



Papua New Guinea

FAO, at the request of its member countries, regularly monitors the world's forests and their management and uses through the Global Forest Resources Assessment (FRA). This country report is prepared as a contribution to the FAO publication, the Global Forest Resources Assessment 2015 (FRA 2015).

The content and the structure are in accordance with the recommendations and guidelines given by FAO in the document Guide for country reporting for FRA 2015 (<http://www.fao.org/3/a-au190e.pdf>). These reports were submitted to FAO as official government documents.

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Introductory Text

Place an introductory text on the content of this report

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Desk Study?

Check "yes" if this survey is a Desk Study, "no" otherwise	
Desk Study?	no

1. What is the area of forest and other wooded land and how has it changed over time?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

1.1 Categories and definitions

Category	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.
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 ; 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.
Other land	All land that is not classified as "Forest" or "Other wooded land".
...of which with tree cover (<i>sub-category</i>)	Land considered as "Other land", that is predominantly agricultural or urban lands use and has patches of tree cover that span 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. It includes bothe forest and non-forest tree species.
Inland water bodies	Inland water bodies generally include major rivers, lakes and water reservoirs.
Forest expansion	Expansion of forest on land that, until then, was not defined as forest.
...of which afforestation (<i>sub-category</i>)	Establishment of forest through planting and/or deliberate seeding on land that, until then, was not defined as forest.
...of which natural expansion of forest (<i>sub- category</i>)	Expansion of forests through natural succession on land that, until then, was under another land use (e.g. forest succession on land previously used for agriculture).
Deforestation	The conversion of forest to other land use or the longterm reduction of the tree canopy cover below the minimum 10 percent threshold.
...of which human induced (<i>sub-category</i>)	Human induced conversion of forest to other land use or the permanent reduction of the tree canopy cover below the minimum 10 percent threshold.
Reforestation	Natural regeneration or re-establishment of forest through planting and/or deliberate seeding on land already in forest land use.
...of which artificial reforestation (<i>sub- category</i>)	Re-establishment of forest through planting and/or deliberate seeding on land already in forest land use.

1.2 National data

1.2.1 Data sources

References to sources of information	Variables	Years	Additional comments
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1	McAlpine, J. & Quigley, J. (Coffey MPW Pty. Ltd for AusAid: Canberra & Papua New Guinea National Forest Service. 1998. Forest Resources of Papua New Guinea. Summary Statistics from the Forest Inventory Mapping (FIM) System	Forest, OWL, Other land	1975	N/A
2	McAlpine, J. & Quigley, J. (Coffey MPW Pty. Ltd for AusAid: Canberra & Papua New Guinea National Forest Service. 1998. Forest Resources of Papua New Guinea. Summary Statistics from the Forest Inventory Mapping (FIM) System	Forest, OWL, Other land	1996	N/A
3	Papua New Guinea National Forest Authority. 2000. 1996 annual report	Forest (Plantations)	1996, 1997, 1998, 1999	N/A
4	Papua New Guinea National Forest Authority. Forest Authority database	Forest (Mangrove)	1996	N/A
5	Japan International Cooperation Agency (JICA) & Papua New Guinea Forest Authority (PNGFA) project on Capacity Development on Forest Monitoring for Addressing Climate Change in Papua New Guinea (on going)	Forest, OWL, Other land	2012	Forest Cover Base-map (version0) develop on July 2013 for internal reviewing
6	PNG Forest Authority, National Forestry Board	National Forest definition	2013	10 percent " " /> " A land area spanning of one hecatre with a minimum of tree height of 3 metres and a canopy coverage of >10 percent "

1.2.2 Classification and definitions

National class	Definition
Large to medium crowned forest (P1)	8m. Canopy is generally 30–35m high and irregular in both height and closure. Stem diameters generally range from large (70-89 cm) to small (30-49 cm) but very large stems (90+ cm) are not uncommon. The floristic composition is very mixed with no single-species dominance." /> Low altitude forest on plains and fans. Crown diameter >8m. Canopy is generally 30–35m high and irregular in both height and closure. Stem diameters generally range from large (70-89 cm) to small (30-49 cm) but very large stems (90+ cm) are not uncommon. The floristic composition is very mixed with no single-species dominance.

Open crowned forest (P0)	15m diameter) emergents often reach 40m, rising above a canopy comprising medium (8-15m) to small (<8m) crowns. The floristic composition is very similar to the “Large to medium crowned forest”." /> Low altitude forest on plains and fans. Forest has an uneven canopy up to 30 m in height with many, often large, gaps revealing a lower tree stratum. Large crowned (>15m diameter) emergents often reach 40m, rising above a canopy comprising medium (8-15m) to small (<8m) crowns. The floristic composition is very similar to the “Large to medium crowned forest”.
Open crowned forest (P0)	15m diameter) emergents often reach 40m, rising above a canopy comprising medium (8-15m) to small (<8m) crowns. The floristic composition is very similar to the “Large to medium crowned forest”." /> Low altitude forest on plains and fans. Forest has an uneven canopy up to 30 m in height with many, often large, gaps revealing a lower tree stratum. Large crowned (>15m diameter) emergents often reach 40m, rising above a canopy comprising medium (8-15m) to small (<8m) crowns. The floristic composition is very similar to the “Large to medium crowned forest”.
Small crowned forest (Ps)	<8m) 25-30m in height with no emergents. Stem diameters are generally small (30-49 cm) to very small (<30 cm)." /> Low altitude forest on plains and fans. This forest type has a dense even canopy of small crowns (<8m) 25-30m in height with no emergents. Stem diameters are generally small (30-49 cm) to very small (<30 cm).
Terminalia brassii forest (PTb)	15m) 30-35m in height. The canopy is dense in a single-species stand, but may be more open when associated with Camptosperma. The majority of stems range from very large (90cm+) to medium diameter (50-69 cm)." /> Low altitude forest on plains and fans. The forest has an even to slightly undulating canopy of large woolly crowns (>15m) 30-35m in height. The canopy is dense in a single-species stand, but may be more open when associated with Camptosperma. The majority of stems range from very large (90cm+) to medium diameter (50-69 cm).
Large crowned forest (HI)	Low altitude forest on uplands. This forest type has an uneven canopy 30-35m in height with a 60-80% closure. Emergents can reach 40m in height. Large stem diameters (70-89cm) predominant. In both structure and floristic content it is very similar to the “Large to medium crowned forest” on plains and fans.
Medium crowned forest (Hm)	Low altitude forest on uplands. The canopy of this forest type is 25-30m in height, is generally only slightly uneven and has a 60-80% crown closure. Except for Araucaria emergents rarely exceed 40m in height. Very large stem diameters (90cm+) are rare except for Araucaria. Floristically the forest is very mixed.
Small crowned forest (Hs)	<8m) trees predominates in the canopy." /> Low altitude forest on uplands. This forest has a relatively even canopy 20- 30m in height, with a 60-80% closure and no emergents. Large stem diameters (90cm+) are rare, the majority of trees falling into the medium (50-69cm) to small (30-49cm) classes. The forest may be either a mixed forest which is poorly developed due to adverse site or climatic conditions, or a forest in which a small crowned (<8m) trees predominates in the canopy.

Small crowned forest (L)	Lower montane forest (above 1000m). This forest has an even to slightly undulating canopy 20-30m in height. Canopy closure varies from dense to slightly open. The canopy height decreases with increasing altitude. Stem diameters are generally medium (50-69cm) to small (30-49cm). The forest occurs throughout the mountain ranges in the 1400-3400m altitude range.
Small crowned forest with conifers (Lc)	<8m) to very small. Although the stems of the associated broadleaf species are generally small (30-49cm) in diameter, the coniferous stems often exceed 50cm in diameter. The forest occurs in many places in the mountain ranges above 2400m altitude." /> This forest has a canopy 15-25m in height with emergent conifers. Crowns are small (<8m) to very small. Although the stems of the associated broadleaf species are generally small (30-49cm) in diameter, the coniferous stems often exceed 50cm in diameter. The forest occurs in many places in the mountain ranges above 2400m altitude.
Montane forest (above 3000m) (Mo)	This forest “mossy forest” has a dense, even, dark toned, almost velvety textured canopy 5-15m in height, usually without emergents. Stems are very thin and crooked.
Dry seasonal forest (D)	This forest has a fairly open canopy 20-25m in height with emergents to 30m and occasionally to 40m. Stems are often low-branched and crooked.
Littoral forest (B)	<8m) crowns 15-30m in height. Forest with <i>Melaleuca leucandendron</i> (BMI): The forest has an irregularly open to sometimes almost closed, irregularly uneven canopy of medium (8-15m) to small (<8m) crowns 20-30m in height." /> Contains forest classes: Mixed forest (B) The forest has an irregularly open, irregularly uneven canopy of medium (8-15m) crowns 20-30m in height. Forest with <i>Casuarina equisetifolia</i> (BCe): The forest has a dense to irregularly open, more or less even canopy of small (<8m) crowns 15-30m in height. Forest with <i>Melaleuca leucandendron</i> (BMI): The forest has an irregularly open to sometimes almost closed, irregularly uneven canopy of medium (8-15m) to small (<8m) crowns 20-30m in height.

