



Food and Agriculture  
Organization of the  
United Nations

# Global Forest Resources Assessment 2025

Report

## Malaysia

Food and Agriculture Organization of the United Nations

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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

Malaysia is a nation located in Southeast Asia. Together with its territorial waters lie between 0° 51' N and 7° 33' N, and 98° 01' E and 119° 30' E. It consists of 13 states and three Federal Territories. Eleven of the states and two of the Federal Territories (of Kuala Lumpur and Putrajaya) are in Peninsular Malaysia, and these are separated by the South China Sea from the states of Sabah and Sarawak in the island of Borneo. The Federal Territory of Labuan, consisting of the island of Labuan, is located off the coast of western Sabah.

Malaysian forests, with their complex ecosystems and richness in species of both flora and fauna, are considered one of the world's megadiverse countries. There are approximately 15,000 species of vascular plants, more than 306 species of wild mammals, more than 742 species of birds, 567 species of reptiles, 242 species of amphibians, approximately 1,619 species of marine fish, more than 449 species of freshwater fish, 612 species of hard coral and over 150,000 species of invertebrates. Malaysia's terrestrial biodiversity is primarily concentrated within its tropical rainforests that extend from coastal plains to mountainous areas, including inland waters such as lakes and rivers. The major forest types found in Malaysia are the lowland dipterocarp forests, hill dipterocarp forests, upper hill dipterocarp forests, montane ericaceous forests, peat swamp forests, and mangrove forests.

The management of all types of forest is enshrined in the Forestry Policy of Peninsular Malaysia for Peninsular Malaysia, Sabah Forest Policy 2018 for Sabah, and Sarawak Forest Policy 2019 for Sarawak, respectively. Additionally, Malaysia introduced the Malaysia Policy on Forestry on 21 March 2021, a comprehensive national forestry policy encompassing three regional forestry policies. These policies provide for greater uniformity in implementing strategies for achieving forest conservation, management, and social and educational needs. It represents an important policy framework, which is unequivocal in maintaining that forest management must fulfil environmental and conservational needs besides meeting rational socioeconomic goals. It provides guidelines and a strong emphasis on the necessity for sound management, conservation, utilisation, development, and protection of these forests.

The key objective of forest management in Malaysia has been to ensure the continuity of product flow while conserving the complex ecosystems and maintaining the rich and varied flora and fauna. Sustainable Forest Management (SFM) remains the common policy thrust in Malaysia, in line with sustainable development goals. Consequently, SFM must be one that is socially acceptable, environmentally sound, and economically viable. As such, successful SFM will provide integrated benefits to all, ranging from safeguarding local livelihoods to protecting the biodiversity and ecosystems provided by forests, reducing rural poverty, and mitigating some of the effects of climate change.

As a whole, the tropical forests in Malaysia are important national treasures. They will continue to play important roles in ensuring the stability of the ecosystem and are closely linked to the country's socioeconomic development and the people's well-being. These natural treasures, undoubtedly, need to be properly managed in perpetuity to ensure that the forest ecosystem can continue to function in terms of tangible and intangible benefits such as timber, clean water supply, fresh air, biodiversity, the storehouse of genetic materials, maintaining a sizable carbon stock, and providing critical function in stabilizing the world's climate.

## Report preparation and contact persons

The present report was prepared by the following person(s)

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# 1 Forest extent, characteristics and changes

## 1a Extent of forest and other wooded land

### National Data

#### Data sources + type of data source eg NFI, etc

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
<a href="#">Ministry of Natural Resources, Environment and Climate Change (NRECC)</a>	Registers and statistics	Forest	2020	Statistical information of forest cover in Malaysia
<a href="#">Ministry of Plantation and Commodities</a>	Registers and statistics	Forest	2020	Statistical information of rubber plantation sector in Malaysia. Statistic on Commodities.

#### National classification and definitions

National classification	Definitions
Forest	Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of <b>more than 30 percent</b> , or trees able to reach these thresholds <i>in situ</i> . It does not include land that is predominantly under agricultural include rubber plantation or urban land use.
Other wooded land	Land not classified as "Forest", spanning more than 0.5 hectares; with trees higher than 5 meters and a canopy cover of 5-10 percent, or trees able to reach these thresholds <i>in situ</i> ; or with a combined cover of shrubs, bushes and trees above 10 percent. It does not include land that is predominantly under agricultural or urban land use.
Remaining Land Area	All land that is not classified as Forest or Other wooded land.

#### Original data

FRA 2020 Categories	Area (1000ha)				
	1990	2000	2010	2015	2020
(a) Permanent Reserved Forest (PRF)	12,139.52	11,916.97	12,086.70	11,283.40	10,677.41
(b) State Land Forest	5,205.97	4,506.40	3,745.81	4,068.17	4,046.83
(c) Total Protected Area/National Parks and Wildlife & Bird Sanctuary	1,436.41	1,837.29	2,094.74	3,038.12	3,321.35
Total Forested Area (a+b+c)	18,781.90	18,260.65	17,927.25	18,389.69	18,045.60
Rubber Plantation	1,836.60	1,430.70	1,020.40	1,074.53	1,139.14
Remaining Land Area	12,236.50	13,163.65	13,907.35	13,390.78	13,670.26
Total land area	32,855.00	32,855.00	32,855.00	32,855.00	32,855.00

\*Figure on total land area base on FAOSTAT country area figures.

## Analysis and processing of national data

### Estimation and forecasting

The figure forest for year 1990, 2000, 2010, 2015 and 2020 are available. While figure for year 2025 has been forecasted using the projection of forest loss or historical pattern.

### Reclassification into FRA 2025 categories

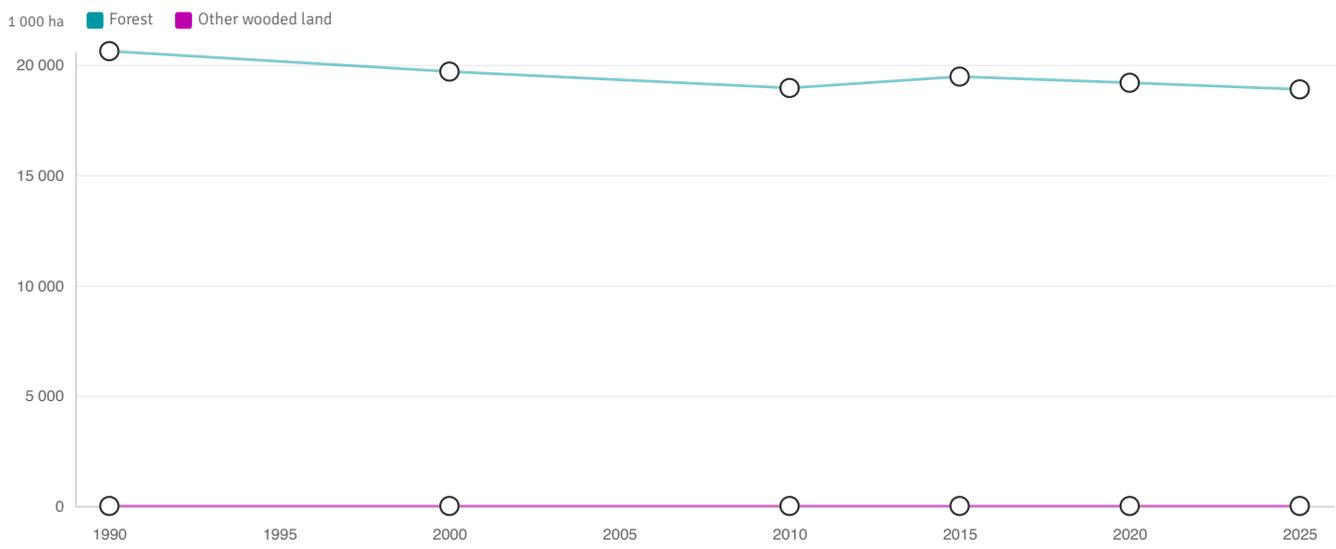
Classifications and Definitions	FRA classes	
	Forest	Other wooded land
Permanent reserved forest	100	
Stateland forest	100	
National park and wildlife sanctuary	100	
Rubber plantation	100	

