during the past five years. Four countries (Georgia, Lao People Democratic

Republic, Niger and Sri Lanka) reported that their national organizations have sought opportunities for participating in international R&D cooperation on FGR.

V. CONTRIBUTIONS FROM REGIONAL NETWORKS AND INTERNATIONAL ORGANIZATIONS

31. A report was received from the European Forest Genetic Resources Programme (EUFORGEN)⁵ which is a pan-European implementation mechanism for Resolution S2 (Conservation of forest genetic resources) of the first Ministerial Conference on the Protection of Forests in Europe (MCPFE, now called Forest Europe) and which established in 1994. EUFORGEN reported contributions to all four priority areas of the Global Plan of Action. The full report of EUFORGEN will be made available on the FAO website.

VI. REMARKS

32. The Preliminary First Report indicates that most reporting countries had a national inventory of forest genetic resources as well as national *in situ* and *ex situ* conservation programmes or systems in place when the Global Plan of Action was adopted in 2013. Most national FGR inventories, national tree seed programmes and tree breeding programmes were also established well before 2013.

33. In case of national coordination mechanisms and national strategies for forest genetic resources, 16 and 18 countries, respectively, reported of not having them. These countries are likely to benefit from the guidelines that are being developed for the preparation of a national strategy for FGR.

34. More detailed analyses and conclusions will be included into the final version of the First Report on the Implementation of the Global Plan of Action that will be presented to the Commission at its next session.

APPENDIX I

GUIDELINES FOR THE PREPARATION OF COUNTRY PROGRESS REPORTS ON THE IMPLEMENTATION OF *THE GLOBAL PLAN OF ACTION FOR THE CONSERVATION, SUSTAINABLE USE AND DEVELOPMENT OF FOREST GENETIC RESOURCES*

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I. INTRODUCTION

1. The *Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources* (Global Plan of Action)⁶ was adopted by the FAO Conference at its Twenty-eighth Session in June 2013⁷. It was developed in response to the findings of the first report on *The State of the World's Forest Genetic Resources*⁸ and agreed by the Commission on Genetic Resources for Food and Agriculture (the Commission) at its Fourteenth Regular Session in April 2013⁹ based on the strategic priorities identified by the Intergovernmental Technical Working Group on Forest Genetic Resources (the Working Group).

2. At its Sixteenth Regular Session in February 2017, the Commission adopted targets, indicators and verifiers for forest genetic resources¹⁰ to be used as assessment tools to monitor the implementation of the Global Plan of Action, as well as a schedule for the monitoring process¹¹. The targets, indicators and verifiers resulted from the discussions by the Working Group during its Second, Third and Fourth Sessions held in 2013, 2014 and 2016, respectively.

3. The Commission requested FAO to prepare draft guidelines for the preparation of country progress reports and to consult the Working Group and the National Focal Points of *The State of the World's Forest Genetic Resources*, by electronic means, on the draft guidelines prior to their finalization by 31 March 2017, taking into account the need to clarify in detail the reporting requirements and to include a glossary of technical terms. The Commission encouraged countries to prepare themselves for the collection of information and data, as appropriate, to facilitate timely submission of the first country progress reports. The Commission further requested FAO to consider the interface between the reporting systems for plant and forest genetic resources to avoid duplication of efforts, and to pursue extra-budgetary funds to support developing countries, in particular least-developed countries, in the preparation of country progress reports.

4. In March 2017, FAO sent a draft questionnaire, including a glossary of technical terms, to the Working Group and the NPFs for their comments. A total of 11 countries¹² provided comments to the draft questionnaire by April 2017. Additionally, the draft questionnaire and the reporting process were discussed at the meetings of several regional networks on forest genetic resources in 2017 (Asia Pacific Forest Genetic Resources Programme, Kuala Lumpur, Malaysia, 20-24 March 2017; European Forest Genetic Resources Programme, Amsterdam, Netherlands, 30 May-2 June 2017; Forest Genetic Resources Working Group of the North American Forestry Commission, Provo, USA, 23-27 October 2017).

5. This document contains the guidelines for the preparation of country progress reports on the implementation of the Global Plan of Action, including the final questionnaire and the glossary of technical terms, and provides additional information on the reporting format and process.

II. PURPOSE OF THESE GUIDELINES

6. The purpose of these reporting guidelines is to facilitate the preparation of the country progress reports for assessing the implementation of the Global Plan of Action. The guidelines explain in detail various technical terms and what kind of information and data countries are expected to submit to FAO.

⁶ <http://www.fao.org/3/a-i3849e.pdf>

⁷ C 2013/REP, paragraph 77.

⁸ <http://www.fao.org/3/a-i3825e.pdf>

⁹ CGRFA-14/13/Report, paragraph 52.

¹⁰ CGRFA-16/17/20, *Appendices A & B*.

¹¹ CGRFA-16/17/20, *Appendix C*.

¹² Australia, Brazil, Czechia, Denmark, Finland, France, Germany, Morocco, Norway, Sweden, United States of America

III. TARGETS, INDICATORS AND VERIFIERS FOR FOREST GENETIC RESOURCES

7. The targets, indicators and verifiers for forest genetic resources¹³ are used for monitoring the implementation of the Global Plan of Action. They result from a compilation of the strategic priorities identified by the Global Plan of Action and focus on its four priority areas which are:

- Improving the availability of, and access to, information on forest genetic resources;
- Conservation of forest genetic resources (*in situ* and *ex situ*);
- Sustainable use, development and management of forest genetic resources; and
- Policies, institutions and capacity-building.

8. The targets specify objectives for countries to achieve in response to the Global Plan of Action and the indicators measure the progress countries have made against these objectives. Each indicator has one or more verifiers which are data or information providing means of verification.