Seral forest (F)	<p><8m) crowned canopy up to 30m in height. Large crowned (>15m) emergents, may be present. The forest is heterogeneous, comprising many seral stages, from low forest to original levee forest, following changes in the course of a river. Riverine successions with <i>Casuarina grandis</i> (FriCg): This forest has a dense, even canopy of small (<8m), semi-conical crowns up to 30m in height. It is an almost pure stand of <i>Casuarina grandis</i>. Stem diameters are small (30-49cm). Riverine successions with <i>Eucalyptus deglupta</i> [commonly known in PNG as Kamarere] (FriK): This forest has a dense to open, generally even, large crowned (>15m) canopy up to 30m in height. The canopy is predominantly Kamarere which has light-toned crowns. Riverine successions with <i>Terminalia brassii</i> (FriTb): This forest has a dense to open, even to slightly undulating, Volcanic successions (Fv): The forest is highly variable in height, crown size, canopy closure and profile, and in species composition, being a seral vegetation type. Generally it has an even canopy being composed of even-aged trees." /> This forest class contains five sub-classes: Riverine mixed successions (Fri): This forest has an irregularly open to open, irregularly uneven, medium (8- 15m) to small (<8m) crowned canopy up to 30m in height. Large crowned (>15m) emergents, may be present. The forest is heterogeneous, comprising many seral stages, from low forest to original levee forest, following changes in the course of a river. Riverine successions with <i>Casuarina grandis</i> (FriCg): This forest has a dense, even canopy of small (<8m), semi-conical crowns up to 30m in height. It is an almost pure stand of <i>Casuarina grandis</i>. Stem diameters are small (30-49cm). Riverine successions with <i>Eucalyptus deglupta</i> [commonly known in PNG as Kamarere] (FriK): This forest has a dense to open, generally even, large crowned (>15m) canopy up to 30m in height. The canopy is predominantly Kamarere which has light-toned crowns. Riverine successions with <i>Terminalia brassii</i> (FriTb): This forest has a dense to open, even to slightly undulating, Volcanic successions (Fv): The forest is highly variable in height, crown size, canopy closure and profile, and in species composition, being a seral vegetation type. Generally it has an even canopy being composed of even-aged trees.</p>
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Swamp forest (Fsw)	<p><8m) crowns 20-30m in height. A dense under-storey of sago palms is often visible. In some intermontane basins the forest is extremely low in height, up to 5m and can be a pure stand of Nothofagus or Podocarpus. Swamp forest with Camptosperma (FswC): The forest has a dense, even canopy of small crowns 20-30m in height. Although rarely seen under the dense canopy there is a lower layer of sago palms. Swamp forest with Melaleuca leucadendron (FswML): This forest has an open, irregularly uneven canopy of small crowns 20-30m in height. Swamp forest with terminalia brassii (FswTb): The forest has a generally dense, occasionally open, even to slightly uneven or undulating canopy of medium (8-15m) to large (>15m), woolly, light-toned crowns 20-30m in height." /> This forest class contains four sub-classes: Mixed swamp forest (Fsw): The forest has an irregularly open, almost even canopy of medium (8-15m) to very small (<8m) crowns 20-30m in height. A dense under-storey of sago palms is often visible. In some intermontane basins the forest is extremely low in height, up to 5m and can be a pure stand of Nothofagus or Podocarpus. Swamp forest with Camptosperma (FswC): The forest has a dense, even canopy of small crowns 20-30m in height. Although rarely seen under the dense canopy there is a lower layer of sago palms. Swamp forest with Melaleuca leucadendron (FswML): This forest has an open, irregularly uneven canopy of small crowns 20-30m in height. Swamp forest with terminalia brassii (FswTb): The forest has a generally dense, occasionally open, even to slightly uneven or undulating canopy of medium (8-15m) to large (>15m), woolly, light-toned crowns 20-30m in height.</p>
Mangrove (M)	Covers a wide range of communities from almost bare tidal flats with scattered halophytic herbs, to mangrove forest over 30m in height.
Woodlands (W)	<p>This class contains six sub-classes: Woodland (W): The tree layer is low and open but the ground layer is usually dense and may include shrubs, herbs or grasses, or any combination of these three. Riverine succession dominated by woodland (Wri): A low open tree layer of species common to its forest counterpart. Riverine successions with Casuarinas grandis woodland (WriCg): This type is a low, open version of its forested counterpart. The ground layer is generally sparse. Volcanic successions dominated by woodland (Wv): The low, open tree layer up to 8m high over a sparse to dense ground layer of grasses. Swamp woodland (Wsw): The wood land consists of an open to fairly dense upper layer of sago palms or pandans, with scattered trees, over a ground layer of tall sedges and ferns or Phragmites grass, or bare ground. Where trees occur, the species are similar to those of swamp forest. Swamp woodland with Melaleuca leucadendron (WswMI): This woodland is a very open variant of swamp forest with Melaleuca. The upper layer of very open Melaleuca leucadendron can attain a height of 20m over a dense ground layer of grasses and sedges.</p>
Savannah (Sa)	<p>This class contains three sub-classes: Savannah (Sa): The tree layer is low, generally less than 6m tall, and is open. The ground layer is clearly visible and is dominated by grasses with some shrubs and herbs. Savannah with gallery forest (Saf): The type of savannah present is similar to that described above for the appropriate area. Savannah with Melaleuca leucadendron (SaMI): in southwest PNG, on periodically waterlogged terrain, the tree layer is dominated by Melaleuca.</p>

Scrub (Sc)	This class contains three sub-classes: Scrub (Sc): Scrub is a community of dense shrubs up to 6m in height, with or without low scattered trees. Scrub with Bambusa and Cyathea (ScBc): Occasional low trees may be present but for the most part the scrub comprises of the tree-fern Cyathea with a tangled mass of scrambling Bambusa.
Grassland (G)	Encompassed by FIMS summary report. This class contains ten sub-classes
Other land uses	Urban, agriculture, plantations grasslands, lakes etc.

1.2.3 Original data

Forestarea				
All forests				
National classes		Area (1000 ha)		
		1975	1996	1996
Low Altitude Forest on Plains and Fans	Large to medium crowned forest (P1)	3 260.8	798.2	2 875.1
	Open crowned forest (P0)		1,252.1	
	Small crowned forest (Ps)		824.8	
	<i>Terminalia brassii</i> forest (PTb)		0	
Low Altitude Forest on Uplands	Large crowned forest (Hl)	17 946.8	320.7	17 171.1
	Medium crowned forest (Hm)		13, 839.4	
	Small crowned forest (Hs)		3, 011.0	
Lower Montane Forest	Small crowned forest (L)	8 109.9	7,303.6	7 745.4
	small crowned forest with conifers (Lc)		441.8	
Montane Forest (above 3000 m) (Mo)		177.4	177.4	

Dry seasonal Forest (D)	1 062.9	778.6	
Littoral Forest (B)	86.5	86.5	
Seral Forest (F)	171.0	46,1	
Swamp Forest (Fsw)	2 250.3	1,267.3	
Mangrove (M)	601.6	550.0	
Woodlands (W)	2 693.8	2,693.8	
Savannah (Sa)	1 190.6	1,190.6	
Scrub (Sc)	601.4	601.4	
Grassland encompassed by FIM summary report (G)	3 241.1	3,241.1	
Other land uses ¹⁾	5 015.8	7,985.5	
Total area	46 409.9	46 409.9	

1. Includes: urban land, agriculture, plantations, grasslands, lakes etc.

Forest plantations (excl. rubber plantations)

State plantations	Total area planted (ha)			
	1996	1997	1998	1999
Province				
Central	600	600	600	600
Madang	900	900	900	900
Morobe	13 000	12 000	12 000	13 000
Milne Bay	1 500	1 500	1 500	1 500
New Ireland	250	250	250	250
Eastern Highlands	4 700	5 100	5 100	5 100
Western Highlands	2 100	2 100	2 100	2 100
Southern Highlands	900	400	400	900

TotalState	23 950	22 850	22 850	24 350
Private plantations				
Madang	8 400	10 745	10 745	10 745
East New Britain	12 833	13 904	13 904	13 904
West New Britain	9 927	10 258	10 558	10 853
Central	1 200	1 200	1 200	1 200
Total private	32 360	36 107	36 407	36 702
GRAND TOTAL	56 310	58 957	59 257	61 052

1.3 Analysis and processing of national data

1.3.1 Adjustment

Forestarea		
Source	Total area (1000 ha)	
National data	46 409.9	
FAOSTAT	46 284.0	
<i>Calibration factor</i>	<i>0.997287</i>	

After applying the calibration factor, applying the inland water area from FAOSTAT and adjusting the difference to Other land, we get:

	1975	1996
Forest (excl. plantations)	33 576	30 614
Other wooded land	4 474	4 474
Other land (incl. plantations)*	7 237	10 198
Inland water (from FAOSTAT)	998	998

Total after calibration	46 284	46 284
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* Note that the plantations are still included in “Other land”.

1.3.2 Estimation and forecasting

Forestarea				
The calibrated data above were used for estimation and forecasting (unit 1000 ha). Linear interpolation and extrapolation were used.				
	1990	2000	2005	2010
Forest (excl. plantations)	31 460	30 050	29 345	28 640
Other wooded land	4 474	4 474	4 474	4 474
Other land (incl. plantations)	9 352	10 762	11 467	12 172
Inland water	998	998	998	998
Total	46 284	46 284	46 284	46 284
In order to adjust the above data for plantation area, estimation and forecasting for plantations was done separately, based on the specific information above regarding plantations.				
Plantation	Estimated plantation (ha)			
	1990	2000	2005	2010
Rubber wood ¹⁾	15 800	19 800	21 800	23 800
Forest plantations ²⁾	47 000	62 600	62 600	63 600
Total	62 800	82 400	84 400	87 400

1. The same annual planting rate (400 ha/year) in FRA 2000 and FRA 2005 have been applied to estimate the area of rubber plantations for the FRA 2010 reference years.

The plantation area for the reporting year 2005 in FRA 2005 was estimated at 70 500 ha (excluding rubber plantations), however PNGFA internal report indicated no significant increase from 2000, however noted the planting rate between 2005 and 2008 of about 200 ha per year, it is also assumed that the plantation rate for 2009 and 2010 will remain 200 hectares/year. This rate has been used to estimate the area of forest plantations for 2010 reference year.

1.3.3 Reclassification

Forestarea

The national data above were reclassified using the following reclassification matrix:

National classes	Area (1000 ha)		FRA 2010 categories		
	1975	1996	Forest	OWL	Other land
Low Altitude forests on plains and fans	3 260.8	2 875.1	100%		
Low Altitude Forest on Uplands	17 946.8	17 171.1	100%		
Lower Montane forest	8 109.9	7 745.4	100%		
Montane Forest (above 3000 m) (Mo)	177.4	177.4	100%		
Dry seasonal Forest (D)	1 062.9	778.6	100%		
Littoral Forest (B)	86.5	86.5	100%		
Seral Forest (F)	171.0	46.1	100%		
Swamp Forest (Fsw)	2 250.3	1 267.3	100%		
Mangrove (M)	601.6	550.0	100%		





Woodlands (W)	2 693.8	2 693.8		100%	
Savannah (Sa)	1 190.6	1 190.6		100%	
Scrub (Sc)	601.4	601.4		100%	
Grassland encomp. by FIM sum. Rep. (G)	3 241.1	3 241.1			100%
Other land uses	5 015.8	7 985.5			100%
TOTAL	46 409.9	46 409.9			

This reclassification results in the following table:

	1975	1996
Forest (excl. plantations)	33 667	30 698
Other wooded land	4 486	4 486
Other land (incl. water and plantations)	8 257	11 227
Total	46 410	46 410

1.4 Data

Table 1a

Categories		Area (000 hectares)				
		1990	2000	2005	2010	2015
	Forest	33627	33600	33586	33573	33559
	Other wooded land	4337	4237	4187	4137	4087
	Other land	7322	7449	7513	8602	8666
	... of which with tree cover	55	60	63	66	68









	Inland water bodies	998	998	998	579	579
	TOTAL	46284.00	46284.00	46284.00	46891.00	46891.00

Table 1b

Categories		Annual forest establishment / loss (000 hectares per year)				...of which of introduced species (000 hectares per year)			
		1990	2000	2005	2010	1990	2000	2005	2010
	Forest expansion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	... of which afforestation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	... of which natural expansion of forest	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Deforestation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	... of which human induced	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Reforestation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	... of which artificial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Tiers

Category	Tier for status	Tier for reported trend
Forest	Tier 2	Tier 2
Other wooded land	Tier 2	Tier 2
Forest expansion	Tier 2	Tier 2
Deforestation	Tier 1	Tier 1
Reforestation	Tier 1	Tier 1

Tier criteria

Category	Tier for status	Tier for reported trend
<ul style="list-style-type: none"> • Forest • Other wooded land • Afforestation • Reforestation • Natural expansion of forest • Deforestation 	Tier 3 : Data sources: Either recent (less than 10 years ago) National Forest Inventory or remote sensing, with ground truthing, or programme for repeated compatible NFIs Tier 2 : Data sources: Full cover mapping / remote sensing or old NFI (more than 10 years ago) Tier 1 : Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other

