QUESTIONNAIRE ON POPLARS AND OTHER FAST-GROWING TREES SUSTAINING PEOPLE AND THE ENVIRONMENT 2020 - 2023

INTRODUCTION

The questionnaire is designed to complement the Country Reports for the 27th Session of the International Commission on Poplars and Other Fast-Growing Trees Sustaining People and the Environment (IPC) in 2024.

Response to the questionnaire is crucial for FAO to allow country, regional and global analyses of status and trends in forest sector development and to assist in improving formulation of policies, preparing outlook studies and undertaking planning, management, monitoring and reporting.

The questionnaire has four questions. In the case that detailed primary data is not available, aggregated statistics and best professional estimates are appreciated.

CONTACTS

For queries in completing this questionnaire, please contact:

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Thank you

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Terms and definitions

The main FAO categories of land with a tree component are classified as[1]:

Naturally regenerating forest	Forest predominantly composed of trees established through natural regeneration *Explanatory notes* 1. Includes forests for which it is not possible to distinguish whether planted or naturally regenerated. 2. Includes forests with a mix of naturally regenerated tree species and planted/seeded trees, and where the naturally regenerated trees are expected to constitute the major part of the growing stock at stand maturity. 3. Includes coppice from trees originally established through natural regeneration. 4. Includes naturally regenerated trees of introduced species.
Planted forest	Forest predominantly composed of trees established through planting and/or deliberate seeding. *Explanatory notes* 1. In this context, predominantly means that the planted/seeded trees are expected to constitute more than 50 percent of the growing stock at maturity. 2. Includes coppice from trees that were originally planted or seeded.
Plantation forest (Sub-category of planted forest)	Planted Forest that is intensively managed and meet ALL the following criteria at planting and stand maturity: one or two species, even age class, and regular spacing. *Explanatory notes* 1. Specifically includes: short rotation plantation for wood, fibre and energy. 2. Specifically excludes: forest planted for protection or ecosystem restoration. 3. Specifically excludes: Forest established through planting or seeding which at stand maturity resembles or will resemble naturally regenerating forest.
Agroforestry	"Other land with tree cover" with temporary agricultural crops and/or pastures/animals. *Explanatory notes* 1. Includes areas with bamboo and palms provided that land use, height and canopy cover criteria are met. 2. Includes agrisilviculturural, silvopastoral and agrosilvopastoral systems.
Trees in urban settings	"Other land with tree cover" such as: urban parks, alleys and gardens

[1] See the Global Forest Resources Assessment 2020 Terms and Definitions, http://www.fao.org/3/I8661EN/i8661en.pdf

Forest	Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use. *Explanatory notes* 1. Forest is determined both by the presence of trees and the absence of other predominant land uses. The trees should be able to reach a minimum height of 5 meters in situ. 2. Includes areas with young trees that have not yet reached but which are expected to reach a canopy cover of 10 percent and tree height of 5 meters. It also includes areas that are temporarily unstocked due to clear-cutting as part of a forest management practice or natural disasters, and which are expected to be regenerated within 5 years. Local conditions may, in exceptional cases, justify that a longer time frame is used.
	3. Includes forest roads, firebreaks and other small open areas; forest in national parks, nature reserves and other protected areas such as those of specific environmental, scientific, historical, cultural or spiritual interest. 4. Includes windbreaks, shelterbelts and corridors of trees with an area of more than 0.5 hectares and width of more than 20 meters. 5. Includes abandoned shifting cultivation land with a regeneration of trees that have, or are expected to reach, a canopy cover of 10 percent and tree height of 5 meters. 6. Includes areas with mangroves in tidal zones, regardless whether this area is classified as land area or not. 7. Includes rubber-wood, cork oak and Christmas tree plantations. 8. Includes areas with bamboo and palms provided that land use, height and canopy cover criteria are met. 9. Includes areas outside the legally designated forest land which meet the definition of "forest". 10. Excludes tree stands in agricultural production systems, such as fruit tree plantations, oil palm plantations, olive orchards and agroforestry systems when crops are grown under tree cover. Note: Some agroforestry systems such as the "Taungya" system where crops are grown only during the first years of the forest rotation should be classified as forest.
Other land with tree cover	Land classified as "remaining land area", spanning more than 0.5 hectares with a canopy cover of more than 10 percent of trees able to reach a height of 5 meters at maturity. *Explanatory notes* **1. Land use is the key criteria for distinguishing between forest and other land with tree cover.** **2.** Specifically includes: palms (oil, coconut, dates, etc), tree orchards (fruit, nuts, olive, etc), agroforestry and trees in urban settings. **3.** Includes groups of trees and scattered trees (e g trees outside forest) in agricultural landscapes, parks, gardens and around buildings, provided that area, height and canopy cover criteria are met. **4.** Includes tree stands in agricultural production systems, such as fruit tree plantations/orchards. In these cases the height threshold can be lower than 5 meters. **5.** Includes agroforestry systems when crops are grown under tree cover and tree plantations established mainly for other purposes than wood, such as oil palm plantations. **6.** The different sub-categories of "other land with tree cover" are exclusive and area reported under one subcategory should not be reported for any other sub-categories. **7.** Excludes scattered trees with a canopy cover less than 10 percent, small groups of trees covering less than 0.5 hectares and tree lines less than 20 meters wide.