9. The targets, indicators and verifiers are divided in to two sub-sets. The first sub-set tracks the responses of countries to the Global Plan of Action (see Part A of the questionnaire in Annex I), and the second sub-set assesses the state of conservation, use and development of forest genetic resources (see Part B of the questionnaire in Annex I). Both sub-sets consists of four targets and 10 indicators. There are 10 verifiers in the first sub-set, and 21 verifiers in the second one. For the first sub-set of targets and indicators, countries can report progress by indicating the degree to which targets have been achieved on a Likert-type scale (e.g. if the establishment of a national inventory for forest genetic resources or similar arrangement is completed, underway or not started).

10. It is recognized that countries may not manage and collect information on forest genetic resources at national level but at sub-national level. Therefore, the country progress reports can be based on data and information collected at national and/or sub-national levels. However, sub-national data and information should be merged at national level so that the country progress reports reflect the progress made in implementing the Global Plan of Action at national level, not at sub-national levels.

IV. SUBMISSION OF REPORTS

11. FAO has created an online reporting system for the submission of the country progress reports and it can be accessed through the following link: <http://www.openforis.org/fgr/login>. It is recommended to only use the Chrome browser for accessing the reporting system. The reporting format follows the questionnaire (Annex I) consisting of 31 questions formulated by FAO based on the verifiers adopted by the Commission. The glossary of technical terms is provided in Annex II. Countries can also provide, as appropriate and if needed, comments and additional information. Countries should aim to answer all questions. In case the needed data and/or information is not available for answering a question, there is an option to indicate this situation. **The filled online questionnaire is considered as the country progress report and countries do not need to prepare a separate written report.**

12. The online reporting system was created using the Collect tool of Open Foris (see <http://www.openforis.org> for further information). Each National Focal Point will be provided with a username and a password for accessing the reporting system. The National Focal Points can then change the password after they have logged into the reporting system for the first time. National Focal Points (and their possible alternates) have access only to the reporting template of their own country.

¹³ CGRFA-16/17/20, *Appendices A & B*.

They can contact the Secretariat of the Working Group if they experience any problems in accessing the reporting system or entering their data.

13. The list of species countries reported earlier for *The State of the World's Forest Genetic Resources* have been incorporated into the online questionnaire. The National Focal Points can select relevant species from this list while answering to Questions 11-26. In case there is a need to add species to the list, the National Focal Points should contact the Secretariat of the Working Group.

14. It is recommended that the National Focal Points compile the necessary data and information, and also consult relevant national experts and institutions in their country before filling the online questionnaire. They can download the data and information entered into the reporting system for final consultation and official clearance. Once the filled questionnaire has been cleared by a relevant authority, the National Focal Point should submit the questionnaire in the online reporting system. **Once the report has been submitted in the online reporting system, the data and information cannot be modified.** The National Focal Points are able to view the submitted report after the submission. The data and information provided will remain stored in the reporting system for subsequent analyses that will be carried out by FAO.

V. PROCESS AND TIMELINE

15. In May 2017, FAO invited Members of the Commission to update their nominations of National Focal Points for different sectors, including forest genetic resources, by 30 June 2017, and to submit their country progress reports (i.e. the online questionnaire) on the implementation of the Global Plan of Action by 31 December 2017. The list of the National Focal Points is available on the FAO website¹⁴. Countries are invited to communicate the nominations of the National Focal Points or changes in their contact details to the Secretariat of the Working Group.

16. The National Focal Point is expected to coordinate the preparation of the country progress report and to collaborate with relevant national agencies and stakeholders in compiling information and data for the questionnaire. In case a country has a national (or sub-national) programme, committee or working group on forest genetic resources, it is highly recommended that this body is involved in the preparation of the country progress reports.

17. Based on the country progress reports received, FAO will prepare a draft First Assessment Report of the Global Plan of Action for a review by the Fifth Session of the Working Group that will be held in Rome on 8-10 May 2018. Following the recommendations of the Working Group, the First Assessment Report will then be finalized for consideration by the Commission at its Seventeenth Regular Session on 18-22 February 2019.

18. The FAO contact for this reporting process is:

Mr Jarkko Koskela
Secretary of the Intergovernmental Technical Working Group on Forest Genetic Resources
Forestry Officer (Forest Genetic Resources & Biodiversity)
Forestry Policy and Resources Division
Forestry Department
FAO
Viale delle Terme di Caracalla
00153 Rome, Italy
Email: FO-ITWG-FGR@fao.org

¹⁴ List of National Focal Points for forest genetic resources is available at:
<http://www.fao.org/forestry/fgr/64583/en/>

ANNEX 1

QUESTIONNAIRE FOR SUBMITTING A COUNTRY PROGRESS REPORT
Part A: Responses of countries to the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources
Target A.1: Availability of data and information on FGR is increased

Indicator A.1.1: Extent of national FGR inventories or similar arrangements
Verifier A.1.1.1: Number and list of countries with operational national FGR inventories or similar arrangements
<p>Question 1: Does your country have an operational national (or sub-national) FGR inventory (-ies)?</p> <p><input type="checkbox"/> Yes If yes, please indicate the year when it was established: _____</p> <p>If yes, please indicate the areas of work/activities documented by the national FGR inventory:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Conservation of FGR <input type="checkbox"/> Production of forest reproductive material <input type="checkbox"/> Research and development efforts (provenance trials, tree breeding etc) <input type="checkbox"/> FGR transferred internationally <input type="checkbox"/> Other (please specify under Comments) <p><input type="checkbox"/> No, but a process for establishing a national FGR inventory has been initiated</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Information not available</p>
Comments / additional information:
<p>Notes for reporting: This verifier focuses on the existence of a national FGR inventory as a mechanism or process, not on the completeness of the inventory. In case the exact establishment year is not known, or if the national FGR inventory was developed over many years, the establishment year can be estimated based on the available information. The establishment of a national FGR inventory can be reported as “initiated” if a project or other action for this purpose has been approved or is being implemented.</p>

