



Food and Agriculture
Organization of the
United Nations

Global Forest Resources Assessment 2020

Desk Study

Kuwait

Rome, 2020



FAO has been monitoring the world's forests at 5 to 10 year intervals since 1946. The Global Forest Resources Assessments (FRA) are now produced every five years in an attempt to provide a consistent approach to describing the world's forests and how they are changing. The FRA is a country-driven process and the assessments are based on reports prepared by officially nominated National Correspondents. If a report is not available, the FRA Secretariat prepares a desk study using earlier reports, existing information and/or remote sensing based analysis.

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Introduction

Introductory text

No official report has been received from Kuwait. This report is the result of a desk study prepared by the FRA secretariat in Rome, which summarizes existing available information using the established format for FRA 2020 country reports.

Kuwait's is located on the Arabian Peninsula exhibits a dry climate typical of the Sahara region. The country has approximate land area of 1 782 000 hectares, of which 150 000 ha represents the estimated agricultural area. Recent national population figures estimate the population of Kuwait to be 3.07 million people.

1 Forest extent, characteristics and changes

1a Extent of forest and other wooded land

National data

Data sources

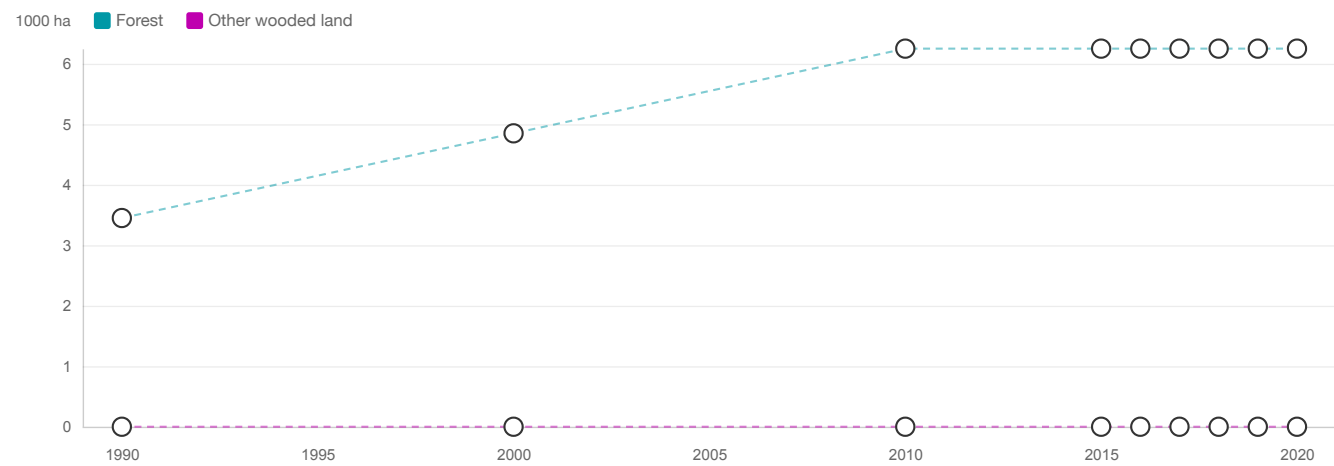
1996	References	GAAFA, 1999. FRA 2000 input tables for data compilation. General Authority of Agriculture and Fisheries Affairs, Kuwait
	Methods used	Other (specify in comments)
	Additional comments	

Classifications and definitions

1996	National class	Definition
	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.

Original data and reclassification

1996	Classifications and definitions		FRA classes		
	Class	Area (1000 ha)	Forest	Other wooded land	Other land
	Forest	4.29	100.00 %	0.00 %	0.00 %
	Total	4.29	4.29	0.00	0.00



FRA categories	Area (1000 ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Forest (a)	3.45	4.85	6.25	6.25	6.25	6.25	6.25	6.25	6.25
Other wooded land (a)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other land (c-a-b)	1 778.55	1 777.15	1 775.75	1 775.75	1 775.75	1 775.75	1 775.75	1 775.75	1 775.75
Total land area (c)	1 782.00	1 782.00	1 782.00	1 782.00	1 782.00	1 782.00	1 782.00	1 782.00	1 782.00

The FAOSTAT land area figure for the year 2015 is used for all reference years

Climatic domain	% of forest area 2015	Override value
Boreal	0.00	
Temperate	0.00	
Sub-tropical	100.00	
Tropical	0.00	

Comments

The annual planting rate has been estimated to be approximately 140 ha, by dividing the total area in 1996 by 30 years of planting activities (the establishment of forest plantations started in 1966). The same planting rate has been considered for all the reference years until 2010.