This leads to the following:

FRA Categories	Area (1000ha)				
	1990	2000	2010	2015	2020
Forests (a)+(b)+(c)+(d)	20,618.50	19,691.35	18,947.65	19,464.22	19,184.74
(a) Permanent Reserved Forest (PRF)	12,139.52	11,916.97	12,086.70	11,283.40	10,677.41

(b) State Land Forest	5,205.97	4,506.40	3,745.81	4,068.17	4,046.83
(c) Total Protected Area/National Parks and Wildlife & Bird Sanctuary	1,436.41	1,837.29	2,094.74	3,038.12	3,321.35
(d) Rubber Plantation*	1,836.60	1,430.70	1,020.40	1,074.53	1,139.14
Other wooded land					
Remaining Land Area	12,236.50	13,163.65	13,907.35	13,390.78	13,670.26
Total land area	32,855.00	32,855.00	32,855.00	32,855.00	32,855.00

\*Malaysia does not include rubber plantations as a forest. However for FRA reporting, rubber plantation is included as forest for international consistency.



FRA 2025 categories	Area (1000 ha)					
	1990	2000	2010	2015	2020	2025
Forest (a)	20 618.50	19 691.35	18 947.65	19 464.22	19 184.74	18 884.74
Other wooded land (b)	0.00	0.00	0.00	0.00	0.00	0.00
<b>Remaining land area (c-a-b)</b>	<b>12 236.50</b>	<b>13 163.65</b>	<b>13 907.35</b>	<b>13 390.78</b>	<b>13 670.26</b>	<b>13 970.26</b>
<b>Total land area (c)</b>	<b>32 855.00</b>					

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

Forest area tier criteria		Tier
Status	Data sources: Recent <sup>1</sup> National Forest Inventory or remote sensing (sample-based survey or wall-to-wall mapping) with accuracy assessment / field data calibration.	High
	Data sources: Old <sup>2</sup> National Forest Inventory or remote sensing (sample-based survey or wall-to-wall mapping) with accuracy assessment / field data calibration.	Medium
	Data sources: Other, such as registers, expert estimates, or remote sensing without accuracy assessment / field data calibration.	Low
Trend	Estimates based on repeated compatible <sup>3</sup> National Forest Inventories where the most recent is not older than five years; and/or remote sensing- change assessments through multitemporal analysis for a period ending not more than five years ago (e.g., REDD+ forest reference [emission] levels).	High
	Estimates based on repeated compatible <sup>3</sup> National Forest Inventories where the most recent is older than five years; and/or remote sensing change assessments through multitemporal analysis for a period ending more than five years ago; or comparison of compatible maps without multitemporal analysis.	Medium
	Other data sources, e.g., expert estimates, or estimates based on non-compatible assessments.	Low

<sup>1</sup> Data not older than 5 years from year of submission of report (2018 or more recent for FRA 2025 country reports)

<sup>2</sup> Data older than 5 years from year of submission of report (older than 2018 for FRA 2025 country reports)

<sup>3</sup> Compatible in terms of methods, categories and definitions used

Forest	Tier
Status	Medium
Trend	Medium

## Comments

- Malaysia has updated its forest from 1990 onward. The update is due to harmonization of cadastral and geospatial data sets. Malaysia does not include rubber plantations as a forest. However for FRA reporting, rubber plantation is included as forest for international consistency.
- Forest area figure for 2020 has been updated and it slightly differs from what previously reported to FRA 2020 (estimated).
- The forest area data for the year 2025 (18,884.74ha) is based on an estimated annual forest area loss in Malaysia. The projection of forest loss between 2020 and 2025 is a reflection of the historical pattern of forest conversion and the anticipated impact of future development in Malaysia.
- Other wooded land is included under Agricultural and Urban Land.

# 1b Forest characteristics

## National Data

### Data sources + type of data source eg NFI, etc

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
<a href="#">Ministry of Natural Resources, Environment and Climate Change (NRECC)</a>	Registers and statistics	Naturally regenerating forest ...of which primary forest ...of which plantation forest	2020	Statistical information covering naturally regenerated forest and forest plantation in Malaysia.
<a href="#">Ministry of Plantation and Commodities</a>	Registers and statistics	Naturally regenerating forest ...of which primary forest ...of which plantation forest	2020	

### National classification and definitions

National classification	Definitions
Naturally regenerating forest	Forest predominantly composed of trees established through natural regeneration.
Primary Forest	Naturally regenerating forest of native tree species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed.
Planted forest	Forest predominantly composed of trees established through planting and/or deliberate seeding.
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.
Plantation Forest of Introduced Tree Species (Sub-category of Plantation Forest)	Plantation forest predominantly composed of introduced tree species.
Other Planted Forest (Sub-category of Planted Forest)	Planted forest which is not classified as plantation forest.

### Original data

FRA 2020 Categories	Area (1000 Hectares)				
	1990	2000	2010	2015	2020
Naturally regenerating forest	18,683.82	18,063.83	17,638.74	17,756.22	17,115.84
Primary Forest	1,086.16	1,086.16	1,086.16	1,086.16	1,086.16
Planted forest	98.08	196.82	288.51	633.47	929.76
Rubber Plantation *	1,836.60	1,430.70	1,020.40	1,074.53	1,139.14

\*Malaysia does not include rubber plantations as a forest. However for FRA reporting, rubber plantation is included as forest for international consistency.

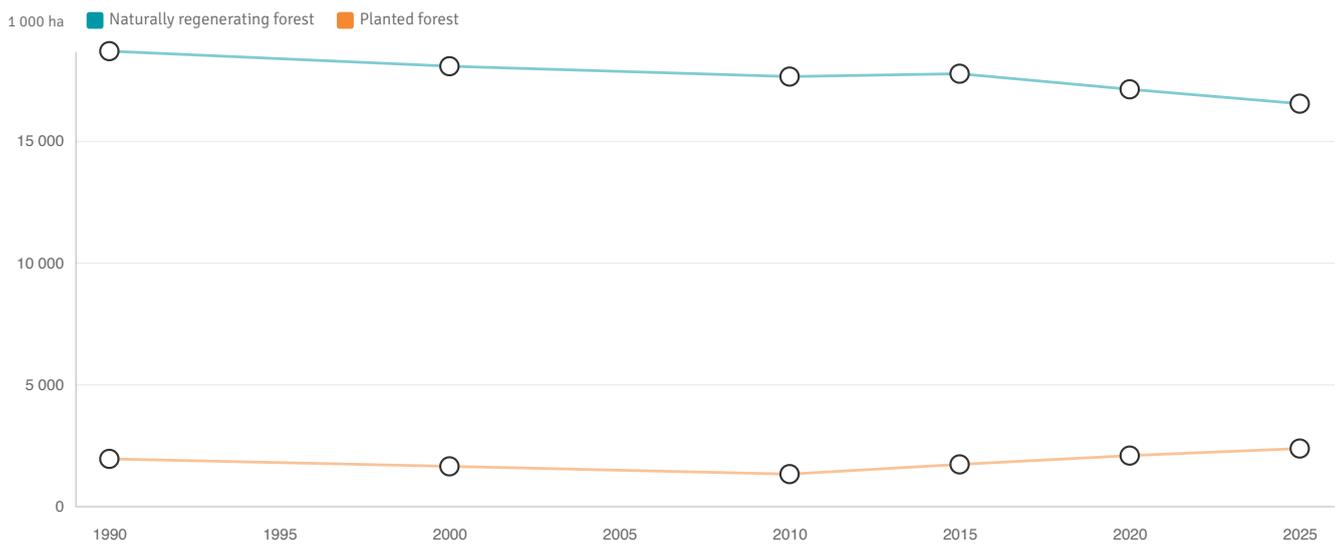
## Analysis and processing of national data

### Estimation and forecasting

The figure for naturally regenerating forest, plantation forest for 1990, 2000, 2010, 2015 and 2020 are available. While figure for year 2025 has been forecasted using of the historical changes.