Indicator A.1.2: Extent of up-to-date national FGR information systems
Verifier A.1.2.1: Number and list of countries with up-to-date national FGR information system(s) or other similar arrangements
<p>Question 2: Does your country have an up-to-date national (or sub-national) FGR information system(s)?</p> <p><input type="checkbox"/> Yes If yes, please indicate the year when it (or the first one) was established: _____</p> <p>If yes, please indicate the areas of work/activities recorded in the information system(s):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Conservation of FGR <input type="checkbox"/> Production of forest reproductive material <input type="checkbox"/> Research and development efforts (provenance trials, tree breeding etc) <input type="checkbox"/> FGR transferred internationally <input type="checkbox"/> Other (please specify under Comments) <p><input type="checkbox"/> No, but a process for establishing a national FGR information system has been initiated</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Information not available</p>
Comments / additional information:
Notes for reporting: The establishment of a national FGR information system can be reported as “initiated” if a project or other action for this purpose has been approved or is being implemented.

Target A.2: National *in situ* and *ex situ* systems for FGR conservation are strengthened

Indicator A.2.1: Extent of national <i>in situ</i> conservation systems
Verifier A.2.1.1: Number and list of countries with operational national <i>in situ</i> conservation systems
<p>Question 3: Does your country have an operational national (or sub-national) <i>in situ</i> conservation system(s) for FGR?</p> <p><input type="checkbox"/> Yes If yes, please indicate the year when it was established: _____</p> <p>If yes, please indicate different components of the conservation system:</p> <ul style="list-style-type: none"> <input type="checkbox"/> <i>In situ</i> conservation units of FGR <input type="checkbox"/> Protected areas <input type="checkbox"/> Forests managed for production of wood and/or non-wood products <input type="checkbox"/> Other (please specific under Comments) <p><input type="checkbox"/> No, but a process for establishing a national <i>in situ</i> conservation system has been initiated</p> <p><input type="checkbox"/> No</p>

<input type="checkbox"/> Information not available
Comments / additional information:
Notes for reporting: This verifier focuses on the existence of a national <i>in situ</i> conservation system (or programme) for FGR, not on the completeness of the conservation network.

Indicator A.2.2: Extent of national <i>ex situ</i> conservation systems
Verifier A.2.2.1: Number and list of countries with operational national <i>ex situ</i> conservation systems
<p>Question 4: Does your country have an operational national (or sub-national) <i>ex situ</i> conservation system(s) for FGR?</p> <p><input type="checkbox"/> Yes If yes, please indicate the year when it was established: _____</p> <p>If yes, please indicate different components of the conservation system:</p> <ul style="list-style-type: none"> <input type="checkbox"/> <i>Ex situ</i> conservation stands <input type="checkbox"/> Field collections <input type="checkbox"/> Storage facilities for seed, pollen or other tissue <input type="checkbox"/> Other (please specific under Comments) <p><input type="checkbox"/> No, but a process for establishing a national <i>ex situ</i> conservation system has been initiated</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Information not available</p>
Comments / additional information:
Notes for reporting: This verifier focuses on the existence of a national <i>ex situ</i> conservation system (or programme) for FGR, not on the amount of FGR conserved <i>ex situ</i> .

Target A.3: Tree seed and breeding programmes, as well as extension efforts on FGR use, are reinforced, including for conservation collections

Indicator A.3.1: Extent of national tree seed programmes
Verifier A.3.1.1: Number and list of countries with operational national tree seed programmes or similar arrangements
<p>Question 5: Does your country have an operational national (or sub-national) tree seed programme(s)?</p> <p><input type="checkbox"/> Yes If yes, please indicate the year when it was established: _____</p>

<input type="checkbox"/> No, but a process for establishing an operational national tree seed programme has been initiated <input type="checkbox"/> No <input type="checkbox"/> Information not available
Comments / additional information:
Notes for reporting: The establishment of a national tree seed programme can be reported as “initiated” if a project or other action for this purpose has been approved or is being implemented.

Indicator A.3.2: Extent of tree breeding programmes
Verifier A.3.2.1: Number and list of countries with operational tree breeding programmes
<p>Question 6: Do public entities, private companies and/or other stakeholders operate a tree breeding programme (or programmes) in your country?</p> <input type="checkbox"/> Yes If yes, please indicate the main stakeholder group operating tree breeding programme(s) <ul style="list-style-type: none"> <input type="checkbox"/> Public entities <input type="checkbox"/> Private companies <input type="checkbox"/> Private-public partnerships <input type="checkbox"/> Other stakeholders (please specify under Comments) <input type="checkbox"/> No, but a process for establishing a tree breeding programme (or programmes) has been initiated <input type="checkbox"/> No <input type="checkbox"/> Information not available
Comments / additional information:
Notes for reporting: If “Other stakeholders” are the main group operating tree breeding programme(s), please identify them under the Comments section. The establishment of a tree breeding programme can be reported as “initiated” if a project or other action for this purpose has been approved or is being implemented.