1.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trends
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Forest	The report published by the University of Papua New Guinea Remote Sensing Centre in June 2008 titled “The State of the forests of Papua New Guinea” estimated PNG’s forest cover to be 28.251 million hectares. However, the figures reported above are from the PNG Forest Authorities Forest Inventory Mapping Systems and 2012 JICA PNGFA project on Capacity Development on Forest Monitoring for Addressing Climate Change in Papua New Guinea.	The forest area increase for 2015 is due to results attained from the 2012 JICA PNGFA project using GIS & RS software. Also the national forest definition influences the increase of forest area because some vegetation types have fallen within the definition threshold.
Other wooded land	2012 JICA PNGFA project on Capacity Development on Forest Monitoring for Addressing Climate Change in Papua New Guinea.	2015 figure decrease due to the above reasons
Other land	2012 JICA PNGFA project on Capacity Development on Forest Monitoring for Addressing Climate Change in Papua New Guinea.	Between 2005 to 2010, it is anticipated that there will be annual increase of 139,000ha in this category.
Other land with tree cover	2012 JICA PNGFA project on Capacity Development on Forest Monitoring for Addressing Climate Change in Papua New Guinea.	N/A
Inland water bodies	2012 JICA PNGFA project on Capacity Development on Forest Monitoring for Addressing Climate Change in Papua New Guinea.	The figure attained from the project will be consistent in future reporting unless there are major changes in the landscapes.
Forest expansion	Data presented is derived from PNGFA Forest Development Directorate	N/A
Deforestation	N/A	N/A
Reforestation	N/A	N/A

Other general comments to the table

Two sets of data are available. One from 1975 and one from 1996. The FIMS (Forest Inventory Mapping Systems) of Papua New Guinea is centred on forest resource and vegetation mapping at scale 1:100 000 and covers the whole country. The baseline mapping is based on air photo interpretation of 1973-74 of similar scale. A total of 58 forest and other vegetation types are distinguished; of these, 35 are forest types. The information in FIM is stored as a series of map layers linked to a database. Using mid 1996 Landsat TM images supported by ground and air surveys the 1975 forest resource map was updated to mid 1996. As included in the FIMS, the updated mapping provides information on change in forest status 1975-1996 relating to logged over areas and conversion of forest areas to other land uses. There is uncertainty about data from mangrove forests. There is reason to believe that the data available underestimates mangrove areas. With the latest result of the JICA PNGFA 2012 project (version 0), there are about 11 forest types, 4 other vegetation areas and 2 other land areas using the Rapid Eye Satellite imageries (2010) with a 5 metre resolution. Every vegetation types were assessed promptly with less uncertainties and overlaps.

2. What is the area of natural and planted forest and how has it changed over time?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

2.1 Categories and definitions

Term	Definition
Naturally regenerated forest	Forest predominantly composed of trees established through natural regeneration.
Naturalized introduced species	Other naturally regenerated forest where the tree species are predominantly non-native and do not need human help to reproduce/maintain populations over time.
Introduced species	A species, subspecies or lower taxon 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).
Category	Definition
Primary forest	Naturally regenerated forest of native species where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed.
Other naturally regenerated forest	Naturally regenerated forest where there are clearly visible indications of human activities.
...of which of introduced species (<i>sub-category</i>)	Other naturally regenerated forest where the trees are predominantly of introduced species.
...of which naturalized (<i>sub-sub category</i>)	Other naturally regenerated forest where the trees are predominantly of naturalized introduced species.
Planted forest	Forest predominantly composed of trees established through planting and/or deliberate seeding.
...of which of introduced species (<i>sub-category</i>)	Planted forest where the planted/seeded trees are predominantly of introduced species.
Mangroves	Area of forest and other wooded land with mangrove vegetation.
...of which planted (<i>sub-category</i>)	Mangroves predominantly composed of trees established through planting.

2.2 National data

2.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	FIM Reports	all forest types, land uses	1996	N/A
2	FIM Reports	all forest types, land uses	2008	Updated in FIM database
3	UPNG “State of Forests of PNG” report	Mangroves	2008	Based on remote sensing 1972-2002

4	JICA PNGFA project on Capacity Development on Forest Monitoring for Addressing Climate Change in Papua New Guinea.	Forest, OWL, Mangroves, Other land, inland water bodies, land use	2012 (version0)	Based on GIS and Remote Sensing using 2010 Rapid Eye Satellite imageries
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2.2.2 Classification and definitions

National class	Definition
Primary	All Potential Forest Areas designated in the National Forest Plan for timber production, but not yet logged. Also designated for REDD Pilot projects and conservation projects.
N/A	N/A
N/A	N/A
N/A	N/A

2.2.3 Original data

Question 1 has been used as inputs along with information on the FIM based reports on the area of forest subject to use either through logging or other human intervention.

From Question1

Plantation	Estimated area of plantations (ha)			
	1990	2000	2005	2010
Rubber wood	15 800	19 800	21 800	23 800
Plantations	47 000	62 600	62 600	63 600
Total	62 800	82 400	84 400	87 400

	Area of mangroves (1000 ha)					
	1975	1990	1996	2000	2005	2010
Mangrove	606.1	564.7	550.0	540.2	527.9	515.6

2.3 Analysis and processing of national data

2.3.1 Adjustment

Not applied

2.3.2 Estimation and forecasting

Forest area in Question1 used.

The simple linear extrapolation was used to estimate mangrove for 2010 using Question 1 data.

2.3.3 Reclassification

All areas not subject to current and past logging or other human intervention have been reclassified as primary forest.

2.4 Data

Table 2a







Categories		Forest area (000 hectares)				
		1990	2000	2005	2010	2015
	Primary forest	31329	25837	23091	20345	17599
	Other naturally regenerated forest	2298	7763	10495	13228	15960
	... of which of introduced species	0	0	0	0	0
	... of which naturalized	0	0	0	0	0
	Planted forest	0	0	0	0	0
	... of which of introduced species	0	0	0	0	0
TOTAL		33627.00	33600.00	33586.00	33573.00	33559.00

Table 2b

Primary forest converted to (000 ha)								
1990-2000			2000-2010			2010-2015		
Other natural regeneration	Planted	Other land	Other natural regeneration	Planted	Other land	Other natural regeneration	Planted	Other land

N/A	N/A	N/A	N/A	N/A	N/A	9943	N/A	N/A
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Table 2c

Categories	Area (000 hectares)				
	1990	2000	2005	2010	2015
Mangroves (forest and OWL)	564.7	540.2	527.9	515.6	649.6
... of which planted	N/A	N/A	N/A	N/A	N/A

Tiers

Category	Tier for status	Tier for reported trend
Primary forest	Tier 2	Tier 2
Other naturally regenerated forest	Tier 1	Tier 1
Planted forest	Tier 3	Tier 3
Mangroves	Tier 3	Tier 3

Tier Criteria

Category	Tier for status	Tier for reported trend
Primary forest/Other naturally regenerated forest/Planted forest	<p>Tier 3 : Data sources: Recent (less than 10 years) National Forest Inventory or remote sensing with ground truthing or data provided by official agencies or programme for repeated compatible NFIs</p> <p>Tier 2 : Data sources: Full cover mapping/ remote sensing or old NFI (more than 10 years) Tier 1 : Other</p>	<p>Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other</p>

2.5 Comments

Category	Comments related to data definitions etc	Comments on reported trend
Primary forest	This includes all the forest that are either currently under timber permits and operational and those other areas that have been identified as potential timber areas and also those in the “reserve forest” areas where their status is yet to be determined. REDD pilot project areas also included.	There is a substantial decrease in the area of primary forest due to more areas being brought into production through the allocation of new timber permits.
Other naturally regenerating forest	Includes mostly timber concessions that have expired and reverting back to their owners and that are regenerating post logging	There is an increase in the figure due to expiration of TRP projects.
Planted forest	Similar figure for previous years report have been use due to the complex land issues faced internally.	N/A

Mangroves	2015 mangrove data is the updated data from JICA PNGFA project on Capacity Development on Forest Monitoring for Addressing Climate Change in Papua New Guinea 2012 (version0).	There is a decrease in the area due to climate change issue such as sea level rise and resource owners daily usage of its resources over the years.
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Other general comments to the table
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N/A

3. What are the stocks and growth rates of the forests and how have they changed?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

3.1 Categories and definitions

Category	Definition
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.
Net Annual Increment (NAI)	Average annual volume of gross increment over the given reference period less that of natural losses on all trees, measured to minimum diameters as defined for "Growing stock".
Above-ground biomass	All living biomass above the soil including stem stump 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.
Carbon in above-ground biomass	Carbon in all living biomass above the soil including stem stump 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 and stumps larger than or equal to 10 cm in diameter or any other diameter used by the country.
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 soil depth of 30 cm.

3.2 National data

3.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	IPCC Guidelines Table 4.12, Tropical Ecological Zone, FAO	Tropical rain forest, tropical moist deciduous forest, tropical mountain system, tropical dry forest and tropical shrubland.	2012	Default values used to calculate PNG biomass
2	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 4.	BCEF Carbon	all	N/A

3	JICA PNGFA project on Capacity Development on Forest Monitoring for Addressing Climate Change in Papua New Guinea.	PNG forest types	2012	Each forest types were sorted out to Tropical Ecological zones and multiply by the IPCC Guidelines 2012 biomass values
4	N/A	N/A	N/A	N/A

3.2.2 Classification and definitions

National class	Definition
Gross volume	Includes all trees measuring 50 cm+ at diameter breast height in all forest area.
N/A	N/A
N/A	N/A
N/A	N/A

3.2.3 Original data

Growing stock		
Years	Million cubic meters (o.b.)	
	1975	1996
Gross volume, natural forests	1181.7	1069.5

For plantations, a growing stock of 150 m³/ha (expert estimate) is used.

Biomass stock
Volume growing stock.

Carbon stock
Biomass data.

3.3 Analysis and processing of national data

3.3.1 Adjustment

3.3.2 Estimation and forecasting

Growing stock

Growing stock of natural forest (dbh 50+ cm) and plantations.

	Million cubic meters (over bark)					
Years	1975	1996	1990	2000	2005	2010
Natural Forests ¹⁾	1 181.7	1 069.5	1 101.6	1 048.1	1 021.4	994.7
Plantations ²⁾			9.4	12.4	13.8	12.9
Total Growing stock			1 111	1 060.5	1 035.2	1 007.6

1) Estimated/forecasted with linear interpolation and extrapolation.

2) Calculated by multiplying 150 m³/ha with plantation area from table T3 (see section 3.3.3).

Growing stock of natural forest (dbh 20-49 cm) calculated by multiplying 60 m³/ha with natural forest area from table Question1 (section 1.3.3).

	Volume (million cubic meters over bark)			
	1990	2000	2005	2010
Natural forest (DBH 20-49)	1887.6	1803.0	1760.7	1718.4

3.3.3 Reclassification

Growing stock

Total growing stock = Natural forest + plantations.