### Reclassification into FRA 2025 categories

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FRA 2025 categories	Forest area (1000 ha)					
	1990	2000	2010	2015	2020	2025
<b>Naturally regenerating forest (a)</b>	18 683.82	18 063.83	17 638.74	17 756.22	17 115.84	16 525.84
...of which primary forest	1 086.16	1 086.16	1 086.16	1 086.16	1 086.16	1 086.16
<b>Planted forest (b=b1+b2)</b>	<b>1 934.68</b>	<b>1 627.52</b>	<b>1 308.91</b>	<b>1 708.00</b>	<b>2 068.90</b>	<b>2 358.90</b>
...of which plantation forest (b1)	98.08	196.82	288.51	633.47	929.76	1 219.76
...of which introduced species						
...of which other planted forest (b2)	1 836.60	1 430.70	1 020.40	1 074.53	1 139.14	1 139.14
<b>Total (a+b)</b>	<b>20 618.50</b>	<b>19 691.35</b>	<b>18 947.65</b>	<b>19 464.22</b>	<b>19 184.74</b>	<b>18 884.74</b>

Primary forest by climatic domain	Primary forest area (1 000 ha)					
	1990	2000	2010	2015	2020	2025
...of which boreal primary forest	0.00	0.00	0.00	0.00	0.00	0.00
...of which temperate primary forest	0.00	0.00	0.00	0.00	0.00	0.00
...of which sub-tropical primary forest	0.00	0.00	0.00	0.00	0.00	0.00
...of which tropical primary forest	1 086.16	1 086.16	1 086.16	1 086.16	1 086.16	1 086.16
<b>Total</b>	<b>1 086.16</b>	<b>1 086.16</b>	<b>1 086.16</b>	<b>1 086.16</b>	<b>1 086.16</b>	<b>1 086.16</b>

## Comments

Rubber plantations have been reported under planted forest "of which other planted forest" with the reason that rubber plantation in the Malaysia's definition is consider Agro-commodity Plantation.

# 1c Specific forest categories

## National Data

### Data sources + type of data source eg NFI, etc

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
<a href="#">Ministry of Natural Resources, Environment and Climate Change (NRECC)</a>	Registers and statistics	Mangroves <sup>1</sup>	2020	Statistical information covering mangrove forest in Malaysia.

### National classification and definitions

National classification	Definitions
Bamboos	Forest area with predominant bamboo vegetation.
Mangroves	Forest and other wooded land with mangrove vegetation.
Rubber Wood	Forest area with predominant rubber wood vegetation.

### Original data

FRA 2020 Categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Bamboos					
Mangroves	467.76	438.02	429.77	376.58	284.96
*Rubber wood	3673.20	2862.7	2076.05	2272.85	2394.38

\*Malaysia does not include rubber plantations as a forest. However for FRA reporting, rubber plantation is included as forest for international consistency.

## Analysis and processing of national data

### Estimation and forecasting

The figure for mangroves and rubber wood for 1990, 2000, 2010, 2015 and 2020 are available. While figure for year 2025 has been forecasted using linear trend (1990-2020).

### Reclassification into FRA 2025 categories

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FRA 2025 categories	Area (1000 ha)					
	1990	2000	2010	2015	2020	2025
Bamboos						
Mangroves <sup>4</sup>	467.76	438.02	429.77	376.58	311.07	284.96
Rubber wood	3 673.20	2 862.70	2 076.05	2 272.85	2 394.38	2 181.24

<sup>4</sup>Includes both Forest and Other wooded land

### Comments

Rubber plantation in table 1a refers only to the area of plantations outside the permanent reserve forest. while for table 1c, rubber plantation takes into account the area inside and outside the permanent reserve forest.

Data not available on bamboos.

# 1d Annual forest expansion, deforestation and net change

## 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 2025 categories

-

FRA 2025 categories	Area (1000 ha/year)				
	1990-2000	2000-2010	2010-2015	2015-2020	2020-2025
Forest expansion (a=a1+a2)					
...of which afforestation (a1)					
...of which natural expansion (a2)					
Deforestation (b)					
Forest area net change (a-b)					
Forest area net change calculated from table 1a	-92.72	-74.37	103.31	-55.90	-60.00

### Comments

Malaysia is still under engaging the potential of afforestation activities. Data on deforestation not available.

# 1e Other land with tree cover

## National Data

### Data sources + type of data source eg NFI, etc

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
<a href="#">Ministry of Plantation and Commodities Malaysia. (Pocket Statistic)</a>	Registers and statistics	Palms	2020	Statistic on Commodities.
<a href="#">Ministry of Agriculture and Food Security of Malaysia. Agrofood Statistic.</a>	Registers and statistics	Tree orchards	2020	Statistic on Tree orchards.

### National classification and definitions

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.

National classification	Definitions
Palms	Other land tree cover predominantly composed of palms for production of oil, coconuts or dates.
Tree orchards	Other land with tree cover predominantly composed of trees for production of fruits, nuts, or olives.
Agroforestry	“Other land with tree cover” with temporary agricultural crops and/or pastures/animals.
Tree in urban settings	Other land with tree cover such as: urban parks, alleys and gardens.

### Original data

FRA 2020 Categories	Area (1000 ha)				
	1990	2000	2010	2015	2020
Palms	2345.06	3535.22	4959.42	5724.94	5950.24
Tree orchards	598.07	379.77	437.97	371.07	357.03
Agroforestry					
Tree in urban settings					
Other (Specify)					

## Analysis and processing of national data

### Estimation and forecasting

The figure for palms, tree orchards and tree in urban settings for 1990, 2000, 2010, 2015 and 2020 are available. Figure for 2025 is a estimation figure derived from the policy measures outlined in the National Agri Commodity Policy.

### Reclassification into FRA 2025 categories

-

FRA 2025 categories	Area (1000 ha)					
	1990	2000	2010	2015	2020	2025
Palms (a)	2 345.06	3 535.22	4 959.42	5 724.94	5 950.24	6 000.00
Tree orchards (b)	598.07	379.77	437.97	371.07	357.03	316.86
Agroforestry (c)						
Trees in urban settings (d)						
Other (specify in comments) (e)						

## Comments

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## 2 Forest growing stock, biomass and carbon

### 2a Growing stock

#### National Data

##### Data sources + type of data source eg NFI, etc

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
Forestry Department Peninsular Malaysia. Third National Forest Inventory Report.	National Forest Inventory (NFI)	Naturally regenerating forest Planted forest ...of which plantation forest ...of which other planted forest	1993	from 1991 to 1993 Growing stock information.
Forestry Department Peninsular Malaysia. Fourth National Forest Inventory Report.	National Forest Inventory (NFI)	Naturally regenerating forest Planted forest ...of which plantation forest ...of which other planted forest	2007	Growing stock information.
Forestry Department Peninsular Malaysia. Fifth National Forest Inventory Report.	National Forest Inventory (NFI)	Naturally regenerating forest Planted forest ...of which plantation forest ...of which other planted forest	2013	Growing stock information.

##### National classification and definitions

National classification	Definitions
Growing stock	Volume over bark of all living trees with a minimum diameter of 10 cm at breast height (or above buttress if these are higher). Includes the stem from ground level up to a top diameter of 0 cm, excluding branches.