Indicator A.3.3: Extent of extension efforts promoting appropriate use of FGR
Verifier A.3.3.1: Number and list of countries with ongoing extension programmes or activities on FGR use
<p>Question 7: Does your country have an extension programme (or programmes) that organizes extension activities on FGR use on a regular basis?</p> <input type="checkbox"/> Yes If yes, please indicate the year when it (or the first such programme) was established: _____

<p>If yes, please indicate the targeted FGR users of the extension programme:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Farmers <input type="checkbox"/> Local communities <input type="checkbox"/> Forest owners <input type="checkbox"/> Others (please specify under Comments) <input type="checkbox"/> No, but a process for establishing an extension programme (or programmes) on FGR use has been initiated <input type="checkbox"/> No <input type="checkbox"/> Information not available
<p>Comments / additional information:</p>
<p>Notes for reporting: The establishment of an extension programme can be reported as “initiated” if a project or other action for this purpose has been approved or is being implemented.</p>

Target A.4: National coordination mechanisms on FGR are created, and national strategies for FGR conservation and use are developed and implemented

<p>Indicator A.4.1: Extent of national coordination mechanisms on FGR</p>
<p>Verifier A.4.1.1: Number and list of countries with national coordination mechanisms on FGR</p>
<p>Question 8: Does your country have a national (or sub-national) coordination mechanism(s) on FGR?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Yes <ul style="list-style-type: none"> If yes, please indicate the year when it was established: _____ If yes, please indicate the stakeholders involved in the national FGR coordination mechanism: <ul style="list-style-type: none"> <input type="checkbox"/> Farmers <input type="checkbox"/> Forest owners <input type="checkbox"/> Private sector <input type="checkbox"/> Non-governmental organizations <input type="checkbox"/> Governmental organizations (including state-owned enterprises) <input type="checkbox"/> Research organizations (including universities) <input type="checkbox"/> Relevant ministries <input type="checkbox"/> Others (please specify under Comments) <input type="checkbox"/> No, but a process for establishing a national coordination mechanism on FGR has been initiated <input type="checkbox"/> No <input type="checkbox"/> Information not available
<p>Comments / additional information:</p>

Notes for reporting: The establishment of a national coordination mechanism on FGR can be reported as “initiated” if a project or other action for this purpose has been approved or is being implemented.

Indicator A.4.2: Extent of national strategies for FGR conservation and use

Verifier A.4.2.1: Number and list of countries implementing national strategies for FGR conservation and use

Question 9: Does your country have a national strategy (or sub-national strategies) for FGR conservation and use?

- Yes
 - If yes, please indicate the year when it (or the first such strategy) was prepared: _____
 - If yes, please indicate the areas of work covered by the strategy:
 - Conservation of FGR
 - Use of FGR
 - Development of FGR
- No, but a process for preparing a national strategy for FGR conservation and use has been initiated
- No
- Information not available

Comments / additional information:

Notes for reporting: The process for preparing a national strategy for FGR can be reported as “initiated” if a project or other action for this purpose has been approved or is being implemented. In case the preparation of the national strategy has been initiated, please indicate under Comments if the strategy will cover all areas of work (i.e. conservation, use and development of FGR) or only some of them.

Indicator A.4.3: Extent to which national strategies contribute to the implementation of regional or sub-regional FGR conservation strategies

Verifier A.4.3.1: Number and list of countries whose national strategy contribute to the implementation of regional or sub-regional FGR conservation strategy

Question 10: If your country has a national strategy for FGR, is it aligned with a regional or sub-regional FGR conservation strategy (-ies)?

- Yes
- No, but a process for aligning the national FGR strategy with a regional conservation strategy has been initiated
- No
- Information not available

Comments / additional information:

Notes for reporting: In case no regional or sub-regional FGR conservation strategy exist, please indicate this under Comments. The process for aligning the national FGR strategy with a regional conservation strategy can be reported as “initiated” if a project or other action for this purpose has been approved or is being implemented.

Part B: State of conservation, use and development of forest genetic resources

Target B.1: Forest genetic resources are regularly assessed and characterized

Indicator B.1.1: Assessment of FGR

Verifier B.1.1.1: Number and list of species for which an up-to-date national distribution range is available

Question 11: Please indicate those species for which an up-to-date national distribution range is available:

- To be indicated from the list of species incorporated in the online questionnaire

Comments / additional information:

Notes for reporting: A distribution map can be considered as up-to-date if less than 10 years have passed since the national distribution area of a species was assessed or re-documented.

Indicator B.1.2: Characterization of FGR

Verifier B.1.2.1: Number and list of species which have been characterized based on non-molecular information (e.g. provenance trials, ecological or climatic zonation)

Question 12: Please indicate those species which have been characterized based on non-molecular information:

- To be indicated from the list of species incorporated in the online questionnaire

Comments / additional information:

Notes for reporting: A species can be reported here when a large part of its genetic resources have been evaluated; it is not necessary that all populations or provenances of a species within a country have been characterized. Species for which characterization efforts have been started only recently can also be reported here.

Verifier B.1.2.2: Number and list of species which have been characterized based on molecular information (e.g. range-wide sampling of populations for molecular marker studies)

<p>Question 13: Please indicate those species which have been characterized based on molecular information:</p> <p><input type="checkbox"/> To be indicated from the list of species incorporated in the online questionnaire</p>
<p>Comments / additional information:</p>
<p>Notes for reporting: A species can be reported here when a large part of its genetic resources have been evaluated; it is not necessary that all populations or provenances of a species within a country have been characterized. Species for which characterization efforts have been started only recently can also be reported here.</p>

Target B.2: Forest genetic resources are conserved *in situ*, and complementary *ex situ* measures have been implemented

Indicator B.2.1: Amount FGR conserved <i>in situ</i>
Verifier B.2.1.1: Number and list of species included in <i>in situ</i> conservation programmes
<p>Question 14: Please indicate those species which have been included in <i>in situ</i> conservation programme(s) in your country:</p> <p><input type="checkbox"/> To be indicated from the list of species incorporated in the online questionnaire</p>
<p>Comments / additional information:</p>
<p>Notes for reporting:</p>
Verifier B.2.1.2: Number of <i>in situ</i> conservation units by species
<p>Question 15: Please indicate the number of <i>in situ</i> conservation units for each of the species in your country:</p> <p><input type="checkbox"/> To be added to the online table listing all selected species</p>
<p>Comments / additional information:</p>
<p>Notes for reporting: In case the information on the units is not available, “n/a” should be indicated in the table.</p>
Verifier B.2.1.3: Area (ha) designated and managed for <i>in situ</i> conservation by species
<p>Question 16: Please indicate the area (in hectares) of <i>in situ</i> conservation units for each of the species in your country:</p> <p><input type="checkbox"/> To be added to the online table listing all selected species</p>
<p>Comments / additional information:</p>