In November 2019, FAO received the following update on the afforestation projects from the Public Authority of Agriculture Affairs & Fish Resources:

Project Number	Name fo the project	Number of trees
1	Afforestation Um Al Hayman Environmental Phase 1 & 2	109200
2	Afforestation el saleebya	72000
3	Afforestation Um Al Hayman Residential	40000
4	Afforestation sabah elahmed city + Components of the industrial waste landfill rehabilitation project	40000+10300
5	Afforestation Shaddiya and behind the airport	90000
6	Afforestation northwest of Jahra	40000
7	Wafers Abundance	32950
8	Afforestation Doha	42000

1b Forest characteristics

National data

Data sources

1996	References	GAAFA, 1999. FRA 2000 input tables for data compilation. General Authority of Agriculture and Fisheries Affairs, Kuwait
	Methods used	Other (specify in comments)
	Additional comments	

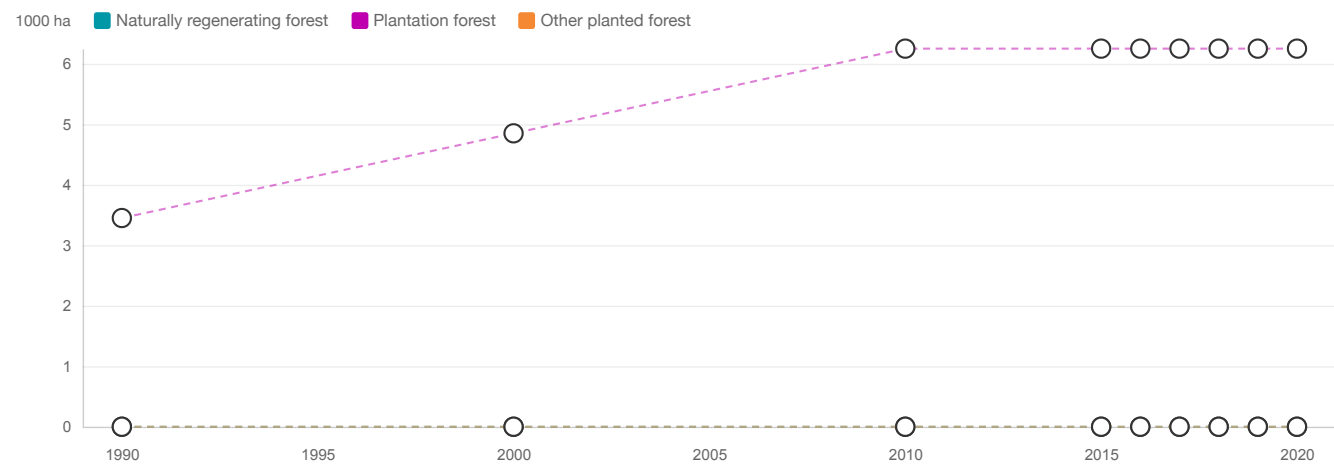
Classifications and definitions

1996	National class	Definition
	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.

Original data and reclassification

1996	Classifications and definitions		FRA classes		
	Class	Area (1000 ha)	Naturally regenerating forest	Plantation forest	Other planted forest
	Forest	4.29	0.00 %	100.00 %	0.00 %
	Total	4.29	0.00	4.29	0.00

Plantation forest	Area (1000 ha)	...of which introduced
Forest	4.29	100.00 %
Total	4.29	4.29