3.4 Data

Table 3a




Category		Growing stock volume (million m ³ over bark)									
		Forest					Other wooded land				
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015
	Total growing stock	5205	5201	5199	5197	5195	N/A	N/A	N/A	N/A	N/A
	... of which coniferous	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
	... of which broadleaved	5205	5201	5199	5197	5195	N/A	N/A	N/A	N/A	N/A

Table 3b

Category/Species name			Growing stock in forest (million cubic meters)			
Rank	Scientific name	Common name	1990	2000	2005	2010
1 st	<i>Pometia pinnata</i>	Taun	N/A	N/A	N/A	N/A
2 nd	<i>Homalium foetidum</i>	Malas	N/A	N/A	N/A	N/A
3 rd	<i>Calophyllum inophyllum</i>	Calophyllum	N/A	N/A	N/A	N/A
4 th	<i>Eucalyptus deglupta</i>	Kamarere	N/A	N/A	N/A	N/A
5 th	<i>Instia bijuga/palembanica</i>	Kwila	N/A	N/A	N/A	N/A
6 th	<i>Terminalia</i> spp.	Terminalia	N/A	N/A	N/A	N/A
7 th	<i>Anisoptera thurifera</i>	Mersawa	N/A	N/A	N/A	N/A
8 th	<i>Palaquium warburgianum</i>	Cedar Pencil	N/A	N/A	N/A	N/A
9 th	<i>Dillenia papuana</i>	Dillenia	N/A	N/A	N/A	N/A
10 th	<i>Canarium indicum</i>	Canarium Red	N/A	N/A	N/A	N/A
Remaining			N/A	N/A	N/A	N/A

TOTAL			.00	.00	.00	.00
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THE PRE-FILLED VALUES FOR GROWING STOCK REFER TO THE FOLLOWING THRESHOLD VALUES (SEE TABLE BELOW)

Item	Value	Complementary information
Minimum diameter (cm) at breast height of trees included in growing stock (X)	10cm	Minimum diameter is taken at 1.3m at breast height, merchantable and also total height is taken instead.
Minimum diameter (cm) at the top end of stem for calculation of growing stock (Y)	N/A	Minimum diameter is taken at 1.3m at breast height, merchantable and also total height is taken instead.
Minimum diameter (cm) of branches included in growing stock (W)	Not included	Minimum diameter is taken at 1.3m at breast height, merchantable and also total height is taken instead.
Volume refers to above ground (AG) or above stump (AS)	AS	N/A

PLEASE NOTE THAT THE DEFINITION OF GROWING STOCK HAS CHANGED AND SHOULD BE REPORTED AS GROWING STOCK DBH 10 CM INCLUDING THE STEM FROM GROUND LEVEL UP TO A DIAMETER OF 0 CM, EXCLUDING BRANCHES.

Table 3c






Category		Net annual increment (m ³ per hectare and year)				
		Forest				
		1990	2000	2005	2010	2015
	Net annual increment	N/A	N/A	N/A	N/A	N/A
	... of which coniferous	N/A	N/A	N/A	N/A	N/A
	... of which broadleaved	N/A	N/A	N/A	N/A	N/A

Table 3d

Category		Biomass (million metric tonnes oven-dry weight)									
		Forest					Other wooded land				
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015
	Above ground biomass	10088	10080	10076	10072	10068	304	297	293	290	286
	Below ground biomass	3733	3730	3728	3727	3725	121	119	117	116	114









	Dead wood	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL		13821.00	13810.00	13804.00	13799.00	13793.00	425.00	416.00	410.00	406.00	400.00

Table 3e

Category		Carbon (Million metric tonnes)									
		Forest					Other wooded land				
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015
	Carbon in above ground biomass	4741	4738	4736	4734	4732	137	133	132	130	129
	Carbon in below ground biomass	1381	1380	1379	1379	1378	47	47	46	46	46
	<i>Subtotal Living biomass</i>	6122	6118	6115	6113	6110	184	180	178	176	175
	Carbon in dead wood	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Carbon in litter	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	<i>Subtotal Dead wood and litter</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Soil carbon	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL		6122.00	6118.00	6115.00	6113.00	6110.00	184.00	180.00	178.00	176.00	175.00

Tiers

Variable/category	Tier for status	Tier for trend
Total growing stock	Tier 1	Tier 1
Net annual increment	N/A	N/A
Above ground biomass	Tier 1	Tier 1
Below ground biomass	Tier 1	Tier 1
Dead wood	N/A	N/A
Carbon in above-ground biomass	Tier 1	Tier 1

Carbon in below ground biomass	Tier 1	Tier 1
Carbon in dead wood and litter	N/A	N/A
Soil carbon	N/A	N/A

Tier criteria

Category	Tier for status	Tier for reported trend
Total growing stock	Tier 3: Data sources Recent 10 years National Forest Inventory or remote sensing with ground truthing or programme for repeated compatible NFI 10 years Domestic volume functions Tier 2: Data sources/registers and statistics modelling or old NFI 10 years or partial field inventory Tier 1: Other data sources	Tier 3: Estimate based on repeated compatible tiers 3 (tier for status) Domestic growth functions Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 tier for status Tier 1: Other
Net annual increment	Tier 3: Scientifically tested national volume and growth functions Tier 2: Selection of volume and growth functions as relevant as possible Tier 1: Other	Tier 3: Confirmation/adjustment of functions used through scientific work Tier 2: Review work done to seek alternative functions Tier: 1 Other
Biomass	Tier 3: Country-specific national or sub-national biomass conversion expansion factors applied or other domestic or otherwise nationally relevant biomass studies Tier 2: Application of country specific national or sub-national biomass conversion factors from other country with similar climatic conditions and forest types Tier 1: International/regional default biomass expansion factors applied	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other
<ul style="list-style-type: none"> Carbon in above ground biomass Carbon in below ground biomass Carbon in dead wood and litter Soil carbon 	Tier 3: Country-specific national or sub-national biomass conversion expansion factors applied Tier 2: Application of country specific national or sub-national biomass conversion factors form from other country with similar climatic conditions and forest types Tier 1: International/regional default biomass expansion factors applied	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other

3.5 Comments on growing stock biomass and carbon

Category	Comments related to data definitions etc	Comments on the reported trend
Total growing stock	N/A	N/A

Growing stock of broadleaved coniferous	The growing stock has been reported only for broad leaved forests as there is no data for coniferous forests that constitute only a very small percent of total forest area. The small area of coniferous forest are found in the montane forests in a limited number of provinces and comprise mostly <i>Araucaria</i> spp, mostly <i>A. cunninghamii</i> and <i>A. hunsteinii</i>	N/A
Growing stock composition	Only names of the 10 common species is provided because of no proper information	After the major NFI we should have growing stock information for reporting
Net annual increment	N/A	N/A
Above-ground biomass	We used IPCC Guideline 2006 biomass value on Tropical Ecological zones and JICA/PNGFA 2012 project information on forest types to calculate PNG biomass	It is hard to provide factual trends due to limited data, but the use of IPCC default values of BCEF 4 is our best estimates.
Below-ground biomass	Same as above	As above
Dead wood	No work has been done on this aspect of biomass. Where does litter comes into the picture?	As above
Carbon in above-ground biomass	We used IPCC Guideline 2006 biomass value on Tropical Ecological zones and JICA/PNGFA 2012 project information on forest types to calculate PNG carbon in above ground biomass	No comments due to lack of data and the extent of data coverage for all forest types in the country
Carbon in below-ground biomass	Same as above	No comments due to lack of data and the extent of data coverage for all forest types in the country
Carbon in dead wood	Again, as with biomass our forest carbon contents have yet to be established, although we have some limited data, but these cannot be applied to all forest types	No comments due to lack of data and the extent of data coverage for all forest types in the country
Carbon in litter	Again, as with biomass our forest carbon contents have yet to be established, although we have some limited data, but these cannot be applied to all forest types	No comments due to lack of data and the extent of data coverage for all forest types in the country
Soil carbon	Again, as with biomass our forest carbon contents have yet to be established, although we have some limited data, but these cannot be applied to all forest types	No comments due to lack of data and the extent of data coverage for all forest types in the country

Other general comments to the table

After the NFI PNG will have default values for each forest types including other wooded land.

4. What is the status of forest production and how has it changed over time?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

4.1 Categories and definitions

Term	Definition
Primary designated function	The primary function or management objective assigned to a management unit either by legal prescription documented decision of the landowner/manager or evidence provided by documented studies of forest management practices and customary use.
Non wood forest product (NWFP)	Goods derived from forests that are tangible and physical objects of biological origin other than wood.
Commercial value of NWFP	For the purpose of this table, value is defined as the commercial market value at the forest gate.
Category	Definition
Production forest	Forest area designated primarily for production of wood, fibre, bio-energy and/or non-wood forest products.
Multiple use forest	Forest area designated for more than one purpose and where none of these alone is considered as the predominant designated function.
Total wood removals	The total of industrial round wood removals and woodfuel removals.
...of which woodfuel	The wood removed for energy production purposes, regardless whether for industrial, commercial or domestic use.

4.2 National data

4.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Internal PNG Forest Authority Reports	Production forests, Concessions	2012	Internal Yearly updated report-Forest Acquisition
2	ITTO 2006. Status of Tropical Forest Management 2005	Area of permanent forest estate	2005	N/A
3	Internal PNG Forest Authority Reports	NWFP	2011	N/A
4	Internal PNG Forest Authority Reports	Total Wood Removals	2013	Internal reports extracted

4.2.2 Classification and definitions

National class	Definition
Production forest	Areas that have legally been acquired by the State for timber production. Includes potential production forest areas.

Extreme constraint to logging	Includes: Land with over 30 degrees dominant slope; or Land over 2400m altitude; or Land with polygonal karst landform; or Land permanently or near permanently inundated extending over more than 80% of the area of that land; or Land covered by mangroves
Concession area	Includes areas for which the acquisition of timber rights has been approved under the current and previous Forestry Acts. Thus includes Timber Rights Purchase agreements (TRP), Forest Management Areas (FMA) and Local Forest Areas (LFA). Areas do not cover logging arrangements on land acquired under Lands Act provisions or informal logging in local areas such as by portable sawmills
Production Forests	Areas that have legally been acquired by the State for timber production. Includes all the Timber Rights Purchase (TRP), Local Forest Areas (LFA) and Forest Management Agreement (FMA) areas
Future Productions Forests	Areas identified as potential for timber harvesting in the long term under legal concession arrangements such as a Forest Management Agreement (FMA) or Timber Authority (TA)
Multiple use	Based on the 10 % from FMA projects assumed for multiple use purposes. Also projects expired thru TRP and are reverted back to resource owners.
Salvage Forests	Forest Areas to be cleared for other land uses.
Afforestation	Land that is identified for afforestation and includes most of the grasslands in the country.
Non Wood Forest Products (NWFP)	Products derived from forests that are tangible and physical objects of biological origin other than wood.