Notes for reporting: The area by species should be indicated in hectares and with an accuracy of one decimal, e.g. 50.4 ha. In case the information on the units is not available, “n/a” should be indicated in the table.
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Indicator B.2.2: Amount FGR conserved <i>ex situ</i>
Verifier B.2.2.1: Number and list of species included in <i>ex situ</i> conservation programmes
Question 17: Please indicate those species which have been included in <i>ex situ</i> conservation programme(s) in your country: <ul style="list-style-type: none"> <input type="checkbox"/> To be indicated from the list of species incorporated in the online questionnaire
Comments / additional information:
Notes for reporting:
Verifier B.2.2.2: Number of <i>ex situ</i> conservation units by species
Question 18: Please indicate the number of <i>ex situ</i> conservation units for each of the species in your country: <ul style="list-style-type: none"> <input type="checkbox"/> To be added to the online table listing all selected species
Comments / additional information:
Notes for reporting: In case the information on the units is not available, “n/a” should be indicated in the table.
Verifier B.2.2.3: Area (ha) designated and managed for <i>ex situ</i> conservation by species
Question 19: Please indicate the area (in hectares) of <i>ex situ</i> conservation units for each of the species in your country: <ul style="list-style-type: none"> <input type="checkbox"/> To be added to the online table listing all selected species
Comments / additional information:
Notes for reporting: The area by species should be indicated in hectares and with an accuracy of one decimal, e.g. 50.4 ha. In case the information on the units is not available, “n/a” should be indicated in the table.
Verifier B.2.2.4: Number of <i>ex situ</i> accessions (in seed and clone banks) by species
Question 20: Please indicate the number of <i>ex situ</i> accessions for each of the species in your country: <ul style="list-style-type: none"> <input type="checkbox"/> To be added to the online table listing all selected species

Comments / additional information:
Notes for reporting: In case the information on the accessions is not available, “n/a” should be indicated in the table.

Target B.3: Use and development of FGR are enhanced

Indicator B.3.1: Species included in tree seed and breeding programmes (including international breeding cooperation and efforts carried out by the private sector)
Verifier B.3.1.1: Number and list of species included in national tree seed programmes
Question 21: Please indicate those species which have been included in a national (or sub-national) tree seed programme(s) in your country: <input type="checkbox"/> To be indicated from the list of species incorporated in the online questionnaire
Comments / additional information:
Notes for reporting:
Verifier B.3.1.2: Number and list of species included in tree breeding programmes
Question 22: Please indicate those species which have been included in a tree breeding programme in your country: <input type="checkbox"/> To be indicated from the list of species incorporated in the online questionnaire
Comments / additional information:
Notes for reporting:

Indicator B.3.2: Production of forest reproductive material
Verifier B.3.2.1: Area (ha) and number of seed stands by species
Question 23: Please indicate the area and number of seed stands by species in your country: <input type="checkbox"/> To be added to the online table listing all selected species
Comments / additional information:

Notes for reporting: The area of seed stands by species should be indicated in hectares and with an accuracy of one decimal, e.g. 176.3 ha. In case the information on the seed stands is not available, “n/a” should be indicated in the table.
Verifier B.3.2.2: Area (ha) and number of seed orchards by species
Question 24: Please indicate the area and number of seed orchards by species in your country: <input type="checkbox"/> To be added to the online table listing all selected species
Comments / additional information:
Notes for reporting: The area of seed orchards by species should be indicated in hectares and with an accuracy of one decimal, e.g. 35.6 ha. In case the information on the seed orchards is not available, “n/a” should be indicated in the table.
Verifier B.3.2.3: Amount (average number per year) of planting stock produced through macro and micropropagation by species
Question 25: Please indicate the amount (average number per year) of planting stock produced through macro and/or micropropagation by species in your country: <input type="checkbox"/> To be added to the online table listing all selected species
Comments / additional information:
Notes for reporting: In case the information on the planting stock produced is not available, “n/a” should be indicated in the table.

Indicator B.3.3: State of tree breeding programmes
Verifier B.3.3.1: Testing and selection cycle by species
Question 26: Please indicate the state of a tree breeding programme by indicating the generation number for species included in breeding programmes: <input type="checkbox"/> To be added to the online table listing all selected species
Comments / additional information:
Notes for reporting: The generation number should be indicated as 1, 1.5, 2 etc. It should refer to the material that has already been deployed for the establishment of seed orchards or mass propagation using vegetative techniques, not to the material that is still under breeding and/or testing. In case the information is not available, “n/a” should be indicated in the table.