FRA categories	Forest area (1000 ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest (a)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Planted forest (b)	3.45	4.85	6.25	6.25	6.25	6.25	6.25	6.25	6.25
Plantation forest	3.45	4.85	6.25	6.25	6.25	6.25	6.25	6.25	6.25
...of which introduced species	3.45	4.85	6.25	6.25	6.25	6.25	6.25	6.25	6.25
Other planted forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (a+b)	3.45	4.85	6.25	6.25	6.25	6.25	6.25	6.25	6.25
Total forest area	3.45	4.85	6.25	6.25	6.25	6.25	6.25	6.25	6.25

Comments

1c Primary forest and special forest categories

National Data

Data sources + type of data source eg NFI, etc

Spalding, M., Kainuma, M., & Collins, L. (2010). *World Atlas of Mangroves*. London: Earthscan.

National classification and definitions

-

Original data

5 ha mangroves

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

Original data rounded to 2 decimal places

FRA categories	Area (1000 ha)				
	1990	2000	2010	2015	2020
Primary forest					
Temporarily unstocked and/or recently regenerated					
Bamboos					
Mangroves	0.01	0.01	0.01	0.01	0.01
Rubber wood					

Comments

1d Annual forest expansion, deforestation and net change

National Data

Data sources + type of data source eg NFI, etc

GAAFA, 1999. FRA 2000 input tables for data compilation. General Authority of Agriculture and Fisheries Affairs, Kuwait

National classification and definitions

-

Original data

Planted area in 1996 (ha): 4294

Estimated 30 years of planting activities by 1996

Analysis and processing of national data

Estimation and forecasting

The annual planting rate has been estimated to be approximately140 ha, by dividing the total area in 1996 by 30 years of planting activities (the establishment of forest plantations started in 1966). The same planting rate has been considered for all the reference years until 2010.

Reclassification into FRA 2020 categories

-

FRA categories	Area (1000 ha/year)			
	1990-2000	2000-2010	2010-2015	2015-2020
Forest expansion (a)	0.14	0.14	0.00	0.00
...of which afforestation	0.14	0.14	0.00	0.00
...of which natural expansion	0.00	0.00	0.00	0.00
Deforestation (b)	0.00	0.00	0.00	0.00
Forest area net change (a-b)	0.14	0.14	0.00	0.00

Comments

No further available data since FRA 2015

1e Annual reforestation

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

Analysis and processing of national data

Estimation and forecasting

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Reclassification into FRA 2020 categories

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FRA categories	Area (1000 ha/year)			
	1990-2000	2000-2010	2010-2015	2015-2020
Reforestation				

Comments

1f Other land with tree cover

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

Analysis and processing of national data

Estimation and forecasting

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Reclassification into FRA 2020 categories

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FRA categories	Area (1000 ha)				
	1990	2000	2010	2015	2020
Palms (a)					
Tree orchards (b)					
Agroforestry (c)					
Trees in urban settings (d)					
Other (specify in comments) (e)					
Total (a+b+c+d+e)	–	–	–	–	–
Other land area	1 778.55	1 777.15	1 775.75	1 775.75	1 775.75

Comments

2 Forest growing stock, biomass and carbon

2a Growing stock

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

Analysis and processing of national data

Estimation and forecasting

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Reclassification into FRA 2020 categories

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FRA categories	Growing stock m³/ha (over bark)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest									
Planted forest									
...of which plantation forest									
...of which other planted forest									
Forest									
Other wooded land									

FRA categories	Total growing stock (million m³ over bark)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest									
Planted forest									
...of which plantation forest									
...of which other planted forest									
Forest									
Other wooded land									

Comments

2b Growing stock composition

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

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Analysis and processing of national data

Estimation and forecasting

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Reclassification into FRA 2020 categories