4.2.3 Original data

Based on FIMS, 1996								
Province	Area (1000 hectares)							
	Gross Area	Production	Future Production	Reserve Forest	Protection Forest	Afforestation & Salvage potential	Other Areas	Sub-total
Western	9,845.21	1,558.13	1,363.07	3,180.64	63.48	1,938.87	1,741.02	9,845.21
Gulf	3,840.07	1,627.5	214.52	858.69	0.47	180.37	598.52	3,480.07
Central	2,987.18	315.16	699.6	881.08	2.99	570.99	517.37	2,987.18
Milne Bay	1,426.4	151.94	191.19	480.96	20.32	285.89	296.11	1,426.4
Northern	2,277.22	159.92	979.54	638.48	0	298.69	200.59	2,277.22

SHP	2,574.83	21.45	342.78	1,555.19	4.48	162.63	488.3	2,574.83
Enga	1,182.66	31.27	165.77	554.98	0	32.25	398.39	1,182.66
WHP	914.12	59.12	45.51	298.62	0	104.88	405.99	914.12
Simbu	613.36	0	186.72	195.45	90.38	23.02	117.8	613.36
EHP	1,150.51	0	0	746.47	0.19	195.65	178.2	1,150.51
Morobe	3,393.29	161.92	203.96	1,635.01	2.69	1,066.34	323.36	3,393.29
Madang	2,909.53	147.45	288.55	1,132.19	163.99	239.44	937.91	2,909.53
ESP	4,381.32	401.28	614.17	914.41	157.37	320.47	1,973.62	4,381.32
WSP	3,605.39	501.62	1,296.75	1,153.78	0	254.59	398.66	3,605.39
Manus	215.03	20.68	147.73	2.7	0	14.7	29.22	215.03
NIP	961.03	149.78	234.37	92.06	1.52	361.84	121.46	961.03
ENB	1,534.36	306.49	354.07	352.19	0	284.47	237.13	1,534.36
WNB	2,045.59	563.54	243.37	192.94	13.77	789.86	242.11	2,045.59
NSP	943.27	0	0	683.25	25.05	27.09	207.88	943.27
Total	46,410.37	6,177.25	7,571.67	15,549.09	546.7	7,152.04	9,413.64	46,410.39

Figures in the above table are not calibrated.

4.3 Analysis and processing of national data

4.3.1 Adjustment

Applied only to the TOTAL of the Table for ease of computation. It is assumed that Other wooded land is included in the national category “Afforestation & salvage potential”. The T1 area Other wooded land (4 474 (000) ha is thus subtracted from this category giving the following results for 1996:

Total	Area (1000 hectares and %)					
	Production	Future Production	Reserve Forest	Protection Forest	Afforestation & Salvage potential (less OWL)	Other Forest area
	6,177.25	7,571.67	15,549.09	546.7	2,678.04	9,413.64

%	14.73	18.06	37.08	1.30	6.39	22.45
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4.3.2 Estimation and forecasting

The above percentages have been applied to the Forest area excluding plantations from Question 1.

4.3.3 Reclassification

Step 1 reclassification					
National class	%	Area 1000 hectares			
		1990	2000	2005	2010
		<i>TIForestarea (excl. plantations): 31460</i>	<i>TIForestarea (excl. plantations): 30050</i>	<i>TIForestarea (excl. plantations): 29345</i>	<i>TIForestarea (excl. plantations): 28640</i>
Production	14.7	4625	4417	4314	4210
Future production	18.1	5694	5439	5311	5184
Reserve forest	37.1	11672	11149	10887	10625
Protection forest	1.3	409	391	381	372
Aff. & Salv. pot.	6.4	2013	1923	1878	1833
Other areas	22.4	7047	6731	6573	6415
Total	100	31460	30050	29345	28640
Step 2 reclassification					
Reclassification matrix for reporting year 1990					

National class	FRA 2010 categories					
	Prod.	Prot.	Cons. Biodiv.	Soc. Serv.	Multiple	No/ Unknown
Production ¹	85%				15%	
Future production						100%
Reserve forest						100%
Protection Forest			100%			
Afforestation & Salvage potential						100%
Other areas						100%

Reclassification matrix for the reporting years: 2000, 2005 and 2010.

National class	FRA 2010 categories					
	Prod.	Prot.	Cons. Biodiv.	Soc. Serv.	Multiple	No/ Unknown
Production ¹	75%		10%		15%	
Future production	75%		10%		15%	
Reserve forest						100%
Protection Forest			100%			
Afforestation & Salv. Pot.						100%
Other areas						100%

¹ In timber production areas it is now mandatory that 10% be set aside for biodiversity conservation, and a further 15% being set aside to cater for buffer zones along creeks and watershed management and to act as village reserves and other social services. Again this is an arbitrary percent. The total of 25% only came into effect in Year 2000 and prior to that only 15% was being reserved for buffer zones etc.

In addition to the above, all plantation areas have been reclassified as production forests and added to this category.

Plantation	Estimated plantation (ha)			
	1990	2000 ¹⁾	2005	2010
Rubber wood	15 800	19 800	21 800	23 800
Plantations	47 000	62 600	70 500	63 200
Total	62 800	82 400	92 300	86 100

4.4 Data

Table 4a



Categories		Forest area (000 hectares)				
		1990	2000	2005	2010	2015
	Production forest	3994	7474	7311	7132	8758
	Multiple use forest	694	1478	1444	1409	2696

Table 4b

Rank	Name of product	Key species	Commercial value of NWFP removals 2010 (value 1000 local currency)	NWFP category
1 st	Woodchips	Accacia mangium, Eucalyptus deglupta	4297	8
2 nd	Eaglewood oil	Gyrinops ledermanii	1350	7
3 rd	Massoi bark oil	Cryptocarya massoi	76	7
4 th	Sandalwood oil	Santallum macgregorii	5	7
5 th	Rattan Furnitures	Calamus spp.	N/A	5
6 th	Bamboo Furnitures	Bambusa spp.	N/A	5
7 th	Baskets	Flagelleria sp., Calamus spp.	N/A	5

8 th	Trays	Flagellaria sp., Calamus spp.	N/A	5
9 th	Medicinal plants	Various Plant species	N/A	3
10 th	Mushroom	Dead suitable trees	N/A	8
TOTAL			5728.00	

2010	
Name of local currency	Kina and toea

Category
Plant products / raw material
1 Food
2 Fodder
3 Raw material for medicine and aromatic products
4 Raw material for colorants and dyes
5 Raw material for utensils handicrafts construction
6 Ornamental plants
7 Exudates
8 Other plant products
Animal products / raw material
9 Living animals
10 Hides skins and trophies
11 Wild honey and beewax
12 Wild meat
13 Raw material for medicine
14 Raw material for colorants
15 Other edible animal products
16 Other non-edible animal products

Table 4c Pre-filled data from FAOSTAT

Year	FRA 2015 category (1000 m ³ u.b.)	
	Total wood removals	...of which woodfuel
1990	1785	N/A
1991	1661	N/A
1992	1350	N/A
1993	2020	N/A
1994	2761	N/A
1995	2191	N/A
1996	2651	N/A
1997	3006	N/A
1998	1617	N/A
1999	1984	N/A
2000	1993	N/A
2001	1646	N/A
2002	2227	N/A
2003	2149	N/A
2004	2777	N/A
2005	2832	N/A
2006	3633	N/A
2007	3482	N/A
2008	2756	N/A
2009	2863	N/A
2010	3756	N/A
2011	3526	N/A

Tiers

Category	Tier for status	Tier for reported trend
Production forest	Tier 3	Tier 2

Multiple use forest	Tier 3	Tier 2
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Tier Criteria

Category	Tier for status	Tier for reported trend
Production forest Multiple use forest	Tier 3: Updated including field verifications national forest maps including functions Tier 2: Forest maps older than 6 years including forest functions Tier 1: Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other

4.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Production forest	Production forests is all the areas under timber concessions or licences and excludes those that are in the planned stage or proposed for production	There had been an increase as new timber areas are acquired and committed for timber production
Multiple use forest	Based on the 10 % assumed from production forest as being used for multiple use purpose. Also projects expired thru TRP and are reverted back to resource owners.	Other forest areas under non legal binding forest agreement and are privately own by resource owners are not included
Total wood removals	The wood removed (volume of roundwood over bark) for production of goods and services other than energy production (woodfuel).	PNGFA confirmed internal data from 1990 to 2013
Commercial value of NFWP	Monetary value paid for NFWP extraction from the forest.	Other components have limited data availability

Other general comments to the table

Table 4c data are PNGFA internal data extracted and filled. The FAO prefill data are too high. 2012 removals is 3805000 cubic metres.

5. How much forest area is managed for protection of soil and water and ecosystem services?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

5.1 Categories and definitions

Category	Definition
Protection of soil and water	Forest area designated or managed for protection of soil and water
...of which production of clean water (<i>sub-category</i>)	Forest area primarily designated or managed for water production, where most human uses are excluded or heavily modified to protect water quality.
...of which coastal stabilization (<i>sub-category</i>)	Forest area primarily designated or managed for coastal stabilization.
...of which desertification control (<i>sub-category</i>)	Forest area primarily designated or managed for desertification control.
...of which avalanche control (<i>sub-category</i>)	Forest area primarily designated or managed to prevent the development or impact of avalanches on human life assets or infrastructure.
...of which erosion, flood protection or reducing flood risk (<i>sub-category</i>)	Forest area primarily designated or managed for protecting communities or assets from the impacts of erosion riparian floods and landslides or for providing flood plain services.
...of which other (<i>sub-category</i>)	Forest area primarily designated or managed for other protective functions.
Ecosystem services, cultural or spiritual values	Forest area primarily designated or managed for selected ecosystem services or cultural or spiritual values.
...of which public recreation (<i>sub-category</i>)	Forest area designated or managed for public recreation.
...of which carbon storage or sequestration (<i>sub-category</i>)	Forest area designated or managed for carbon storage or sequestration.
...of which spiritual or cultural services (<i>sub-category</i>)	Forest area designated or managed for spiritual or cultural services.
...of which other (<i>sub-category</i>)	Forest area designated or managed for other ecosystem services.