Target B.4: Policies and capacities supporting FGR conservation and sustainable use are strengthened

Indicator B.4.1: Integration of FGR conservation and use into relevant national policies
Verifier B.4.1.1: Number of countries which have integrated FGR conservation and use into their national forest programme and/or national forest policy
<p>Question 27: Have FGR conservation and use been integrated into a national (or sub-national) forest programme(s) and/or national (or sub-national) forest policy (-ies) in your country?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No, but a process for integrating FGR conservation and use into a national forest programme and/or national forest policy has been initiated <input type="checkbox"/> No, because my country does not have a national forest programme and/or national forest policy <input type="checkbox"/> No <input type="checkbox"/> Information not available
Comments / additional information:
Notes for reporting:
Verifier B.4.1.2: Number of countries which have integrated FGR conservation and use into their national biodiversity action plans and/or related policies
<p>Question 28: Have FGR conservation and use been integrated into a national (or sub-national) biodiversity action plan(s) and related policies in your country?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No, but a process for integrating FGR conservation and use into a national biodiversity action plan has been initiated <input type="checkbox"/> No, because my country does not have a national biodiversity action plan <input type="checkbox"/> No <input type="checkbox"/> Information not available
Comments / additional information:
Notes for reporting:
Verifier B.4.1.3: Number of countries which have integrated FGR conservation and use into their national adaptation strategies for climate change
<p>Question 29: Have FGR conservation and use been integrated into a national (or sub-national) adaptation strategy (-ies) for climate change in your country?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No, but a process for integrating FGR conservation and use into a national adaptation strategy for climate change has been initiated <input type="checkbox"/> No, because my country does not have a national adaptation strategy for climate change <input type="checkbox"/> No

<input type="checkbox"/> Information not available
Comments / additional information:
Notes for reporting:

Indicator B.4.2: Participation in regional/sub-regional collaboration on FGR
Verifier B.4.2.1: Number of countries participating in regional/sub-regional networks on FGR
Question 30: Is your country a member of a regional and/or sub-regional network(s) on FGR?
<input type="checkbox"/> Yes If yes, please indicate in which network(s): _____ <input type="checkbox"/> No, but my country is considering joining a regional and/or sub-regional network(s) <input type="checkbox"/> No <input type="checkbox"/> Information not available
Comments / additional information:
Notes for reporting:

Indicator B.4.3: Participation in international research and development cooperation on FGR
Verifier B.4.3.1: Number of countries and national organizations participating in international R&D cooperation on FGR
Question 31: Is your country participating in international research and development collaboration on FGR?
<input type="checkbox"/> Yes If yes, please indicate the number of national organizations currently participating: ____ <input type="checkbox"/> No, but my country and its national organizations have sought opportunities for participating in international R&D cooperation on FGR <input type="checkbox"/> No, my country and its national organizations are currently not participating in international R&D cooperation on FGR but have done so during the past 5 years <input type="checkbox"/> No <input type="checkbox"/> Information not available
Comments / additional information:
Notes for reporting: The names of the national organizations (including government and non-governmental organizations, universities and other relevant organizations) can be provided under Comments.

ANNEX 2

GLOSSARY OF TECHNICAL TERMS

Characterization based on non-molecular information refers to the description and evaluation of FGR based on information obtained from field observations, provenance trials or ecological/climatic zonation of species' distribution range within a country, for example. The characterization of FGR is typically done at the level of populations or provenances. In general, genetic resources are characterized based on traits that are usually heritable, easy to observe by the eye and expressed across different environments.

Characterization based on molecular information refers to the description and evaluation of FGR based on information obtained through molecular markers and/or genomic approaches.

Designated means that an area has been assigned to *in situ* and/or *ex situ* conservation of FGR by law or other arrangement, depending on how a country (or state) has organized its work on FGR.

***Ex situ* accession** refers to a sample of FGR stored in a seed bank or a genotype held in a clonal collection.

***Ex situ* conservation of FGR** refers to the conservation of genetic resources of trees and other woody plant species outside of their natural habitats.

***Ex situ* conservation unit** refers to a range of *ex situ* genetic conservation areas of forest trees and other woody plants species (e.g. *ex situ* conservation stands, provenance and progeny trials, and breeding populations).

Extension programmes or activities refers to training and communication efforts targeted to users of FGR (farmers, local communities, forest owners, etc) with an aim to help them enhance their use of FGR to derive economic and other benefits. Extension activities may include short-term training courses and workshops, field trips, exhibitions, media campaigns and dissemination of information through leaflets, posters and guidelines, or even development of on-line tools.

Forest genetic resources (FGR) refers to the heritable materials maintained within and among tree and other woody plant species that are of actual or potential economic, environmental, scientific or societal value.

Forest reproductive material refers to any plant tissue that is created by sexual or asexual means (e.g. seeds, pollen and cuttings) and used for the production of new trees or other woody species.

***In situ* conservation of FGR** refers to the maintenance of viable populations of trees and other woody plant species in their natural surroundings.

***In situ* conservation unit** refers to a range of *in situ* genetic conservation areas of forest trees and other woody plants species (e.g. gene reserve forests, genetic conservation units or stands, gene management units or zones, and evolutionary conservation units or stands).

International research and development cooperation refers to global, regional and sub-regional research projects (or project proposals), tree breeding programmes and other R&D efforts.

Macropropagation refers to vegetative propagation of planting stock from cuttings, grafting or air-layering.

Micropropagation refers to vegetative propagation of planting stock by *in vitro* technology producing plantlets, micropropagules or somatic embryos.

National adaptation strategy for climate change refers to a national adaptation strategy, action plan and/or programme(s) for climate change.

National biodiversity action plan refers to a national strategy, action plan and/or programme(s) for the conservation and sustainable use of biological diversity.

National distribution range of a species refers to area(s) within a country where a species is growing naturally, and where it might have been introduced.

National forest programme refers to a wide range of approaches that are used to develop and/or revise forest policy and related strategy (or strategies) at the national or sub-national levels, and to facilitate their implementation.

National forest policy is typically a government document which presents a vision or goals on forests (and trees) and their use shared by government and other stakeholders.

National (or sub-national) coordination mechanism on FGR refers to a range of approaches that are used to coordinate the work on FGR at national or sub-national levels. Various stakeholders (e.g. farmers, forest owners, private sector, non-governmental organizations, research organizations and relevant ministries) are typically represented in such national coordination mechanism. Examples of national coordination mechanisms include national (or sub-national) FGR programmes and national (or sub-national) committees or working groups on FGR.