##### Original data

FRA 2020 Categories	Growing stock (m <sup>3</sup> /ha over bark)			
	1990	2000	2010	2015
Naturally regenerating forest (a)	227.79	217.50	207.23	223.11
Planted forest (b)	145.00	145.00	145.00	145.00
...of which plantation forest				
...of which other planted forest				

#### Analysis and processing of national data

##### Estimation and forecasting

The growing stock has been estimated and forecasted by calculating the growing stock per hectares for the reference year (1990, 2000, 2010). For this purposes, the weighted average per hectares of growing stock for national inventories with reference years of 1992, 2002 and 2012 has been interpolated and extrapolated. While for the reference year (2015 to 2025), growing stock from NFI-5 have been used.

##### Reclassification into FRA 2025 categories

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FRA 2025 categories	Growing stock m <sup>3</sup> /ha (over bark)					
	1990	2000	2010	2015	2020	2025
Naturally regenerating forest	227.79	217.50	207.23	223.11	223.11	223.11
...of which primary forest						
Planted forest	145.00	145.00	145.00	145.00	145.00	145.00
...of which plantation forest						
...of which introduced species						
...of which other planted forest						
Total Forest	220.02	211.51	202.93	216.26	214.69	213.35
Other wooded land						

FRA 2025 categories	Total growing stock (million m <sup>3</sup> over bark)					
	1990	2000	2010	2015	2020	2025
Naturally regenerating forest	4 255.99	3 928.88	3 655.28	3 961.59	3 818.71	3 687.08
...of which primary forest						
Planted forest	280.53	235.99	189.79	247.66	299.99	342.04
...of which plantation forest						
...of which introduced species						
...of which other planted forest						
Total Forest	4 536.52	4 164.87	3 845.07	4 209.25	4 118.70	4 029.12
Other wooded land	0.00	0.00	0.00	0.00	0.00	0.00

Growing stock tier criteria		Tier
Status	Data sources: Recent <sup>1</sup> National Forest Inventory or Airborne Laser Scanning (ALS) with probabilistic ground samples.	High
	Data sources: Old <sup>2</sup> National Forest Inventory, partial field inventories, or ALS without probabilistic ground samples.	Medium
	Data sources: Other data sources, such as satellite data, registers, questionnaires or expert assessments.	Low

<sup>1</sup> Data not older than 10 years from year of submission of report (2013 or more recent for FRA 2025 country reports)

<sup>2</sup> Data older than 10 years from year of submission of report (older than 2013 for FRA 2025 country reports)

Growing stock	Tier
Status	Medium

## Comments

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## 2b Forest growing stock composition

### National Data

#### Data sources + type of data source eg NFI, etc

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
Forestry Department Peninsular Malaysia. Third National Forest Inventory Report.	National Forest Inventory (NFI)	Native tree species #1 Ranked Native tree species #2 Ranked Native tree species #3 Ranked Native tree species #4 Ranked Native tree species #5 Ranked Native tree species #6 Ranked Native tree species #7 Ranked Native tree species #8 Ranked Native tree species #9 Ranked Native tree species #10 Ranked	1993	From 1991 to 1993 Growing stock information.
Forestry Department Peninsular Malaysia. Fourth National Forest Inventory Report.	National Forest Inventory (NFI)	Native tree species #1 Ranked Native tree species #2 Ranked Native tree species #3 Ranked Native tree species #4 Ranked Native tree species #5 Ranked Native tree species #6 Ranked Native tree species #7 Ranked Native tree species #8 Ranked Native tree species #9 Ranked Native tree species #10 Ranked	2007	Growing stock information.
Forestry Department Peninsular Malaysia. Fifth National Forest Inventory Report.	National Forest Inventory (NFI)	Native tree species #1 Ranked Native tree species #2 Ranked Native tree species #3 Ranked Native tree species #4 Ranked Native tree species #5 Ranked Native tree species #6 Ranked Native tree species #7 Ranked Native tree species #8 Ranked Native tree species #9 Ranked Native tree species #10 Ranked	2013	Growing stock information.

#### National classification and definitions

National classification	Definitions
Native tree species	A tree species occurring within its natural range (past or present) and dispersal potential (i.e. within the range it occupies naturally or could occupy without direct or indirect introduction or care by humans).
Introduced tree species	A tree species occurring outside its natural range (past or present) and dispersal potential (i.e. outside the range it occupies naturally or could occupy without direct or indirect introduction or care by humans).

#### Original data

For the calculation of growing stock in forest of 10 most common species, the species distribution (%) from NFI5 has been utilised. Estimation of growing stock in forest for year 2020 is based on species distribution from NFI5. Calculation of species wise growing stock is done by multiplying the percent species distribution based on NFI with total growing stock for the particular year.

### Analysis and processing of national data

#### Estimation and forecasting

The growing stock has been estimated and forecasted by calculating the growing stock per hectares for the reference year (1990, 2000, 2010, 2015 and 2020) and multiplying it with related extent of forest area in the respective years.

#### Reclassification into FRA 2025 categories

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FRA 2025 categories	Scientific name	Common name	Million m <sup>3</sup>	% of total
<b>Native tree species</b>				
Most recent year:			2020	
#1 Ranked	Syzygium spp.	Kelat	473.90	12.41
#2 Ranked	Cinnamomum spp.	Medang	438.01	11.47
#3 Ranked	Canarium spp.	Kedondong	232.94	6.10
#4 Ranked	Shorea curtisii	Meranti seraya	148.55	3.89
#5 Ranked	Shorea leprosula	Meranti tembaga	100.43	2.63
#6 Ranked	Shorea platyclados	Meranti bukit	83.63	2.19
#7 Ranked	Koompassia spp.	Kempas, Tualang	72.94	1.91
#8 Ranked	Palaquium spp.	Nyatoh	69.12	1.81
#9 Ranked	Shorea ovalis	Meranti kepong	67.59	1.77
#10 Ranked	Shorea pauciflora	Meranti nemesu	63.77	1.67
Remaining native tree species			2 067.83	54.15
<b>TOTAL native tree species</b>			<b>3 818.71</b>	<b>100.00</b>
<b>Introduced tree species</b>				
#1 Ranked				
#2 Ranked				
#3 Ranked				
#4 Ranked				
#5 Ranked				
Remaining introduced tree species				
<b>TOTAL introduced tree species</b>				
<b>Total growing stock</b>			<b>3 818.71</b>	

## Comments

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## 2c Biomass stock

### National Data

#### Data sources + type of data source eg NFI, etc

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
Forestry Department Peninsular Malaysia. Third National Forest Inventory Report.	National Forest Inventory (NFI)	Above-ground biomass Below-ground biomass	1993	from 1991 to 1993 Growing stock information.
Forestry Department Peninsular Malaysia. Fourth National Forest Inventory Report.	National Forest Inventory (NFI)	Above-ground biomass Below-ground biomass	2007	Growing stock information.
Forestry Department Peninsular Malaysia. Fifth National Forest Inventory Report.	National Forest Inventory (NFI)	Above-ground biomass Below-ground biomass	2013	Growing stock information.
FRA Biomass and carbon calculator		Above-ground biomass Below-ground biomass		FRA calculator

#### National classification and definitions

National classification	Definitions
Above ground biomass	All biomass of living vegetation, both woody and herbaceous, above the soil including stems, stumps, branches, bark, seeds, and foliage.
Below-ground biomass	All biomass of live roots. Fine roots of less than 2 mm diameter are excluded because these often cannot be distinguished empirically from soil organic matter or litter.
Dead wood	All non-living woody biomass not contained in the litter, either standing, lying on the ground, or in the soil. Dead wood includes wood lying on the surface, dead roots, and stumps larger than or equal to 10 cm in diameter or any other diameter used by the country.

#### Original data

The calculation of Biomass stock are based on biomass calculator from FRA system.