5.2 National data

5.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	NA	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A

3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

5.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

5.2.3 Original data

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5.3 Analysis and processing of national data

5.3.1 Adjustment

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5.3.2 Estimation and forecasting




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5.3.3 Reclassification

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5.4 Data

Table 5a

Categories		Forest area (1000 hectares)				
		1990	2000	2005	2010	2015
	Protection of soil and water	N/A	N/A	N/A	N/A	N/A
	... of which production of clean water	N/A	N/A	N/A	N/A	N/A
	... of which coastal stabilization	N/A	N/A	N/A	N/A	N/A

	... of which desertification control	N/A	N/A	N/A	N/A	N/A
	... of which avalanche control	N/A	N/A	N/A	N/A	N/A
	... of which erosion, flood protection or reducing flood risk	N/A	N/A	N/A	N/A	N/A
	... of which other (please specify in comments below the table)	N/A	N/A	N/A	N/A	N/A

Other

N/A

Table 5b

Categories	Forest area (1000 hectares)				
	1990	2000	2005	2010	2015
Ecosystem services, cultural or spiritual values	N/A	N/A	N/A	N/A	N/A
...of which public recreation	N/A	N/A	N/A	N/A	N/A
...of which carbon storage or sequestration	N/A	N/A	N/A	N/A	N/A
...of which spiritual or cultural services	N/A	N/A	N/A	N/A	N/A
...of which other (please specify in comments below the table)	N/A	N/A	N/A	N/A	N/A

Tiers

Category	Tier for reported trend	Tier for status
Protection of soil and water	N/A	N/A
Ecosystem services, cultural or spiritual values	N/A	N/A

Tier criteria

Category	Tier for status	Tier for reported trend
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Protection of soil and water	Tier 3: High reliability data derived either from high intensity sample survey or data obtained from national or state agencies responsible for regulations or legislation relating to soil and water protection. Tier 2: Approaches based on low intensity or incomplete sample-based surveys or studies that provide data for specific areas that is extrapolated through statistical analysis to national level estimates. Tier 1: Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other
<ul style="list-style-type: none"> • Cultural or spiritual values • Public recreation • Spiritual or cultural services • Other 	Tier 3: High reliability data derived either from high intensity sample survey or data obtained from national or state agencies responsible for regulations. Tier 2: Approaches based on low intensity or incomplete sample-based surveys or studies that provide data for specific areas that is extrapolated through statistical analysis to national level estimates. Tier 1: Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other

5.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Protection of soil and water	N/A	N/A
Production of clean water	N/A	N/A
Coastal stabilization	N/A	N/A
Desertification control	N/A	N/A
Avalanche control	N/A	N/A
Erosion, flood protection or reducing flood risk	N/A	N/A
Other protective functions	N/A	N/A
Ecosystem services, cultural or spiritual values	N/A	N/A
Public recreation	N/A	N/A
Carbon storage or sequestration	N/A	N/A
Spiritual or cultural services	N/A	N/A
Other ecosystem services	N/A	N/A

Other general comments to the table

N/A

6. How much forest area is protected and designated for the conservation of biodiversity and how has it changed over time?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

6.1 Categories and definitions

Category	Definition
Conservation of biodiversity	Forest area designated primarily for conservation of biological diversity. Includes but is not limited to areas designated for biodiversity conservation within the protected areas.
Forest area within protected areas	Forest area within formally established protected areas independently of the purpose for which the protected areas were established.

6.2 National data

6.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Department of Environment and Conservation PNG	Conservation, Protected Areas, Biodiversity	2012	N/A
2	Forest Information Management System(FIMS) of PNGFA.	Forest Protection	2009	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

6.2.2 Classification and definitions

National class	Definition
Conservation of biodiversity	Only the legally recognised areas have been included in this table
Forest area within protected areas	Areas that are identified for some form of management, including domestic use by the local communities aside from being completely protected as defined under 'Protected Areas'.
N/A	N/A
N/A	N/A

6.2.3 Original data

See 4.2.3.

6.3 Analysis and processing of national data

6.3.1 Adjustment

See 4.3.1.

6.3.2 Estimation and forecasting



See 4.3.2.

6.3.3 Reclassification

See 4.3.3.

6.4 Data

Table 6

Categories		Forest area (000 hectares)				
		1990	2000	2005	2010	2015
	Conservation of biodiversity	409	1376	1344	1312	1689
	Forest area within protected areas	313.32	313.32	313.32	313.32	1796

Tiers

Category	Tier for status	Tier for reported trend
Conservation of biodiversity	Tier 3	Tier 3
Forest area within protected areas	Tier 3	Tier 3

Tier criteria

Category	Tier for status	Tier for reported trend
<ul style="list-style-type: none"> Conservation of biodiversity Forests within protected areas 	<p>Tier 3: Data obtained from national or state agencies responsible for conservation and protected area or legislation relating to area protection. Tier 2: Studies that provide data for specific areas that is extrapolated through statistical analysis to national level estimates Tier 1 Other</p>	<p>Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other</p>

6.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Conservation of biodiversity	This data is an update from the Department of Environment and Conservation PNG	There is a decrease in the area from 2000 due to conversion of conservation areas into other land use due to the wishes of the land owners. Much of this is now under timber concessions
Forest area within protected areas	This data is an update from the existing Forest Information Management System(FIMS) of PNGFA.	These data are based on the FIMS report which was updated in 2009.

Other general comments to the table

The data for Table 3b were generated from the internal PNG Forest Authority Timber Permits, Local Forest Areas and Timber Licences Status from various years and the FIMS 1996 Report.

7. What is the area of forest affected by woody invasive species?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

7.1 Categories and definitions

Category	Definition
Invasive species	Species that are non-native to a particular ecosystem and whose introduction and spread cause, or are likely to cause, socio-cultural, economic or environmental harm or harm to human health.

7.2 National data

7.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

7.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

7.2.3 Original data

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7.3 Analysis and processing of national data

7.3.1 Adjustment

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7.3.2 Estimation and forecasting

7.3.3 Reclassification

7.4 Data

Table 7

Scientific name of woody invasive species	Forest area affected (000 ha)	
	2005	2010
<i>Piper aduncum</i>	N/A	N/A
<i>Spathodea companulata</i>	N/A	N/A
<i>Leucaena leucocephala</i>	N/A	N/A
<i>Adenanthera falacataria</i>	N/A	N/A
<i>Samanea saman</i>	N/A	N/A
<i>Pithecellobium dulce</i>	N/A	N/A
<i>Timonius timon</i>	N/A	N/A
<i>Clerodendron quadriloculare</i>	N/A	N/A
<i>Tecoma stans</i>	N/A	N/A
<i>Tithonia diversifolia</i>	N/A	N/A
Total	N/A	N/A

Tiers

Category	Tier for status	Tier for reported trend
Invasive species	N/A	N/A

Tier Criteria

Category	Tier for status	Tier for reported trend
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Invasive species	Tier 3: Systematic assessment in forest inventory or other survey (e.g. by conservation department) within the last 5 years) Tier 2: Systematic assessment in forest inventory or other survey (e.g. by conservation department conducted more than 5 years ago) Tier 1: Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other
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7.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Invasive species	N/A	N/A

Other general comments to the table

Only a list of the most ten common woody invasive species is provided. No proper studies on spatial distribution rate over time ever been conducted in the country.

8. How much forest area is damaged each year?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

8.1 Categories and definitions

Category	Definition
Number of fires	Number of fires per year
Burned area	Area burned per year
Outbreaks of insects	A detectable reduction in forest health caused by a sudden increase in numbers of harmful insects.
Outbreaks of diseases	A detectable reduction in forest health caused by a sudden increase in numbers of harmful pathogens, such as bacteria, fungi, phytoplasma or virus.
Severe weather events	Damage caused severe weather events, such as snow, storm, drought, etc.

8.2 National data

8.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	FAO Stats	Burned Areas	2013	N/A
2	FAO Stats	Burned forest areas	2013	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

8.2.2 Classification and definitions

National class	Definition
Burned areas	Include both anthropogenic grasslands and forest areas that were burned
Burned forest areas	Only includes burned forest areas
N/A	N/A
N/A	N/A

8.2.3 Original data

8.3 Analysis and processing of national data

8.3.1 Adjustment

8.3.2 Estimation and forecasting

8.3.3 Reclassification

8.4 Data

Table 8a


Category		000 ha, number of fires									
		2003		2004		2005		2006		2007	
		000 ha	#	000 ha	#	000 ha	#	000 ha	#	000 ha	#
	Total land area burned	42.27	N/A	83.58	N/A	10.15	N/A	41.25	N/A	16.6	N/A
	... of which forest area burned	9.94	N/A	25.52	N/A	3.74	N/A	17.29	N/A	6.83	N/A
Category		2008		2009		2010		2011		2012	
		000 ha	#	000 ha	#	000 ha	#	000 ha	#	000 ha	#
	Total land area burned	32.48	N/A	14.31	N/A	32.08	N/A	7.06	N/A	5.33	N/A
	... of which forest area burned	10.92	N/A	4.93	N/A	11.63	N/A	2.3	N/A	1.53	N/A

Table 8b

Outbreak category	Description/name	Year(s) of latest outbreak	Area damaged (000 hectares)
-------------------	------------------	----------------------------	-----------------------------

N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Outbreak category

- | |
|-------------------------|
| 1 Insects |
| 2 Diseases |
| 3 Severe weather events |

Tiers

Category	Tier for status	Tier for trend
Area affected by fire	Tier 2	Tier 2
<ul style="list-style-type: none"> • Insects • Diseases • Severe weather events 	N/A	N/A

Tier criteria

Category	Tier for status	Tier for reported trend
Burned area	Tier 3 : National fire monitoring routines Tier 2 : Remote sensing surveys Tier 1 : Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other
<ul style="list-style-type: none"> • Insects • Diseases • Severe weather events 	Tier 3 : Systematic survey (e.g. via inventory or aerial damage assessment) Tier 2 : Management records Tier 1 : Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other

8.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Burned area	N/A	N/A
Insects	N/A	N/A
Diseases	N/A	N/A
Severe weather events	N/A	N/A

Other general comments to the table
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Currently no report for forest fires but for anthropogenic grassland fires are common hence the grassland recovers again. Data filled are from FAO stats 2013.
--

9. What is the forest area with reduced canopy cover?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

Category	Definition
Reduction in canopy cover	Forest that has undergone a reduction of canopy cover of more than 20% between the years 2000 and 2010 within the forest canopy cover range of 30-80% as detected by the MODIS VCF sensor.

Table 9

Category	Area of forest with reduced canopy cover (000 ha)
Reduction in canopy cover	5014.16

Tiers

Category	Tier for reported trend
Reduction in canopy cover	Tier 2

Tier criteria

Category	Tier for reported trend
Reduction in canopy cover	Tier 3 : Remote sensing with ground truthing and/or Landsat imagery Tier 2 : Remote sensing using Modis (using pre-filled data provided by FAO) Tier 1 : Expert opinion

Comments

Category	Comments related to data definitions etc
Reduction in canopy cover	Taken from FAO Stats 2013

Other general comments

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10. What forest policy and regulatory framework exists to support implementation of sustainable forest management SFM?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

10.1 Categories and definitions

Category	Definition
Policies supporting sustainable forest management	Policies or strategies that explicitly encourage sustainable forest management.
Legislation and regulations supporting sustainable forest management	Legislation and regulations that govern and guide sustainable forest management, operations and use.