-

FRA categories	Scientific name	Common name	Growing stock in forest (million m³ over bark)				
			1990	2000	2010	2015	2020
Native tree species							
#1 Ranked in terms of volume							
#2 Ranked in terms of volume							
#3 Ranked in terms of volume							
#4 Ranked in terms of volume							
#5 Ranked in terms of volume							
#6 Ranked in terms of volume							
#7 Ranked in terms of volume							
#8 Ranked in terms of volume							
#9 Ranked in terms of volume							
#10 Ranked in terms of volume							
Remaining native tree species							
Total volume of native tree species			–	–	–	–	–
Introduced tree species							
#1 Ranked in terms of volume							
#2 Ranked in terms of volume							
#3 Ranked in terms of volume							
#4 Ranked in terms of volume							
#5 Ranked in terms of volume							
Remaining introduced tree species							
Total volume of introduced tree species			–	–	–	–	–
Total growing stock			–	–	–	–	–

Comments

2c Biomass stock

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

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Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

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FRA categories	Forest biomass (tonnes/ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Above-ground biomass									
Below-ground biomass									
Dead wood									

Comments

2d Carbon stock

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

Analysis and processing of national data

Estimation and forecasting

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Reclassification into FRA 2020 categories

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FRA categories	Forest carbon (tonnes/ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Carbon in above-ground biomass									
Carbon in below-ground biomass									
Carbon in dead wood									
Carbon in litter									
Soil carbon									

Soil depth (cm) used for soil carbon estimates	
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Comments

3 Forest designation and management

3a Designated management objective

National Data

Data sources + type of data source eg NFI, etc

GAAFA, 1999. FRA 2000 input tables for data compilation. General Authority of Agriculture and Fisheries Affairs, Kuwait.

National classification and definitions

-

Original data

Type	Ownership	Area (ha)
Protective plantations	Public sector	4294

Area of forest plantations, reference year: 1996

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

	Protection of soil and water (%)
Protective plantations	100

Primary designated management objective

FRA 2020 categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Production (a)	0.00	0.00	0.00	0.00	0.00
Protection of soil and water (b)	3.45	4.85	6.25	6.25	6.25
Conservation of biodiversity (c)	0.00	0.00	0.00	0.00	0.00
Social Services (d)	0.00	0.00	0.00	0.00	0.00
Multiple use (e)	0.00	0.00	0.00	0.00	0.00
Other (specify in comments) (f)	0.00	0.00	0.00	0.00	0.00
None/unknown (g)	0.00	0.00	0.00	0.00	0.00
Total forest area	3.45	4.85	6.25	6.25	6.25

Total area with designated management objective

FRA 2020 categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Production					
Protection of soil and water	3.45	4.85	6.25	6.25	6.25
Conservation of biodiversity					
Social Services					
Other (specify in comments)					

Comments

Protective function is identified in sources provided to FRA 2015 country report, no further national data is available to provide an additional update.

3b Forest area within protected areas and forest area with long-term management plans

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

-

FRA categories	Area (1000 ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Forest area within protected areas									
Forest area with long-term forest management plan									
...of which in protected areas									

Comments

4 Forest ownership and management rights

4a Forest ownership

National Data

Data sources + type of data source eg NFI, etc

GAAFA, 1999. FRA 2000 input tables for data compilation. General Authority of Agriculture and Fisheries Affairs, Kuwait

National classification and definitions

-

Original data

Type	Ownership	Area (ha)
Protective plantations	Public sector	4294

Forest area Area of forest plantations, reference year: 1996

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

-

FRA categories	Forest area (1000 ha)			
	1990	2000	2010	2015
Private ownership (a)	0.00	0.00	0.00	0.00
...of which owned by individuals	0.00	0.00	0.00	0.00
...of which owned by private business entities and institutions	0.00	0.00	0.00	0.00
...of which owned by local, tribal and indigenous communities	0.00	0.00	0.00	0.00
Public ownership (b)	3.45	4.85	6.25	6.25
Unknown/other (specify in comments) (c)	0.00	0.00	0.00	0.00
Total forest area	3.45	4.85	6.25	6.25

Comments

Public ownership was indicated in sources provided for FRA 2015, no additional national data has since been made available.