#### Analysis and processing of national data

##### Estimation and forecasting

The calculation of carbon stock are based on biomass calculator from FRA system (Tropical Climate Domain).

IPCC forest types	FRA forest categories					
	Naturally regenerating forest	Plantation forest	Other planted forest			
	% of Growing stock					
Broadleaved humid	100%	100%	100%			
Broadleaved dry						
Coniferous						
	100%	100%	100%	Must add up to 100%		
Insert Carbon fraction used by country (IPCC default = 0.47)						
Carbon Fraction	47%					
<b>Biomass conversion and expansion factors (BCEF)</b>						
Naturally regenerating forest	1990	2000	2010	2015	2020	2025
Broadleaved humid	0.95	0.95	0.95	0.95	0.95	0.95
Broadleaved dry	0.95	0.95	0.95	0.95	0.95	0.95
Coniferous	0.70	0.70	0.70	0.70	0.70	0.70

Plantation forest						
Broadleaved humid	1.30	1.30	1.30	1.30	1.30	1.30
Broadleaved dry	1.30	1.30	1.30	1.30	1.30	1.30
Coniferous	0.70	0.70	0.70	0.70	0.70	0.70
Other planted forest						
Broadleaved humid	1.30	1.30	1.30	1.30	1.30	1.30
Broadleaved dry	1.30	1.30	1.30	1.30	1.30	1.30
Coniferous	0.70	0.70	0.70	0.70	0.70	0.70
Weighted BCEF						
Naturally regenerating forest	0.95	0.95	0.95	0.95	0.95	0.95
Plantation forest	1.30	1.30	1.30	1.30	1.30	1.30
Other planted forest	1.30	1.30	1.30	1.30	1.30	1.30
<b>Root-shoot ratios</b>						
Naturally regenerating forest	1990	2000	2010	2015	2020	2025
Broadleaved humid	0.24	0.24	0.24	0.24	0.24	0.24
Broadleaved dry	0.28	0.28	0.28	0.28	0.28	0.28
Coniferous	0.20	0.20	0.20	0.20	0.20	0.20
Plantation forest						
Broadleaved humid	0.24	0.24	0.24	0.24	0.24	0.24
Broadleaved dry	0.28	0.28	0.28	0.28	0.28	0.28
Coniferous	0.20	0.20	0.20	0.20	0.20	0.20
Other planted forest						
Broadleaved humid	0.24	0.24	0.24	0.24	0.24	0.24
Broadleaved dry	0.28	0.28	0.28	0.28	0.28	0.28
Coniferous	0.20	0.20	0.20	0.20	0.20	0.20
Weighted RS ratio						
Naturally regenerating forest	0.24	0.24	0.24	0.24	0.24	0.24
Plantation forest	0.24	0.24	0.24	0.24	0.24	0.24
Other planted forest	0.24	0.24	0.24	0.24	0.24	0.24
<b>Above-ground biomass (t/ha)</b>						
	1990	2000	2010	2015	2020	2025
Naturally regenerating forest	216.40	206.63	196.87	211.95	211.95	211.95
Plantation forest	188.50	188.50	188.50	188.50	188.50	188.50
Other planted forest	188.50	188.50	188.50	188.50	188.50	188.50
Total	213.78	205.13	196.29	209.90	209.43	209.02
<b>Below-ground biomass (t/ha)</b>						
	1990	2000	2010	2015	2020	2025
Naturally regenerating forest	51.94	49.59	47.25	50.87	50.87	50.87
Plantation forest	45.24	45.24	45.24	45.24	45.24	45.24
Other planted forest	45.24	45.24	45.24	45.24	45.24	45.24
Total	51.31	49.23	47.11	50.38	50.26	50.17

**Reclassification into FRA 2025 categories**

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FRA 2025 categories	Forest Biomass (tonnes/ha)					
	1990	2000	2010	2015	2020	2025
Above-ground biomass	213.78	205.13	196.29	209.90	209.43	209.02
Below-ground biomass	51.31	49.23	47.11	50.38	50.26	50.17
Dead wood						

FRA 2025 categories	Total forest Biomass (million tonnes)					
	1990	2000	2010	2015	2020	2025
Above-ground biomass	4 407.82	4 039.27	3 719.24	4 085.54	4 017.86	3 947.29
Below-ground biomass	1 057.94	969.41	892.62	980.61	964.23	947.45
Dead wood						

Biomass estimation methods tier criteria		Tier
Status	Country-specific biomass conversion and expansion factors or allometric equations applied	High
	Application of generic or biome-level allometric equations or a combination of country/biome specific conversion factors and IPCC default biomass expansion factors.	Medium
	IPCC default biomass conversion and expansion factors applied (e.g. using the "biomass calculator"), or estimates based on remote sensing-based biomass maps.	Low

Biomass stock	Tier
Status	Medium

## Comments

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## 2d Carbon stock

### National Data

#### Data sources + type of data source eg NFI, etc

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
Forestry Department Peninsular Malaysia. Third National Forest Inventory Report.	National Forest Inventory (NFI)	Carbon in above-ground biomass Carbon in below-ground biomass	1993	from 1991 to 1993 Growing stock information.
Forestry Department Peninsular Malaysia. Fourth National Forest Inventory Report.	National Forest Inventory (NFI)	Carbon in above-ground biomass Carbon in below-ground biomass	2007	Growing stock information.
Forestry Department Peninsular Malaysia. Fifth National Forest Inventory Report.	National Forest Inventory (NFI)	Carbon in above-ground biomass Carbon in below-ground biomass	2013	Growing stock information.

#### National classification and definitions

National classification	Definitions
Carbon on above-ground biomass	Carbon in all living biomass above the soil, including stems, stumps, branches, bark, seeds, and foliage.
Carbon in below-ground biomass	Carbon in all biomass of live roots. Fine roots of less than 2 mm diameter are excluded, because these often cannot be distinguished empirically from soil organic matter or litter.
Carbon in dead wood	Carbon in all non-living woody biomass not contained in the litter, either standing, lying on the ground, or in the soil. Dead wood includes wood lying on the surface, dead roots down to 2 mm, and stumps larger than or equal to 10 cm in diameter.
Carbon in litter	Carbon in all non-living biomass with a diameter less than the minimum diameter for dead wood (e.g. 10 cm), lying dead in various states of decomposition above the mineral or organic soil.
Soil Carbon	Organic carbon in mineral and organic soils (including peat) to a specified depth chosen by the country and applied consistently through the time series.

#### Original data

Based on FRA 2025 guidelines and projected growing stock for 2025, this table uses biomass data and convention factor of 0.47 to calculate carbon in above-ground biomass and carbon in below-ground biomass.

### Analysis and processing of national data

#### Estimation and forecasting

The calculation of carbon stock are based on biomass calculator from FRA system (Tropical Climate Domain).