10.2 National data

10.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Government of Papua New Guinea (GoPNG). National Forest Policy, Ministry of Forests.	Forest Policy	1991	The PNG National Forest Policy was endorsed by Parliament in 1991
2	N/A	Forestry Act	1991	N/A
3	Government of Papua New Guinea (GoPNG). Forestry Act (as amended). Ministry of Forests.	N/A	1991	N/A
4	Papua New Guinea Forest Authority. Papua New Guinea Logging Code of Practice, First Edition. Papua New Guinea Forest Authority.	N/A	1996	N/A
5	National Forestry Development Guidelines. Papua New Guinea Forest Authority	N/A	2009	N/A
6	Forestry and Climate Change Framework for Action 2009-2015. Papua New Guinea Forest Authority	N/A	2009	N/A

10.2.2 Classification and definitions

National class	Definition
National Forest Policy	Policies for management, use and conservation of forest and tree resources for the benefit of Papua New Guinea society.
Forestry Act (as amended)	A set of rules enacted by the legislative authority of a Papua New Guinea to regulate the access, management, conservation and use of forest resources.
Papua New Guinea Logging Code of Practice	The Papua New Guinea Logging Code of Practice was endorsed by NEC in April 1996.
National Forestry Development Guidelines. Papua New Guinea Forest Authority	Is a legislation which gives significant direction to the National Forest Plan, which underpins all forest based activity in PNG. It states how the forestry sub-sector is expected to contribute to the economy and how social, cultural and environmental needs are to be satisfied.
Forestry and Climate Change Framework for Action 2009-2015. Papua New Guinea Forest Authority	Is a framework for action that outlines the broad priorities for the PNG government thus provides strategic platform not only for use by decision makers at all levels but also for the development and strengthening of partnerships for implementation of national, sub-national and community initiatives.

10.2.3 Original data

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10.3 Data

Table 10

Category				
	National	Sub-national		
		Regional	Provincial/State	Local
Policies supporting sustainable forest management	yes	yes	yes	yes
... of which, in <u>publicly</u> owned forests	yes	yes	yes	yes
... of which, in <u>privately</u> owned forests	yes	yes	yes	yes
Legislation and regulations supporting sustainable forest management	yes	yes	yes	yes
... of which, in <u>publicly</u> owned forests	yes	yes	yes	yes
... of which, in <u>privately</u> owned forests	yes	yes	yes	yes

10.4 Comments

Variable / category	Comments related to data definitions etc
Policies supporting sustainable forest management	The PNG National Forest Policy was endorsed by Parliament in 1991
Legislation and regulations supporting sustainable forest management	The Forestry Act was enacted by Parliament in 1991 and is called the Forestry Act 1991. A number of amendments have been made with the latest being in 2007.

Other general comments

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11. Is there a national platform that promotes stakeholder participation in forest policy development?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

11.1 Categories and definitions

Category	Definition
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.

11.2 National data

11.2.1 Data sources

	References to sources of information	Years	Additional comments
1	National Forestry Development Guidelines. Papua New Guinea Forest Authority	2009	N/A
2	Forestry and Climate Change Framework for Action 2009-2015. Papua New Guinea Forest Authority	2009	N/A
3	N/A	N/A	N/A
4	N/A	N/A	N/A

Table 11

Is there a national platform that promotes or allows for stakeholder participation in forest policy development?	yes
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11.3 Comments

Category	Comments related to data definitions etc
National stakeholder platform	Strategical documents for action which are tested against the forest policy for amendments

Other general comments

--

12. What is the forest area intended to be in permanent forest land use and how has it changed over time?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

12.1 Categories and definitions

Category	Definition
Forest area intended to be in permanent forest land use	Forest area that is designated or expected to be retained as forest and is highly unlikely to be converted to other land use.
...of which permanent forest estate (<i>sub-category</i>)	Forest area that is designated by law or regulation to be retained as forest and may not be converted to other land use.

12.2 National data

12.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Internal PNG Forest Authority Reports	Area of permanent forest estate	2013	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

12.2.2 Classification and definitions

National class	Definition
Permanent Forest Estate	Forest areas on state land that are under a 99 year lease mainly as 'plantations'
N/A	N/A
N/A	N/A
N/A	N/A

12.2.3 Original data

See 4.2.3.

12.3 Analysis and processing of national data

12.3.1 Adjustment

See 4.3.1.

12.3.2 Estimation and forecasting



See 4.3.2.

12.3.3 Reclassification

See 4.3.3.

12.4 Data

Table 12

Categories		Forest area 2010 (000 ha)
	Forest area intended to be in permanent forest land use	28
	... of which permanent forest estate	28

Tiers

Category	Tier for status
Forest area intended to be in permanent forest land use	Tier 1
Permanent forest estate	Tier 1

Tier Criteria

Category	Tier for status
Forest area intended to be in permanent forest land use	Tier 3 : National or sub-national land use plans strategy documents or other reports within the past 10 years Tier 2 : National or sub-national land use plans strategy documents or other reports within the past 20 years Tier 1 : Other
Permanent forest estate	Tier 3 : National or sub-national land use plans strategy documents or other reports within the past 10 years Tier 2 : National or sub-national land use plans strategy documents or other reports within the past 20 years Tier 1 : Other

12.5 Comments

Category	Comments related to data definitions etc
----------	--

Forest area intended to be in permanent forest land use	N/A
Permanent forest estate	These are mainly plantations on state land

Other general comments

--

13. How does your country measure and report progress towards SFM at the national level?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

13.1 Categories and definitions

Category	Definition
Forest area monitored under a national forest monitoring framework	Forest area monitored by a national monitoring framework or systems that provide measurement based periodic monitoring of forest extent and quality.
Forest reporting at national scale	National reporting of forest extent and characteristics that includes some measure of progress toward sustainable forest management.

13.2 National data

13.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Internal PNG Forest Authority Reports	N/A	2012	N/A
2	Japan International Cooperation Agency (JICA) & Papua New Guinea Forest Authority (PNGFA) project on Capacity Development on Forest Monitoring for Addressing Climate Change in Papua New Guinea (on going)	N/A	2012	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

13.2.2 Classification and definitions

National class	Definition
Forest reporting at national scale	Through the Forest Information Mapping System (FIMS) and Forest Information Processing System (FIPS).
N/A	N/A
N/A	N/A
N/A	N/A

13.3 Data

Table 13a

Category	% of total forest area	Most recent year	Check all boxes that apply					
			Continuous	Periodic	Permanent ground plots	Temporary ground plots	Aerial/remote sensing sample based	Aerial/remote sensing full coverage
Forest inventory	100	2014		yes	yes	yes	yes	yes
Other field assessments	10	N/A		yes	yes	yes	yes	yes
Updates to other sources	N/A	N/A		yes				
Expert estimate	N/A	N/A						

Table 13b

Type of forest reporting used at national scale	Check boxes that apply
1 Criteria and Indicators reporting	yes
2 Periodic national state of the forest report	yes
3 Other (please document)	yes
4 None	

Other type of forest reporting

Two types of existing database are used for reporting, that is the Forest Information Mapping System (FIMS) and Forest Information Processing System (FIPS). Currently JICA/PNGFA project 2012 will be assisting in updating these two database.

13.4 Comments

Category	Comments
Forest area	% of total forest area was for the total forest cover only.
Forest inventory	1% is the required sampling intensity for PNG Forest Authority in conducting forest inventory for commercial purposes. Average sampling intensity achieved by PNGFA in 2003 was 0.53% for the country.
Other field assessments	10% sampling intensity is done in a set up boundary of a logging concession or on smaller forest area purposely for marketable tree species stock take which is essential for forest planning.

Other general comments

--

14. What is the area of forest under a forest management plan and how is this monitored?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

14.1 Categories and definitions

Category	Definition
Forest area with management plan	Forest area that has a long-term documented management plan, aiming at defined management goals which is periodically revised
...of which for production (<i>sub-category</i>)	Forest management plan mainly focused on production
...of which for conservation (<i>sub-category</i>)	Forest management plan mainly focused on conservation
Monitoring of forest management plans	Government monitoring of forest management plan implementation conducted through field visits or audits of forest management plan performance

14.2 National data

14.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	ITTO 2006. Status of Tropical Forest Management 2005	N/A	N/A	N/A
2	Internal PNG Forest Authority Reports	Legal Project Agreements	2012	N/A
3	Department of Environment and Conservation PNG	Gazetted Projects	2012	N/A
4	N/A	N/A	N/A	N/A

14.3 Data

Table 14a

Forest plan type	Forest area 2010 (000 ha)
Forest area with management plan	10447
... of which for production	8758
... of which for conservation	1689

Table 14b

Indicate which (if any) of the following are required in forest management plans in your country	
1 Soil and water management	no

2 High conservation value forest delineation	yes
3 Social considerations community involvement	yes

Table 14c

Percent of area under forest management plan that is monitored annually	75
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Tiers

Category	Tier for status
Forest area with management plan	Tier 3
Percent of area under forest management plan that is monitored annually	Tier 3

Tier criteria

Category	Tier for status
Forest area with management plan	Tier 3 : Reports that describe national records 5 years old or less that contain long-term forest monitoring plans Tier 2 : Industry or other records indicating the presence of a long-term forest management plan Tier 1 : Other
Percent of area under forest management plan that is monitored annually	Tier 3 : Government documentation of monitoring extent Tier 2 : Reports from forest managers or other documental sources Tier 1 : Other

14.4 Comments

Category	Comments
Forest area with Management Plan	Areas under Sustainable Forest Management for which an operating authority (Timber Permit) has been allocated to an operator ranging from 10 to 35 years period.
N/A	N/A
N/A	N/A

Other general comments

--

15. How are stakeholders involved in the management decision making for publicly owned forests?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

15.1 Categories and definitions

Category	Definition
Stakeholder involvement	Stakeholder involvement is defined as significant inputs into at least one aspect of forest management at the operational scale

Table 15

Please indicate the type of stakeholder involvement in forest management decision making required in your country	
1. Planning phase	yes
2. Operations phase	yes
3. Review of operations	yes

Tiers

Category	Tier for status
Type of stakeholder inputs	Tier 3

Tier criteria

Category	Tier for status
Type of stakeholder inputs	Tier 3 : Government (national or sub-national) documentation of stakeholder inputs Tier 2 : Government (national or subnational) requirement but stakeholder inputs not documented Tier 1 : Other

15.2 Comments

Category	Comments
N/A	N/A
N/A	N/A
N/A	N/A

Other general comments

--

16. What is the area of forest under an independently verified forest certification scheme?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

16.1 Categories and definitions

Category	Definition
FSC certification	Forest area certified under the Forest Stewardship Council certification scheme
PEFC certification	Forest area certified under the Programme for the Endorsement of Forest Certification scheme
Other international forest management certification	Forest area certified under an international forest management certification scheme with published standards and is independently verified by a third-party, excluding FSC and PEFC certification.
Certified forest area using a domestic forest management certification scheme	Area certified under a forest management certification scheme with published standards that are nationally recognized and independently verified by a thirdparty

16.2 Data

Table 16a













International forest management certification		Forest area (000 ha)						
		2000	2001	2002	2003	2004	2005	2006
	FSC	0	0	4.31	4.31	0	27.35	27.35
	PEFC	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0
		2007	2008	2009	2010	2011	2012	
	FSC	21.92	2.71	60.79	22.63	19.92	180	
	PEFC	0	0	0	0	0	0	
	Other	0	0	0	0	0	0	

Table 16b

Domestic forest management certification		Forest area (000 ha)						
		2000	2001	2002	2003	2004	2005	2006
	N/A	0	0	0	0	0	0	0
	N/A	0	0	0	0	0	0	0
	N/A	0	0	0	0	0	0	0