Food and Agriculture Organization of the United Nations

<u>Question 1:</u> Total area 2023, and area planted from 2020 to 2023 (area change over the last 4 years)

In the following table please indicate for the year 2023 the area (ha) of poplars and willows, the forest area allocated to forest functions (%) and the area planted from 2020 to 2023 (4 years). For other fast-growing species (OFGS)[2], please list the most important species or genera for your commission, adding as many additional lines to the table as is appropriate.

Table 1. Area; Please note that the total of the four forest functions cannot be more than 100% horizontally

Land Use Category		Total Area 2023 (ha)	Total area by forest function in %				Area planted from 2020 to 2023 (ha)
			Production		Protection	Other	
			Industrial roundwood (%)	Fuelwood biomass (%)	(%)	(%)	
Naturally Regenerating Forest							
	Poplars	0	0	0	0	0	N/A
	Willows	45300	0	0	0	100	N/A
	Mix of P&W	0	0	0	0	0	N/A
	OFGS*						
		0	0	0	0	0	N/A
							N/A
							N/A
Planted forest							
	Poplars	10	0	0	0	100	0
	Willows	62.39	0	0	0	100	62.38
	Mix of P&W	0	0	0	0	0	0
	OFGS*						
		0	0	0	0	0	0
Plantations							
	Poplars	0	0	0	0	0	0
	Willows	250 - 300	0	100	0	0	c.30
	Mix of P&W	0	0	0	0	0	0

[2] IPC-Convention (2019)

Article III - Functions

The functions of the Commission shall be:

a) to study and engage on scientific, technical, social, economic and environmental aspects of **Populus and other fast- growing trees. In addition to the Commission's work on the genus Populus, the Commission's subgroups may work on other**

genera that sustain people and the environment. Priorities of the Commission's work are forest resources production, protection, conservation and utilization, with a view to sustaining livelihoods, land uses, rural development and the environment. This work includes food security issues, climate change and carbon sinks, biodiversity conservation and resilience against biotic and abiotic threats, and combating deforestation.

	OFGS*						
		0	0	0	0	0	0
Other planted forest							
	Poplars	0	0	0	0	0	0
	Willows	0	0	0	0	0	0
	Mix of P&W	0	0	0	0	0	0
	OFGS*						
		0	0	0	0	0	0
Other Land with Tree Cover							
Agroforestry	**Poplars**	0	0	0	0	0	0
	Willows	0	0	0	0	0	0
	Mix of P&W	0	0	0	0	0	0
	OFGS*						
		0	0	0	0	0	0
Trees in urban settings	**Poplars**	Unknown					
	Willows	Unknown					
	Mix of P&W	Unknown					
	OFGS*						
		Unknown					
Grand Total		45662 ha maximum estimate					92.38

*** Other fast-growing species; please list the most important species for your commission, adding as many additional lines to the table as is appropriate (e.g. under OFGS, add *tectona* spp.)**

<u>Question 2:</u> Wood removals in 2023

Please quantify by forest category, species and/or cultivar the wood removals in cubic meter (m^3) of each respective product. If possible group the total removals according to industrial roundwood and fuelwood/wood

chips. For other fast-growing species; please list the most important species for your commission, adding as many additional lines to the table as is appropriate (e.g. under OFGS, add tectona spp.)

Table 2 Wood removals

Forest category and species, cultivar or clone		Wood removals 2023 in m^3				
		Total removals	for industrial round wood			for fuelwood, wood chips
Naturally regenerating forest			Veneer/plywood	Pulpwood	Sawnwood	
	Poplars	0	0	0	0	0
	Willows	0	0	0	0	0
	Mix of P&W	0	0	0	0	0
	OFGS*					
		0	0	0	0	0
Planted forest						
	Poplars	0	0	0	0	0
	Willows	14500-30000m3 (based on area of 250-300ha with 7-12 ton/year of oven dried ton of chips)	0	0	0	14500-30000m3 oven dried loose volume
	Mix of P&W	0	0	0	0	0
	OFGS*					
		0	0	0	0	0
Other Land with Tree Cover						
Agroforestry						
	Poplars	0	0	0	0	0
	Willows	0	0	0	0	0
	Mix of P&W	0	0	0	0	0
	OFGS*					
		0	0	0	0	0

Grand Total	**14500 = 30000m3**				

*** Other fast-growing species; please list the most important species for your commission, adding as many additional lines to the table as is appropriate (e.g. under OFGS, add tectona spp.)**