National (or sub-national) *ex situ* conservation programme (or system) for FGR refers to an *ex situ* conservation programme of FGR that is undertaken and coordinated by a designated national (or sub-national) agency working in collaboration with various stakeholders. An *ex situ* conservation programme is often based on a combination of *ex situ* conservation stands, field collections (e.g. clonal archives and stool beds) and storage facilities for seed, pollen or other tissue.

National (or sub-national) FGR information system refers to a database (or databases) and other electronic documentation systems (off-line or on-line) that is used by a national FGR inventory to gather, store and/or make available the data and information on FGR. A national FGR information system is up-to-date when the data and information are updated periodically (e.g. annually) or whenever new data and information have become available.

National (or sub-national) FGR inventory (-ies) refers to a mechanism that gathers data and information, often from several data-providers within a country, on areas and facilities managed for the conservation of FGR and the production of forest reproductive material, as well as related research and development (R&D) efforts, for example. A national (or sub-national) FGR inventory is operational when the collection of data and information is repeated frequently, and when the data and information are processed, stored and made available to support policymaking, management of FGR and R&D efforts.

National (or sub-national) *in situ* conservation programme (or system) for FGR refers to a long-term *in situ* conservation programme of FGR that is undertaken and coordinated by a designated national (or sub-national) agency working in collaboration with various stakeholders. Typically, the main aim of such conservation programme is to establish and maintain a network of *in situ* conservation units for FGR in a country (or state).

National (or sub-national) strategy (-ies) for FGR conservation and use presents the country's (or its states') vision and goals for the conservation and use of FGR, and describes how it intends to achieve these goals. A national (or sub-national) strategy for FGR conservation and use typically reflects both binding (e.g. the Convention on Biological Diversity) and non-binding (e.g. the Global

Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources) international commitments made by the country.

National (or sub-national) tree seed programme refers to a mechanism (or mechanisms) that oversees and/or coordinates the selection, procurement, documentation, storage and testing of forest reproductive material at national or sub-national levels. Such mechanism typically brings together an official body responsible for approving basic material and maintaining a national or sub-national register of this material, as well as other stakeholders (public and private) involved in the selection, procurement, storage and testing of forest productive material.

Operational means that a programme and/or activities are being implemented, and that relevant stakeholders provide inputs and/or meet regularly.

Regional or sub-regional FGR conservation strategy refers to a vision and goals for the conservation of FGR that a group of countries may have agreed in the context of regional or sub-regional networks or other collaboration platforms on FGR.

Regional or sub-regional network on FGR refers to a regional or sub-regional network, programme or working group that promote international collaboration on forest genetic resources.

Seed stand refers to a delineated population of trees or other woody plant species that is identified and registered by a relevant national (or sub-national) authority for producing forest reproductive material.

Seed orchards refers to a plantation of selected individuals of trees or other woody plant species (identified by clone, family or provenance) that is specifically managed for seed production.

Tree breeding programme refers to systematic efforts based on the application of genetic principles and practices to develop improved trees. Tree breeding programmes may be public, private or private-public partnerships, and they may operate at sub-national, national, regional or global scales.

APPENDIX II

REPORTING GUIDELINES FOR REGIONAL NETWORKS AND INTERNATIONAL ORGANIZATIONS ON THEIR CONTRIBUTIONS TO THE IMPLEMENTATION OF *THE GLOBAL PLAN OF ACTION FOR THE CONSERVATION, SUSTAINABLE USE AND DEVELOPMENT OF FOREST GENETIC RESOURCES*

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I. INTRODUCTION

1. The *Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources* (Global Plan of Action)¹⁵ was adopted by the FAO Conference at its Twenty-eighth Session in June 2013¹⁶. It was developed in response to the findings of the first report on *The State of the World's Forest Genetic Resources*¹⁷ and agreed by the Commission on Genetic Resources for Food and Agriculture (the Commission) at its Fourteenth Regular Session in April 2013¹⁸ based on the strategic priorities identified by the Intergovernmental Technical Working Group on Forest Genetic Resources (the Working Group).
2. At its Sixteenth Regular Session in February 2017, the Commission adopted targets, indicators and verifiers for forest genetic resources¹⁹ to be used as assessment tools to monitor the implementation of the Global Plan of Action, as well as a schedule for the monitoring process²⁰. The targets, indicators and verifiers resulted from the discussions by the Working Group during its Second, Third and Fourth Sessions held in 2013, 2014 and 2016, respectively.
3. The targets and indicators were formulated based on the broader needs and actions identified at the level of priority areas in the Global Plan of Action. Furthermore, they focus on actions that need to be carried out at the national level. The Working Group considered that regional and/or sub-regional networks on forest genetic resources and international organizations should be invited to prepare separate reports on their contributions to the implementation of the Global Plan of Action.
4. At its previous session, the Commission requested FAO to prepare draft guidelines for the preparation of country progress reports and reporting guidelines for regional networks on forest genetic resources and international organizations.²¹ It also requested FAO to invite regional networks on forest genetic resources and relevant international organizations to report on their contributions to the implementation of the Global Plan of Action.²²
5. This document contains the reporting guidelines for the regional networks and international organizations on their contributions to the implementation of the Global Plan of Action. It also provides information on the reporting process.

II. PURPOSE OF THESE GUIDELINES

6. The purpose of these reporting guidelines is to facilitate the preparation of reports by the regional networks and international organizations on their contributions to the implementation of the Global Plan of Action. The reporting guidelines explain what kind of information the regional networks and international organizations are expected to submit to FAO (Annex 1). A glossary of technical terms is also included for their information (Annex 2). The glossary is the same one that was provided to countries for the preparation of the country progress reports.