IPCC forest types	FRA forest categories					
	Naturally regenerating forest	Plantation forest	Other planted forest			
	% of Growing stock					
Broadleaved humid	100%	100%	100%			
Broadleaved dry						
Coniferous						
	100%	100%	100%	Must add up to 100%		
<b>Insert Carbon fraction used by country (IPCC default = 0.47)</b>						
Carbon Fraction	47%					
<b>Biomass conversion and expansion factors (BCEF)</b>						
Naturally regenerating forest	1990	2000	2010	2015	2020	2025
Broadleaved humid	0.95	0.95	0.95	0.95	0.95	0.95
Broadleaved dry	0.95	0.95	0.95	0.95	0.95	0.95
Coniferous	0.70	0.70	0.70	0.70	0.70	0.70

Plantation forest						
Broadleaved humid	1.30	1.30	1.30	1.30	1.30	1.30
Broadleaved dry	1.30	1.30	1.30	1.30	1.30	1.30
Coniferous	0.70	0.70	0.70	0.70	0.70	0.70
Other planted forest						
Broadleaved humid	1.30	1.30	1.30	1.30	1.30	1.30
Broadleaved dry	1.30	1.30	1.30	1.30	1.30	1.30
Coniferous	0.70	0.70	0.70	0.70	0.70	0.70
Weighted BCEF						
Naturally regenerating forest	0.95	0.95	0.95	0.95	0.95	0.95
Plantation forest	1.30	1.30	1.30	1.30	1.30	1.30
Other planted forest	1.30	1.30	1.30	1.30	1.30	1.30
<b>Root-shoot ratios</b>						
Naturally regenerating forest	1990	2000	2010	2015	2020	2025
Broadleaved humid	0.24	0.24	0.24	0.24	0.24	0.24
Broadleaved dry	0.28	0.28	0.28	0.28	0.28	0.28
Coniferous	0.20	0.20	0.20	0.20	0.20	0.20
Plantation forest						
Broadleaved humid	0.24	0.24	0.24	0.24	0.24	0.24
Broadleaved dry	0.28	0.28	0.28	0.28	0.28	0.28
Coniferous	0.20	0.20	0.20	0.20	0.20	0.20
Other planted forest						
Broadleaved humid	0.24	0.24	0.24	0.24	0.24	0.24
Broadleaved dry	0.28	0.28	0.28	0.28	0.28	0.28
Coniferous	0.20	0.20	0.20	0.20	0.20	0.20
Weighted RS ratio						
Naturally regenerating forest	0.24	0.24	0.24	0.24	0.24	0.24
Plantation forest	0.24	0.24	0.24	0.24	0.24	0.24
Other planted forest	0.24	0.24	0.24	0.24	0.24	0.24
<b>Above-ground biomass (t/ha)</b>						
	1990	2000	2010	2015	2020	2025
Naturally regenerating forest	216.40	206.63	196.87	211.95	211.95	211.95
Plantation forest	188.50	188.50	188.50	188.50	188.50	188.50
Other planted forest	188.50	188.50	188.50	188.50	188.50	188.50
Total	213.78	205.13	196.29	209.90	209.43	209.02
<b>Below-ground biomass (t/ha)</b>						
	1990	2000	2010	2015	2020	2025
Naturally regenerating forest	51.94	49.59	47.25	50.87	50.87	50.87
Plantation forest	45.24	45.24	45.24	45.24	45.24	45.24
Other planted forest	45.24	45.24	45.24	45.24	45.24	45.24
Total	51.31	49.23	47.11	50.38	50.26	50.17

**Reclassification into FRA 2025 categories**

-

FRA 2025 categories	Forest carbon (tonnes/ha)					
	1990	2000	2010	2015	2020	2025
Carbon in above-ground biomass	100.48	96.41	92.26	98.65	98.43	98.24
Carbon in below-ground biomass	24.11	23.14	22.14	23.68	23.62	23.58
Carbon in dead wood						
Carbon in litter						
Soil carbon						

FRA 2025 categories	Total forest carbon (million tonnes)					
	1990	2000	2010	2015	2020	2025
Carbon in above-ground biomass	2 071.75	1 898.44	1 748.11	1 920.15	1 888.35	1 855.24
Carbon in below-ground biomass	497.11	455.66	419.50	460.91	453.14	445.30
Carbon in dead wood						
Carbon in litter						
Soil carbon						

Soil depth (cm) used for soil carbon estimates	
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## Comments

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## 3 Forest designation and management

### 3a Designated management objective

#### National Data

##### Data sources + type of data source eg NFI, etc

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
<a href="#">Ministry of Natural Resources, Environment and Climate Change (NRECC)</a>	Registers and statistics	Production Protection of soil and water Conservation of biodiversity Social Services Multiple use Other (specify in comments)	2020	From 1990 to 2020 Statistical information of forest cover in Malaysia

##### National classification and definitions

National classification	Definitions
Total area with designated management objective	The total area managed for a specific objective.
Primary designated management objective	The primary designated management objective assigned to a management unit.
Production	Forest where the management objective is production of wood, fibre, bio-energy and/or non wood forest products.
Protection of soil and water	Forest where the management objective is protection of soil and water.
Conservation of biodiversity	Forest where the management objective is conservation of biological diversity. Includes but is not limited to areas designated for biodiversity conservation within the protected areas.
Social services	Forest where the management objective is social services.
Multiple use	Forest where the management objective is a combination of several purposes and where none of them is significantly more important than the other.
Other	Forest where the management objective is other than production, protection, conservation, social services or multiple use.

##### Original data

FRA 2020 Categories	Forest area (1000 ha)				
	Primary designated management objective				
	1990	2000	2010	2015	2020
Production	11,435.66	9,979.47	9,989.55	9,373.03	8,837.39
Protection of soil and water					
Conservation of biodiversity					
Social Services					
Multiple use	9,182.84	9,711.88	8,958.10	10,091.91	10,347.35
Other (specify in comments)					
None/unknown					
<b>Total forest area</b>	<b>20,618.50</b>	<b>19,691.35</b>	<b>18,947.65</b>	<b>19,464.22</b>	<b>19,184.74</b>

\* Malaysia does not include rubber plantations as a forest. However for FRA reporting, rubber plantation is included as forest for international consistency.

## Analysis and processing of national data

### Estimation and forecasting

The figure for production and multiple use for 1990, 2000, 2010, 2015 and 2020 are available. While figure for 2025 has been forecasted using linear trend.

### Reclassification into FRA 2025 categories

-

**Primary designated management objective**

FRA 2025 categories	Forest area (1000 ha)					
	1990	2000	2010	2015	2020	2025
Production (a)	11 435.66	9 979.47	9 989.55	9 373.03	8 837.39	8 777.39
Protection of soil and water (b)	0.00	0.00	0.00	0.00	0.00	0.00
Conservation of biodiversity (c)	0.00	0.00	0.00	0.00	0.00	0.00
Social Services (d)	0.00	0.00	0.00	0.00	0.00	0.00
Multiple use (e)	9 182.84	9 711.88	8 958.10	10 091.91	10 347.35	10 107.35
Other (specify in comments) (f)	0.00	0.00	0.00	0.00	0.00	0.00
No designation	0.00	0.00	0.00	0.00	0.00	0.00
Unknown	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total forest area</b>	<b>20 618.50</b>	<b>19 691.35</b>	<b>18 947.65</b>	<b>19 464.22</b>	<b>19 184.74</b>	<b>18 884.74</b>

**Total area with designated management objective**

FRA 2025 categories	Forest area (1000 ha)					
	1990	2000	2010	2015	2020	2025
Production	11 435.66	9 979.47	9 989.55	9 373.03	8 837.39	8 777.39
Protection of soil and water						
Conservation of biodiversity						
Social Services						
Other (specify in comments)						

**Comments**

- Malaysia does not include rubber plantations as a forest. However for FRA reporting, rubber plantation is included as forest for international consistency.
- The multiple use category does not include timber production forest under sustainable yield. It is managed only for conservation of biodiversity, social services, wild life reserved, national park, soil protection forest, soil reclamation forest, flood control forest, water catchment forest, forest sanctuary for wildlife, virgin jungle reserved forest, amenity forest, education forest, research forest, forest for federal purposes and rubber plantation for latex production.

## 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

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
State Forestry Departments	Registers and statistics	Forest area within protected areas Forest area with long-term management plan ...of which in protected areas	2020	State gazettes
<a href="#">Ministry of Plantation and Commodities</a>	Registers and statistics	Forest area within protected areas Forest area with long-term management plan ...of which in protected areas	2020	Statistical information covering primary and based sector in Malaysia

#### National classification and definitions

National classification	Definitions
Forest area within legally established protected areas	Forest area within formally established protected areas independently of the purpose for which the protected areas were established.
Forest area with long-term forest management plan	Forest area that has a long-term (ten years or more) documented management plan, aiming at defined management goals, and which is periodically revised.
Forest area with long-term forest management plan..... <i>of which in protected areas</i>	Forest area within protected areas that has a long-term (ten years or more) documented management plan, aiming at defined management goals, and which is periodically revised.

