



INDONESIAN FORESTRY

“Earth, water, and the natural riches they contain shall be controlled by the state and used for the prosperity of the people.”

Indonesian Constitution 1945,
Article Number 33

INDONESIAN FORESTRY

Preface

This profile of Indonesian Forestry is a useful source of information for the Indonesian people and the world.

We are aware, and hold in common, that the forest was given to the people of Indonesia through the grace of God Almighty. The 1945 Constitution has mandated that the forest with all its contents should be utilized to the maximum benefit of the people while maintaining sustainability.

This profile gives an overview of forestry in Indonesia and the steps that have been taken by the Government of Indonesia to manage it.

Finally, it is hoped that this document will be useful for the Indonesian nation as well as for the world community, so that in this era of information and globalization, data on Indonesian forestry will be widely disseminated.

Minister of Forestry
Republic of Indonesia



Zulkifli Hasan, SE, MM

Published in 2011 by:

Pusat Humas Kementerian Kehutanan

Together with:

GIZ / FORCLIME

Photographs and maps from:

Pushumas

Forclime

Cover design and layout by: **Donald Bason**

giz



FORESTRY IN INDONESIA

There are 130.68 million hectares of forest in Indonesia, including marine conservation areas. Located in the tropics, Indonesian forests are dominated by tropical rain forest species with research identifying 15 distinct forest formations. Indonesia's tropical forests are known for their mega-diversity and contain a vast assortment of biodiversity.

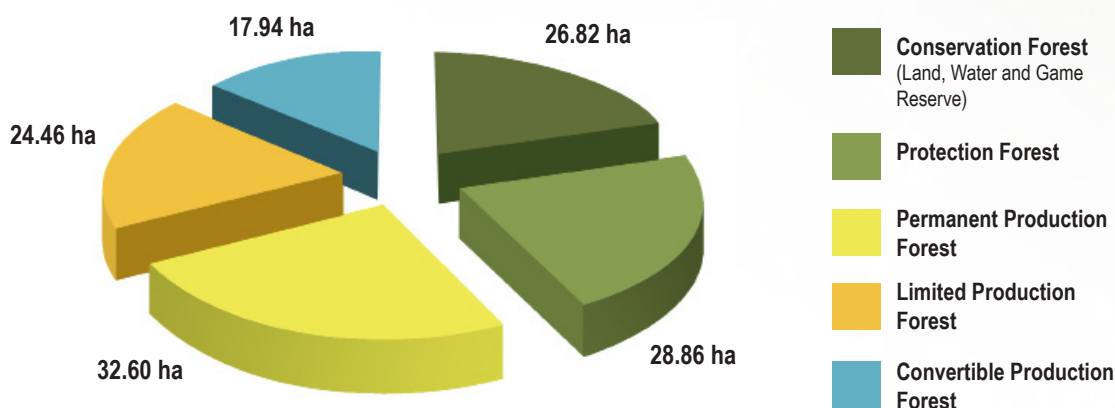
Indonesian forests are home to:

Flora	38,000 species
Flowering Plants	27,500 species (10% of the world's species)
Mammals	515 species (12% of the world's mammal species)
Reptiles	511 species (7.3% of the world's reptile species)
Amphibians	270 species
Birds	1,531 species (17% of the world's bird species)
Invertebrates	2,827 species
Insects (Butterflies)	121 species (44% endemic)
Fish	25% of the world's fresh and salt-water species
Palms	477 species (47% endemic)
Medical Plants	3,000 species (90% of medical plants in Asia)

Based on their function, Indonesia's forests are classified into **Protection Forest, Conservation Forest, and Production Forest.**

Production Forest consists of **Permanent Production Forest, Limited Production Forest or Convertible Production Forest.**

FOREST CLASSIFICATION (130.68 million ha)



Permanent Production Forest (*Hutan Produksi Tetap*) : Forest areas that can be used for selective logging or clear-cutting.

Limited Production Forest (*Hutan Produksi Terbatas*) : Natural forest areas where due to the topography, type of soil and/or climate, use of the forest resources are restricted by a diameter limit.

Convertible Production Forest (*Hutan Produksi yang dapat Dikonversi*) : Production Forest that can be changed or designated into non-forest status by the release of forestry land or by exchange through a ministerial decree.

Conservation Forest (*Hutan Konservasi*) : Forest areas that have specific features, with the principal function of preserving plant and animal diversity and the ecosystem.

Protection Forest (*Hutan Lindung*) : Forest areas with the main function for the protection of life support systems to manage water usage, prevent flooding, control erosion, prevent sea water intrusion, and maintain soil fertility.

Forest land cover also exists outside classified forest and/or other land-use areas and covers approximately 8.07 million hectares that have the potential to be used for supporting the forestry industry through wood or non-wood based products.