III. RECOMMENDED SCOPE AND STRUCTURE OF REPORTS

7. It is recommended that the reports by regional networks and international organizations focus on their contributions to strategic priorities identified in the Global Plan of Action, and other relevant

¹⁵ <http://www.fao.org/3/a-i3849e.pdf>

¹⁶ C 2013/REP, paragraph 77.

¹⁷ <http://www.fao.org/3/a-i3825e.pdf>

¹⁸ CGRFA-14/13/Report, paragraph 52.

¹⁹ CGRFA-16/17/20, *Appendices A & B*.

²⁰ CGRFA-16/17/20, *Appendix C*.

²¹ CGRFA-16/17/Report, paragraph 75.

²² CGRFA-16/17/Report, paragraph 76.

activities on forest genetic resources, at regional and international levels. In case the regional networks and international organizations have also supported countries in addressing the national level strategic priorities, these contributions can also be reported. The reporting period is 2013-2017.

8. The structure of the country progress reports is based on the four priority areas of the Global Plan of Action which are:

- Improving the availability of, and access to, information on forest genetic resources;
- Conservation of forest genetic resources (*in situ* and *ex situ*);
- Sustainable use, development and management of forest genetic resources; and
- Policies, institutions and capacity-building.

9. The regional networks and international organizations are invited to following the same structure in their reports. This will facilitate the preparation of a global assessment report on the implementation of the Global Plan of Action. In case some of the priority areas are not included in the scope or mission of a regional network or an international organization, this should be explained in the report.

10. It is also recommended that the reports include an *Introduction* chapter providing a brief description of a regional network or an international organization, and its mission and objectives as they relate to forest genetic resources. Furthermore, it is recommended to include a *Concluding remarks* chapter under which the regional networks and international organizations can provide additional information, as well as outline their plans for contributing to the implementation of the Global Plan of Action in 2018 and beyond. Relevant publications, reports, tools, databases and other knowledge products produced and/or maintained by a regional network or an international organization can be listed in an annex. All information provided should be presented in brief and concise manner. In case of projects, for example, the reports should provide information on their titles, objectives, duration and location(s) but there is no need to explain the achieved results in detail.

IV. SUBMISSION OF REPORTS

11. The reports by regional networks and international organizations should be submitted to FAO by email (FO-ITWG-FGR@fao.org). The reports can be submitted in MS-Word or PDF formats.

V. PROCESS AND TIMELINE

12. In May 2017, FAO invited Members of the Commission and observers to contribute to the follow-up of the Sixteenth Regular Session of the Commission.²³ FAO then created an online reporting system for the submission of the country progress reports on the implementation of the Global Plan of Action. In November 2017, each National Focal Point on forest genetic resources was provided with codes for accessing the reporting system, and they were invited to submit the country progress reports by 31 January 2018.

13. The regional networks and international organizations are invited to submit their reports to FAO preferably by 20 April 2018. If needed, these reports can be complemented after their submission. FAO is not planning to publish the reports.

14. Based on the reports received from countries, regional networks and international organizations, FAO will prepare a draft First Report on the Implementation of the Global Plan of Action for a review by the Fifth Session of the Working Group that will be held in Rome on 8-10 May

²³ <http://www.fao.org/fileadmin/templates/nr/documents/CGRFA/News/bt555e.pdf>

2018. Following the recommendations of the Working Group, the global report will be then finalized for consideration by the Commission at its Seventeenth Regular Session on 18-22 February 2019.

15. The FAO contact for this reporting process is:

Mr Jarkko Koskela
Secretary of the Intergovernmental Technical Working Group on Forest Genetic Resources
Forestry Officer (Forest Genetic Resources & Biodiversity)
Forestry Policy and Resources Division
Forestry Department
FAO
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ANNEX 1

**RECOMMENDED STRUCTURE AND CONTENT OF REPORTS BY
REGIONAL NETWORKS AND INTERNATIONAL ORGANIZATIONS****CONTRIBUTIONS OF _____ TO THE IMPLEMENTATION OF THE
GLOBAL PLAN OF ACTION FOR THE CONSERVATION, SUSTAINABLE USE AND
DEVELOPMENT OF FOREST GENETIC RESOURCES****2013 - 2017**

[Name, position and email address of the contact person and possible alternates]

Introduction

[Brief description of a regional network or an international organization, and its mission and objectives as they relate to forest genetic resources (FGR). Other background information can also be provided, as appropriate]

Priority Area 1: Improving the availability of, and access to, information on forest genetic resources

[Description of contributions to the strategic priorities of this Priority Area, with special emphasis on possible activities on FGR inventories, FGR information systems, species distribution maps, characterization of FGR based on non-molecular and molecular information, FGR research, and dissemination of information on FGR]

Priority area 2: Conservation of forest genetic resources (*in situ* and *ex situ*)

[Description of contributions to the strategic priorities of this Priority Area, with special emphasis on possible activities on supporting *in situ* and *ex situ* conservation of FGR, development of regional conservation strategies, and promotion of regional/international cooperation in this area]

Priority area 3: Sustainable use, development and management of forest genetic resources

[Description of contributions to the strategic priorities of this Priority Area, with special emphasis on possible activities on forest reproductive material, germplasm exchange, tree breeding, biotechnology, and promotion of regional/international cooperation in this area]

Priority area 4: Policies, institutions and capacity-building

[Description of contributions to the strategic priorities of this Priority Area, with special emphasis on possible activities on supporting development of policies, strengthening of institutions, capacity-

building, mobilizations of resources, including funding, for FGR conservation and use, promotion of regional/international cooperation in this area]

Concluding remarks

[Description of any other contributions or provision of additional information, as well as description of plans of the regional network or international organization for contributing to the implementation of the Global Plan of Action in the future]

Annex

[List of relevant publications, reports, tools, databases and other knowledge products produced and/or maintained by a regional network or an international organization]