#### Original data

FRA 2020 Categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Forest area within legally established protected areas	2,140.26	3,774.79	4,191.89	4,948.48	5,161.38
Forest area with long-term forest management plan	9,141.13	8,887.70	9,186.91	11,444.95	10,874.89
...of which in protected areas	1304.02	2803.52	3424.99	2816.41	2392.76

### Analysis and processing of national data

#### Estimation and forecasting

The figure for forest area within protected areas, forest area with long-term forest management plan and of which in protected areas for 1990, 2000, 2010, 2015 and 2020 are available. While figure for 2025 has been forecasted using linear trend (1990-2020).

#### Reclassification into FRA 2025 categories

-

FRA 2025 categories	Area (1000 ha)					
	1990	2000	2010	2015	2020	2025
Forest area within protected areas	2 140.26	3 774.79	4 191.89	4 948.48	5 161.38	5 664.89
Forest area with long-term management plan	9 141.13	8 887.70	9 186.91	11 444.95	10 874.89	11 163.85
...of which in protected areas	1 304.02	2 803.52	3 424.99	2 816.41	2 392.76	2 574.21

## Comments

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### 3c Forest restoration

Has your country forest restoration commitments?	No
Is there a law or other government mandate in support of restoration?	
Is there a national definition of "restoration" if yes, provide the definition the monitoring process and results.	
What areas in need of restoration have been identified and how have they been identified?	
What are the targets set for the restoration? E.g. xxx hectares by year yyyy	
How many hectares of forest have been restored to date?	

#### Comments

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## 4 Forest ownership and management rights

### 4a Forest ownership

#### National Data

##### Data sources + type of data source eg NFI, etc

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
State Forestry Departments.	Registers and statistics	Private ownership ...of which owned by individuals ...of which owned by private business entities and institutions ...of which owned by Indigenous Peoples and local communities Public ownership	2020	State gazettes

##### National classification and definitions

National classification	Definitions
Forest ownership	Generally refers to the legal right to freely and exclusively use, control, transfer, or otherwise benefit from a forest. Ownership can be acquired through transfers such as sales, donations, and inheritance.
Private ownership	Forest owned by individuals, families, communities, private co-operatives, corporations and other business entities, religious and private educational institutions, pension or investment funds, NGOs, nature conservation associations and other private institutions.
Private ownership... of which owned by individuals	Forest owned by individuals and families.
Private ownership... of which owned by private business entities and institutions	Forest owned by private corporations, co-operatives, companies and other business entities, as well as private organizations such as NGOs, nature conservation associations, and private religious and educational institutions, etc.
Private ownership... of which owned by local, tribal and indigenous communities	Forest owned by a group of individuals belonging to the same community residing within or in the vicinity of a forest area or forest owned by communities of indigenous or tribal people. The community members are co-owners that share exclusive rights and duties and benefits contribute to the community development.
Public ownership	Forest owned by the State; or administrative units of the Public Administration; or by institutions or corporations owned by the Public Administration.
Other Types of Ownership	Other kinds of ownership arrangements not covered by public or private ownership or forest area where ownership is unknown.
Unknown	Forest area where ownership is unknown.

##### Original data

FRA 2020 Categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Private ownership	1,836.60	1,430.70	1,020.40	1,074.53	1,139.14
...of which owned by individuals					
...of which owned by private business entities and institutions	1,836.60	1,430.70	1,020.40	1,074.53	1,139.14
...of which owned by local, tribal and indigenous communities					
Public ownership	18,781.90	18,260.65	17,927.25	18,389.69	18,045.60
Other (specify)/unknown					
<b>Total forest area</b>	<b>20,618.50</b>	<b>19,691.35</b>	<b>18,947.65</b>	<b>19,464.22</b>	<b>19,184.74</b>

#### Analysis and processing of national data

##### Estimation and forecasting

The figure for private ownership and public ownership for 1990, 2000, 2010, 2015 and 2020 are available.

##### Reclassification into FRA 2025 categories

n.a

FRA 2025 categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Private ownership (a)	1 836.60	1 430.70	1 020.40	1 074.53	1 139.14
...of which owned by individuals	0.00	0.00	0.00	0.00	0.00
...of which owned by private business entities and institutions	1 836.60	1 430.70	1 020.40	1 074.53	1 139.14
...of which owned by Indigenous Peoples and local communities	0.00	0.00	0.00	0.00	0.00
Public ownership (b)	18 781.90	18 260.65	17 927.25	18 389.69	18 045.60
Other (specify in comments) (c)	0.00	0.00	0.00	0.00	0.00
Unknown (d)	0.00	0.00	0.00	0.00	0.00
<b>Total (a+b+c+d)</b>	<b>20 618.50</b>	<b>19 691.35</b>	<b>18 947.65</b>	<b>19 464.22</b>	<b>19 184.74</b>

## Comments

-

## 4b Holder of management rights of public forests

### National Data

#### Data sources + type of data source eg NFI, etc

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
State Forestry Departments.	Registers and statistics	Public Administration Private business entities and institutions Indigenous Peoples and local communities	2020	State gazettes

#### National classification and definitions

National classification	Definitions
Management right of public forest	Refers to the right to manage and use publicly owned forests for a specific period of time.
Public administration	The Public Administration (or institutions or corporations owned by the Public Administration) retains management rights and responsibilities within the limits specified by the legislation.
Private Business Entities and Institutions	Forest management rights and responsibilities are transferred from the Public Administration to corporations, other business entities, private co-operatives, private non-profit institutions and associations, etc., through long-term leases or management agreements.
Indigenous Peoples and Local Communities	Forest management rights and responsibilities are transferred from the Public Administration to local communities and Indigenous Peoples through long-term leases or management agreements.
Other Forms of Management Rights	Forests for which the transfer of management rights does not belong to any of the categories mentioned above.
Unknown Management Right	Management rights of public forest area is unknown.

#### Original data

FRA 2020 Categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Public Administration	18,781.90	18,260.65	17,927.25	18,389.69	18,045.60
Individuals					
Private business entities and institutions					
Local, tribal and indigenous communities					
Other (specify)					
Total public ownership	18,781.90	18,260.65	17,927.25	18,389.69	18,045.60

### Analysis and processing of national data

#### Estimation and forecasting

The figure for public administration, private business entities and institutions for 1990, 2000, 2010, 2015 and 2020 are available.

#### Reclassification into FRA 2025 categories

n.a

FRA 2025 categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Public Administration (a)	18 781.90	18 260.65	17 927.25	18 389.69	18 045.60
Private business entities and institutions (b)	0.00	0.00	0.00	0.00	0.00
Indigenous Peoples and local communities (c)	0.00	0.00	0.00	0.00	0.00
Other (specify in comments) (d)	0.00	0.00	0.00	0.00	0.00
Unknown (e)	0.00	0.00	0.00	0.00	0.00
<b>Total public ownership (a+b+c+d+e)</b>	<b>18 781.90</b>	<b>18 260.65</b>	<b>17 927.25</b>	<b>18 389.69</b>	<b>18 045.60</b>

## Comments

-

## 5 Forest disturbances

### 5a Forest damage

#### 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 2025 categories

-

	Predominant cause forest area affected (1000 ha)			
	Insects	Diseases	Severe weather events	Other (specify in comments)
2000				
2001				
2002				
2003				
2004				
2005				
2006				
2007				
2008				
2009				
2010				
2011				
2012				
2013				
2014				
2015				
2016				
2017				
2018				
2019				
2020				
2021				
2022				
2023				

**Comments**

there is no data available.