		2007	2008	2009	2010	2011	2012	
		0	0	0	0	0	180	
		0	0	0	0	0	0	
		0	0	0	0	0	0	

Tier criteria

Category	Tier for status
International forest management certification	Tier 3: International forest management scheme records maintained by the certifying organization for the reporting year Tier 2: International forest management scheme records reported by the certifying organization for a period 2 years prior to the reporting year Tier: 1 Other
Domestic forest management certification	Tier 3: National registry reports for domestic forest management certification maintained by the certifying organization for the reporting year Tier 2: Domestic forest management scheme records reported by the certifying organization for a period 2 years prior to the reporting year Tier: 1 Other

Tiers

Category	Tier for status
International forest management certification	Tier 3
Domestic forest management certification	Tier 3

16.3 Comments

Category	Comments related to data definitions etc
Certified forest area using an international forest management certification scheme	These two companies Cloudy Bay Sustainable Forestry Ltd and Open Bay Timbers Ltd Forest areas were certified under the Forest Stewardship Council certification scheme and is recognized at the international level
Domestic forest management certification	These two companies Cloudy Bay Sustainable Forestry Ltd and Open Bay Timbers Ltd Forest areas were certified under the Forest Stewardship Council certification scheme and is recognized at the domestic level

Other general comments

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17. How much money do governments collect from and spend on forests?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

17.1 Categories and definitions

Category	Definition
Forest revenue	All government revenue collected from the domestic production and trade of forest products and services. For this purpose revenue include: <ul style="list-style-type: none"> • <u>Goods</u> : roundwood; sawnwood; biomass; woodbased panels; pulp and paper and non-wood forest products. • <u>Services</u> : including concession fees and royalties, stumpage payments, public timber sales revenue taxes and charges based on forest area or yield, taxes on domestic trade and export of forest products, special levies on forestry activities and payments into forest related funds, other miscellaneous inspection, licence and administrative fees levied by forest administrations, permit and licence fees for recreation and other forest related activities.
Public expenditure on forestry	All government expenditure on forest related activities.

17.2 National data

17.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Internal PNG Forest Authority Reports	Budget allocations	2010	N/A
2	Central Bank of PNG, Quarterly Economic Bulletin	N/A	2011	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

17.3 Data

Table 17

Category	Revenues / expenditures (000 local currency)		
	2000	2005	2010
Forest revenue	135853	129997	743700
Public expenditure on forestry	20946	23427	27000
	2000	2005	2010
Name of Local Currency	KINA	N/A	N/A

17.4 Comments

Category	Comments related to data definitions etc
Forest revenue	This is the revenue from export taxes collected from export of logs, timber, plywoods and woodchips.
Public expenditure on forestry	The data is for the government allocation to the PNG Forest Authority to operate. Other supplementary funds from 'projects' through donor funding mechanism is not accounted for.
Other general comments	N/A

Other general comments

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18. Who owns and manages the forests and how has this changed?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

18.1 Categories and definitions

Category	Definition
Public ownership	Forest owned by the State or administrative units of the public administration or by institutions or corporations owned by the public administration.
...of which owned by the state at national scale (<i>sub-category</i>)	Forest owned by the State at the national scale or administrative units of the public administration or by institutions or corporations owned by the public administration.
...of which owned by the state at the sub-national government scale (<i>sub-category</i>)	Forest owned by the State at the sub-national government scale or administrative units of the public administration or by institutions or corporations owned by the public administration.
Private ownership	Forest owned by individuals, families, communities, private cooperatives corporations and other business entities, private, religious and educational institutions, pension or investment funds, NGOs, nature conservation associations and other private institutions.
...of which individuals (<i>sub-category</i>)	Forest owned by individuals and families.
...of which private business entities and institutions (<i>sub-category</i>)	Forest owned by private corporations cooperatives companies and other business entities as well as private nonprofit organizations such as NGOs nature conservation associations, and private religious and educational institutions etc.
...of which local tribal and indigenous communities (<i>sub-category</i>)	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 coowners that share exclusive rights and duties and benefits contribute to the community development.
Unknown ownership	Forest area where ownership is unknown includes areas where ownership is unclear or disputed.
Categories related to management rights of public forests	Definition
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.
Individuals households	Forest management rights and responsibilities are transferred from the Public Administration to individuals or households through long-term leases or management agreements.
Private companies	Forest management rights and responsibilities are transferred from the Public Administration to corporations, other business entities private cooperatives, private nonprofit institutions and associations, etc., through long-term leases or management agreements.
Communities	Forest management rights and responsibilities are transferred from the Public Administration to local communities (including indigenous and tribal communities) through long-term leases or management agreements.
Other form of management rights	Forests for which the transfer of management rights does not belong to any of the categories mentioned above.

18.2 National data

18.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Internal PNG Forest Authority Reports	Forest Acquisition	2012	N/A
2	Internal PNG Forest Authority Reports	Forest Plantations	1993-2008	N/A
3	Expert Estimate	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

18.2.2 Classification and definitions

National class	Definition
Customary Ownership	Land and Forest owned by clans
Private companies	Limited to forest plantations planted by private companies
State	Plantations owned by the government
Public Administration	This refers to 3% of the forest area plus the state plantations.
Other form of management rights	Forest areas under the Forest Clearance Authority (FCA) for Special Agriculture Business Leases (SABL), roadline timber authorities or small forest timber areas.

18.2.3 Original data

State land	Tribal land	Long-term lease (99 year)
3%	~96.9 %	0.1%

Note: Estimated by the National Forest Service

18.3 Analysis and processing of national data

18.3.1 Adjustment

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18.3.2 Estimation and forecasting

18.3.3 Reclassification

National Class	FRA 2010 Categories		
	Private Ownership	Public Ownership	Other Ownership
State land		100%	
Tribal land	100 %		
Long term lease			

18.4 Data

Table 18a

Categories		Forest area (1000 hectares)			
		1990	2000	2005	2010
	Public ownership	1009	1008	1008	1007
	... of which owned by the state at national scale	N/A	N/A	N/A	N/A
	... of which owned by the state at the sub-national government scale	N/A	N/A	N/A	N/A
	Private ownership	32618	32592	32578	32566
	... of which owned by individuals	0	0	0	0
	... of which owned by private business entities and institutions	34	34	34	34
	... of which owned by local, tribal and indigenous communities	32584	32558	32544	32532
	Unknown ownership	0	0	0	0

TOTAL	33627.00	33600.00	33586.00	33573.00
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Tiers

Category	Tier for status	Tier for reported trend
Public ownership	Tier 2	Tier 2
Private ownership	Tier 2	Tier 2
Unknown ownership	N/A	N/A

Tier criteria

Category	Tier for status	Tier for reported trend
Ownership	Tier 3: National forestry statistics registers of land titles or maps on land ownership or all forest area under one ownership category that is five years old or less. Tier 2: National forestry statistics registers of land titles or maps on land ownership or questionnaires that are more than five years old. Tier 1: Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other

Table 18b - Holder of management rights of public forests

Categories	Forest area (000 hectares)			
	1990	2000	2005	2010
Public Administration	917	865	844	844
Individuals	0	0	0	0
Private companies	29	39	39	39
Communities	0	0	0	0
Other	0	0	0	0
TOTAL	946.00	904.00	883.00	883.00

Category	Tier for reported trend	Tier for status
Public Administration	Tier 2	Tier 2
Individuals	N/A	N/A
Private companies	Tier 2	Tier 2
Communities	N/A	N/A

Other	N/A	N/A
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18.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Public ownership	Public ownership here is referring to land that have been acquired by the state (PNG Government).	There has been a slight decline in land area under state ownership due to some of these areas reverting to customary/tribal ownership.
Private ownership	These are land owned by tribal/clan groups under customary ownership rights.	A trend is emerging in PNG where individuals are buying land from the tribal/clan groups for their individual use, however there is no specific data to show the percentage or actual area sizes.
Unknown ownership	Refers to forest areas under the Forest Clearance Authority (FCA) for Special Agriculture Business Leases (SABL), roadline timber authorities or small forest timber areas.	N/A
Management rights	The data reported is for all timber concessions where the management rights had been transferred from the indigenous people to the State and onto the timber companies. In areas where the concession term have expired, the rights have reverted back to the indigenous owners.	There is a decrease in the area under management rights held by public administration as timber concessions are expiring and the rights reverting to the customary owners. This trend will continue into the future.

Other general comments to the table

N/A

19. How many people are directly employed in forestry?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

19.1 Categories and definitions

Category	Definition
Full-time equivalents (FTE)	A measurement equal to one person working full-time during a specified reference period.
Employment in forestry	Employment in activities related to production of goods derived from forests. This category corresponds to the ISIC/NACE Rev. 4 activity A02 (Forestry and logging).

19.2 National data

19.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Internal PNG Forest Authority Reports	1990-2008	2011	ANZIF report
2	PNG Forest Authority Internal Reports	1990-2008	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

19.2.2 Classification and definitions



National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

19.2.3 Original data

Category	1990	2000
Primary production of goods	8280	7820

19.3 Data

Table 19

Category		Employment (000 years FTE)			
		1990	2000	2005	2010
	Employment in forestry	N/A	N/A	N/A	4
	... of which female	N/A	N/A	N/A	1

19.4 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Employment in forestry	N/A	Due to current global economic melt down, the timber industry in particular is not seen to increase its activities, hence no marked increased in employment within the sector.

Other general comments to the table
N/A

20. What is the contribution of forestry to Gross Domestic Product (GDP)?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

20.1 Categories and definitions

Category	Definition
Gross value added from forestry (at basic prices)	This category corresponds to the ISIC/NACE Rev. 4 activity A02 (Forestry and logging).

20.2 Data

Table 20 (Pre-filled data from UNdata/EUROSTAT)

Category	Million	Currency	Year for latest available information
Gross value added from forestry (at basic prices)	743.7	PNG kina	Central Bank of PNG, Quarterly Economic Bulletin 2011

20.3 Comments

Category	Comments
N/A	Forestry activities as contributed 4.8 percent of PNG's GDP in 2010

Other general comments

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21. What is forest area likely to be in the future

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

21.1 Categories and definitions

Category	Definition
Government target/aspiration for forest area	Government target/aspiration for forest area for a specific year.
Forests earmarked for conversion	Forest area that is allocated/classified or scheduled to be converted into non-forest uses.

21.2 National data

21.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	PNG Medium Term Development Plan 2011-2015	N/A	2010	N/A
2	Internal PNG Forest Authority Reports	N/A	2013	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

21.3 Data

Table 21a

Category	Forest area (000 ha)	
	2020	2030
Government target/aspiration for forest area	33549	33509

Table 21b

Category	Forest area (000 ha)
	2013
Forests earmarked for conversion	100

21.4 Comments

Category	Comments
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Government target/aspiration for forest area	Under the PNG Medium Term Development Plan 2011-2015, there will be an increase in the area of plantations.
Forests earmarked for conversion	Internal PNGFA data under the Forest Clearance Authority (FCA) for agriculture plantation, i.e. oil palm and cocoa plantation

Other general comments

Papua New Guinea (PNG) is presently planning its first National Forest Inventory as part of the UNREDD Program support to the country. Preparatory work on the planning commenced in 2012 and it is envisaged that the actual field inventory will commence in 2014. Once this work is completed, PNG will be in a much better position to report on its forest resources and other related environmental attributes.