Question 3: Forest products in 2023

Please list by forest category the products that have been produced from poplars and other fast-growing species in 2023[3]. Please use **roundwood equivalents (1,000 m^3 r) as measuring unit.** The general conversion factors for each single product are given below (in case in your country specific conversion factors are not available):

Product	Measuring unit of the product	Conversion factor to roundwood equivalents
011. Wood fuel (including wood for charcoal)	metric tonnes or m^2 stacked wood	1 metric tonne = 4 m^3 (r) 1 m^3 stacked wood = 1.8 m^3 (r)
032. Wood chips and particles	metric tonnes	1 metric tonne = 1.7 m^3 (r)
05. Sawnwood	m^3 of the product	1 m^3 = 1.8 m^3 (r)
06. Veneer sheets	m^3 of the product	1 m^3 = 1.9 m^3 (r)
071. Plywood	m^3 of the product	1 m^3 = 2.5 m^3 (r)
072. Particle board	m^3 of the product	1 m^3 particleboard = 1.4 m^3 (r)
074. Fibreboard	m^3 of the product	1 m^3 fibreboard = 2.0 m^3 (r)
08. Wood pulp	metric tonnes	1 tonne mech. pulp = 2.5 m^3 (r) 1 tonne chem. pulp = 4.5 m^3 (r)

[2] See https://www.fao.org/3/cb8216en/cb8216en.pdf for the classification of forest products

Table 3 Forest products in roundwood equivalents (1000 m3 r)

Forest category	Wood fuel	Wood chips and particles	Sawnwood	Veneer sheets	Plywood	Particle board	Fibreboard	Wood pulp
	'000 m^3 (r)							
Naturally regenerating forest								
Poplars	0	0	0	0	0	0	0	0
Willows	0	0	0	0	0	0	0	0
Mix of P&W	0	0	0	0	0	0	0	0
OFGS*								
	0	0	0	0	0	0	0	0
Planted								
Poplars	0	0	0	0	0	0	0	0
Willows	0	8529 – 17647 ton	0	0	0	0	0	0
Mix of P&W	0	0	0	0	0	0	0	0

	OFGS*								
		0	0	0	0	0	0	0	0
Agroforestry									
	Poplars	0	0	0	0	0	0	0	0
	Willows	0	0	0	0	0	0	0	0
	Mix of P&W	0	0	0	0	0	0	0	0
	OFGS*								
		0	0	0	0	0	0	0	0
Grand Total			8529 – 17647 ton						

*** Other fast-growing species; please list the most important species for your commission, adding as many additional lines to the table as is appropriate (e.g. under OFGS, add tectona spp.)**

Question 4: Please reflect on the prevailing trends until 2030 in the development of poplars and other fast growing trees in your country.

What is your opinion on the following issues?

Please put a cross (X) in the column you think most appropriate

Table 4 Prevailing trends

	increase	decrease	remain as it is	no comment
1a. The conversion of **naturally regenerating** forests of poplar to other land uses will...			X	
1b. The conversion of **naturally regenerating** forests of willow to other land uses will...	X			
1c. The conversion of **naturally regenerating** forests of other fast growing species to other land uses will...			X	
2a. The conversion of **planted** forests of poplar to other land uses will...	X			
2b. The conversion of **planted** forests of willow to other land uses will...	X			
2c. The conversion of **planted** forests of other fast growing species to other land uses will...			X	

3a. The conversion of **planted** forests of poplar to other species will...	X			
3b. The conversion of **planted** forests of willow to other species will...			X	
4a. The area of poplars for bioenergy plantations will			X	
4b. The area of willows for bioenergy plantations will	X			
4c. The area of other fast growing trees for bioenergy plantations will			X	
5a. Government investments in poplars will ...			X	
5b. Government investments in willows will ...			X	
5c. Government investments in other fast growing trees will ...			X	
6a. Private sector investments in poplars will ...			X	
6b. Private sector investments in willows will ...	X			
6c. Private sector investments in other fast growing trees will ...			X	
7a. The significance of poplars for **productive** purposes will ...			X	
7b. The significance of willows for **productive** purposes will ...	X			
7c. The significance of other fast-growing species for **productive** purposes will ...			X	
8a. The significance of poplars for **environmental protection** purposes will ...			X	
8b. The significance of willows for **environmental protection** purposes will ...	X			
8c. The significance of other fast-growing species for **environmental protection** purposes will ...			X	
9a. The rejection by environmental groups of poplars will...			X	
9b. The rejection by environmental groups of willows will...			X	
9c. The rejection by environmental groups of other fast growing trees will...			X	

10a. The **acceptance** by the general public of poplars as important natural resources will.....			X	
10b. The **acceptance** by the general public of willows as important natural resources will.....			X	
10c. The **acceptance** by the general public of other fast growing trees as important natural resources will.....			X	
11a. The introduction of poplars in **agroforestry systems** will.....			X	
11b. The introduction of willows in **agroforestry systems** will.....			X	
11c. The introduction of other fast growing trees in **agroforestry systems** will.....			X	

---END OF QUESTIONNAIRE---