# 5b Area affected by fire

## National Data

### Data sources + type of data source eg NFI, etc

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
Forestry Department of Peninsular Malaysia; Forest Department Sarawak; Sabah Forestry Department.	Registers and statistics	Total land area affected by fire ...of which on forest	2020	Information of forest fire

### National classification and definitions

National classification	Definitions
Burned area	Land area affected by fire.
Total land area affected by fire .....of which on forest	Forest area affected by fire.

### Original data

FRA 2025 categories	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total land area affected by fire (ha)												
...of which on forest (ha)	6	297	1,350	1,320	1,301	2,231	1,325	1,350	60	1,540	2,480	10
FRA 2025 categories	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Total land area affected by fire (ha)												
...of which on forest (ha)	448	1,436	5,196.6	886.0	21,001.99	573.57	1354.72	3607.21	1389.93	552.42	214.85	

## Analysis and processing of national data

### Estimation and forecasting

The figure for total land area affected by fire for 2000 to 2022 are available.

### Reclassification into FRA 2025 categories

-

	FRA 2025 categories area affected (1000 ha)	
	Total land area affected by fire	...of which on forest
2000		0.01
2001		0.30
2002		1.35
2003		1.32
2004		1.30
2005		2.23
2006		1.33
2007		1.35
2008		0.06
2009		1.54
2010		2.48
2011		0.01
2012		0.45
2013		1.44
2014		5.20
2015		0.89
2016		21.00
2017		0.57
2018		1.35
2019		3.61
2020		1.39
2021		0.55
2022		0.21
2023		

## Comments

-

## 5c Degraded forest

### Degraded forest definition

Has your country a national definition of "Degraded forest"		Yes
If "yes"	What is the national definition of "Degraded forest"?	A direct human induced loss of forest values likely to be characterized by a reduction of tree canopy cover over long term. Routine management under sustainable forest management practices are not included.
	Criteria applied in the definition of degraded forest	Change in forest structure / Decrease in forest canopy Forest disturbances Loss of productivity and forest goods Loss of forest services Other (explain in comments)

### Forest degradation monitoring and assessment

Does your country monitor area of degraded forest		No
If "yes"	Main methods applied to monitor degraded forest area	
	Monitoring scale	
If national level data are available	Year of latest assessment	
	Degraded forest area for that year (in 1 000 ha)	

### Comments

Malaysia is developing the method to monitor degraded area.

## 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

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
<a href="#">Ministry of Natural Resources, Environment and Climate Change (NRECC)</a>	Registers and statistics	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	2020	

##### National classification and definitions

National classification	Definitions
Policies supporting SFM	Policies or strategies that explicitly encourage sustainable forest management.
Legislation and/or regulations supporting sustainable forest management	Legislation and regulations that govern and guide sustainable forest management, operations and use.
National stakeholder platform	A recognized procedure that a broad range of stakeholders can use to provide opinions, suggestions, analysis, recommendations and other input into the development of national forest policy.
Traceability system for wood products	A system that provides the ability to trace the origin, location and movement of wood products by means of recorded identifications. This involves two main aspects: (1) identification of the product by marking, and (2) the recording of data on movement and location of the product all the way along the production, processing and distribution chain

##### Original data

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

### Comments

-

## 6b Area of permanent forest estate

### National Data

#### Data sources + type of data source eg NFI, etc

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
<a href="#">Ministry of Natural Resources, Environment and Climate Change (NRECC)</a>	Registers and Statistics	Area of permanent forest estate	2020	Statistical information of forest cover in Malaysia

#### National classification and definitions

National classification	Definitions
Permanent forest estate	Forest area that is designated to be retained as forest and may not be converted to other land use.

#### Original data

FRA 2020 categories	Forest area (1000ha)				
	1990	2000	2010	2015	2020
Area of permanent forest estate	12,489.77	12,482.22	12,793.56	12,788.30	12,345.68

The figure for 1990, 2000, 2010, 2015 and 2020 are available. While figure for 2025 has been forecasted using linear trend (extrapolation).

FRA 2025 categories	Forest area (1000 ha)						
	Applicable?	1990	2000	2010	2015	2020	2025
Area of permanent forest estate	Yes	12 489.77	12 482.22	12 793.56	12 788.30	12 345.68	12 321.67

**Comments**

-

## 7 Non wood forest products removals and value 2020

### 7 Non wood forest products removals and value 2020

#### National Data

##### Data sources + type of data source eg NFI, etc

Reference to data source	Type of data source	FRA variable	Year for data source	Comments
State Forestry Departments.	National Forest Inventory Report	#1 #2 #3 #4 #5 #6 #7 #8 #9 #10	2015	
Department of Wildlife and National Parks.	PERHILITAN Statistic Report	#1 #2 #3 #4 #5 #6 #7 #8 #9 #10	2015	

#### National classification and definitions

-

#### Original data

-

	Name of NWFP product	Key species	Quantity	Unit	Value (1000 local currency)	NWFP category
#1	Agarwood	Aquilaria spp				3 Raw material for medicine and aromatic products
#2	Rattan	Calamus spp				5 Raw material for utensils handicrafts construction
#3	Phyton	Phyton reticulatus				12 Wild meat
#4	Wild Boar	Sus scrofa				12 Wild meat
#5	Monitor Lizard	Varanus				12 Wild meat
#6	Skin (Phyton)	Phyton				10 Hides skins and trophies
#7	Nypa	Nypa spp				5 Raw material for utensils handicrafts construction
#8	Skin(Monitor Lizard)	Varanus salvator				10 Hides skins and trophies
#9	Bamboo	Bambuseae spp				5 Raw material for utensils handicrafts construction
#10						
All other plant products						
All other animal products						
<b>Total</b>						

Name of currency	MYR
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### Comments

Based on FRA 2020 report.

## 8 Sustainable Development Goal 15

### 8 Sustainable Development Goal 15

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

Indicator	Percent									
	2000	2005	2010	2015	2020	2021	2022	2023	2024	2025
Forest area as proportion of total land area	59.93	58.80	57.67	59.24	58.39	58.21	58.03	57.84	57.66	57.48

#### SDG Indicator 15.2.1 Progress towards sustainable forest management

Sub-Indicator 1	Percent					
	2000-2010	2010-2015	2015-2020	2020-2025	2005-2015	2015-2025
Annual forest area change rate	-0.38	0.54	-0.29	-0.31	0.07	-0.30

Sub-Indicator 2	Forest biomass (tonnes/ha)									
	2000	2010	2015	2020	2021	2022	2023	2024	2025	
Above-ground biomass stock in forest	205.13	196.29	209.90	209.43	209.35	209.27	209.18	209.10	209.02	

Sub-Indicator 3	Percent (2015 forest area baseline)									
	2000	2010	2015	2020	2021	2022	2023	2024	2025	
Proportion of forest area located within legally established protected areas	19.39	21.54	25.42	26.52	27.03	27.55	28.07	28.59	29.10	

Sub-Indicator 4	Percent (2015 forest area baseline)									
	2000	2010	2015	2020	2021	2022	2023	2024	2025	
Proportion of forest area under long-term forest management plan	45.66	47.20	58.80	55.87	56.17	56.47	56.76	57.06	57.36	

Sub-Indicator 5	1 000 ha
Forest area under independently verified forest management certification schemes	
2000	55.14
2005	73.30
2010	4 425.41
2015	5 229.60
2016	4 583.57
2017	4 736.86
2018	5 011.18
2019	3 966.83
2020	5 197.20
2021	5 384.35
2022	5 669.32
2023	6 196.01
2024	6 797.86
2025	

Data for this SDG sub-indicator are provided by FSC and PEFC (forest certification organizations).