4b Holder of management rights of public forests

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

-

FRA categories	Forest area (1000 ha)			
	1990	2000	2010	2015
Public Administration (a)	3.45	4.85	6.25	6.25
Individuals (b)	0.00	0.00	0.00	0.00
Private business entities and institutions (c)	0.00	0.00	0.00	0.00
Local, tribal and indigenous communities (d)	0.00	0.00	0.00	0.00
Unknown/other (specify in comments) (e)	0.00	0.00	0.00	0.00
Total public ownership	3.45	4.85	6.25	6.25

Comments

5 Forest disturbances

5a Disturbances

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

-

FRA categories	Area (1000 ha)																	
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Insects (a)																		
Diseases (b)																		
Severe weather events (c)																		
Other (specify in comments) (d)																		
Total (a+b+c+d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total forest area	4.85	-	-	-	-	-	-	-	-	-	6.25	-	-	-	-	6.25	6.25	6.25

Comments

5b Area affected by fire

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

-

FRA categories	Area (1000 ha)																	
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total land area affected by fire																		
...of which on forest																		

Comments

5c Degraded forest

Does your country monitor area of degraded forest		No
If "yes"	What is the national definition of "Degraded forest"?	
	Describe the monitoring process and results	

Comments

6 Forest policy and legislation

6a Policies, Legislation and national platform for stakeholder participation in forest policy

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

Indicate the existence of	Boolean (Yes/No)	
	National	Sub-national
Policies supporting SFM		
Legislations and regulations supporting SFM		
Platform that promotes or allows for stakeholder participation in forest policy development		
Traceability system(s) for wood products		

Comments

6b Area of permanent forest estate

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

FRA 2020 categories	Forest area (1000 ha)					
	Applicable?	1990	2000	2010	2015	2020
Area of permanent forest estate						

Comments

7 Employment, education and NWFP

7a Employment in forestry and logging

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

FRA 2020 categories	Full-time equivalents (1000 FTE)											
	1990			2000			2010			2015		
	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
Employment in forestry and logging												
...of which silviculture and other forestry activities												
...of which logging												
...of which gathering of non wood forest products												
...of which support services to forestry												

Comments

7b Graduation of students in forest-related education

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

FRA 2020 categories	Number of graduated students											
	1990			2000			2010			2015		
	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
Doctoral degree												
Master's degree												
Bachelor's degree												
Technician certificate / diploma												
Total												

Comments

7c Non wood forest products removals and value 2015

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

	Name of NWFP product	Key species	Quantity	Unit	Value (1000 local currency)	NWFP category
#1						
#2						
#3						
#4						
#5						
#6						
#7						
#8						
#9						
#10						
All other plant products						
All other animal products						
Total					-	

Name of currency	
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Comments

8 Sustainable Development Goal 15

8a Sustainable Development Goal 15

SDG Indicator 15.1.1 Forest area as proportion of total land area 2015

Indicator	Percent							
	2000	2010	2015	2016	2017	2018	2019	2020
Forest area as proportion of total land area 2015	0.27	0.35	0.35	0.35	0.35	0.35	0.35	0.35

Name of agency responsible	
----------------------------	--

SDG Indicator 15.2.1 Progress towards sustainable forest management

Sub-Indicator 1	Percent						
	2000-2010	2010-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Forest area annual net change rate	2.57	0.00	0.00	0.00	0.00	0.00	0.00

Name of agency responsible	
----------------------------	--

Sub-Indicator 2	Forest biomass (tonnes/ha)							
	2000	2010	2015	2016	2017	2018	2019	2020
Above-ground biomass stock in forest	–	–	–	–	–	–	–	–

Name of agency responsible	
----------------------------	--

Sub-Indicator 3	Percent (2015 forest area baseline)							
	2000	2010	2015	2016	2017	2018	2019	2020
Proportion of forest area located within legally established protected areas	–	–	–	–	–	–	–	–

Name of agency responsible	
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Sub-Indicator 4	Percent (2015 forest area baseline)							
	2000	2010	2015	2016	2017	2018	2019	2020
Proportion of forest area under long-term forest management plan	–	–	–	–	–	–	–	–

Name of agency responsible	
----------------------------	--

Sub-Indicator 5	Forest area (1000 ha)							
	2000	2010	2015	2016	2017	2018	2019	2020
Forest area under independently verified forest management certification schemes	0.00	0.00	0.00	0.00	0.00	0.00	–	–