Distribution of Indonesian forest land cover is shown in the following map:



Indonesian land cover :

Land cover	Area (hectares)
Primary forest	41.26 million ha
Secondary forest	45.55 million ha
Plantation forest	2.82 million ha
Non-forest	41.05 million ha
Total	130.68 million ha

Indonesia's forestry sector has a strategic role in national development. Foreign exchange generated from the forestry sector reached U.S.\$ 4.3 billion and although gross domestic product (GDP) from forestry started to decline after 1999 (1.66% to 0.74% in 2010), forestry still has great potential through both timber and non timber products. Currently the Ministry of Forestry is developing the concept of a Green GDP by using forestry for ecotourism, pulp, paper, and environmental services as contributions to foreign exchange.

- Rate of forest destruction is 700,000 ha per year
- Critical land is 24.467 million ha with 5.4 million ha very critical



MAP DATA:
 1. Peta Dasar Tematik Kehutanan Skala 1 : 250.000
 2. Hasil Penafsiran Citra Landsat 7 ETM+ Liputan Tahun 2008/2009
 Proyeksi : PID MERCATOR
 Sistem Grid : Grid Geografis
 Spheroid : WGS 1984 / DGN 1995



DIREKTORAT JENDERAL PLANOLOGI KEHUTANAN
 KEMENTERIAN KEHUTANAN 2010

INDONESIAN FORESTRY DEVELOPMENT

The Ministry of Forestry has set a vision for forestry development 2010-2014, **Sustainable Forestry for the Welfare of a Just Society** (*Hutan Lestari untuk Kesejahteraan Masyarakat yang Berkeadilan*). To accomplish this vision, six Ministry of Forestry priority policies have been developed, namely:

1. Forest area consolidation.
2. Forest rehabilitation and watershed development.
3. Protection and control of forest fires.
4. Biodiversity conservation.
5. Revitalization of forest use and forestry industries.
6. Empowerment of communities around the forest.

Forest Area Consolidation

2014 is targeted for completing 63,000 km of forest boundaries and the development of 600 Forest Management Units (FMUs). At present, 48 FMUs have been formed.

Forest Rehabilitation and Watershed Development

Up until 2014, 2.5 million hectares of forest have been targeted for rehabilitation that includes the following :

Objective	2010	2011	2012	2013	2014	Total
Conservation	100,000 ha	100,000 ha	100,000 ha	100,000 ha	100,000 ha	500,000 ha
Watershed	--	389,000 ha	488,000 ha	537,000 ha	540,000 ha	1.954,000 ha
City forest rehabilitation	2,000 ha	1,000 ha	2,000 ha	2,000 ha	--	6,000 ha
Mangroves & swamps	--	1,000 ha	10,000 ha	10,000 ha	10,000 ha	40,000 ha
Jumlah	102,000 ha	500,000 ha	600,000 ha	648,000 ha	650,000 ha	2,500,000 ha

To support large-scale planting for forests and land rehabilitation, the Ministry of Forestry built 8000 Community Seed Nurseries (*Kebun Bibit Rakyat*) in 2010. It will build another 15,000 Community Seed Nurseries each year until 2014. Each Community Seed Nursery will produce as many as 50,000 seeds per year. In addition, as many as 23 Permanent Seed Nurseries will also be built in 20 provinces that will produce five hundred thousand seeds per unit per year.

Protection and Control of Forest Fires

For prevention, protection and control of forest fires, the Ministry of Forestry monitor fires every day via NOAA satellites. Observation results are transmitted to the public and relevant agencies online. The Ministry of Forestry has trained staff in forest fire suppression, with the Concerned Citizens of Fire, Manggala Agni, and Manggala Agni Quick Response Force / SMART. Their focus is to anticipate and overcome forest fires in 9 fire-prone provinces, namely North Sumatra, Riau, Jambi, South Sumatra, West Kalimantan, Central Kalimantan, South Kalimantan, South Sulawesi, and Papua.





1. **Gunung Leuser**
1,094,692 Ha.
2. **Batang Gadis**
108,000 Ha.
3. **Tesso Nilo**
38,576 Ha.
4. **Siberut**
190,500 Ha.
5. **Kerinci Seblat**
1,389,507 Ha.
6. **Bukit Tiga Puluh**
144,223 Ha.
7. **Bukit Duabelas**
60,500 Ha.
8. **Berbak**
150,982.27 Ha.
9. **Sembilang**
202,896.31 Ha.

10. **Bukit Barisan Selatan**
355,511 Ha.
11. **Way Kambas**
125,621.30 Ha.
12. **Ujung Kulon**
120,551 Ha.
13. **Kepulauan Seribu**
107,489 Ha.
14. **Gn. Halimun Salak**
113,357 Ha.
15. **G. Gede Pangrango**
21,975 Ha.
16. **Gunung Ciremai**
15,500 Ha.
17. **Kep. Karimunjawa**
111,624.70 Ha.
18. **Gunung Merapi**
6,410 Ha.

19. **Gunung Merbabu**
5,725 Ha.
20. **Bromo Tengger Semeru**
50,276.20 Ha.
21. **Meru Betiri**
58,000 Ha.
22. **Alas Purwo**
43,420 Ha.
23. **Baluran**
25,000 Ha.
24. **Bali Barat**
19,002.89 Ha.
25. **Gunung Rinjani**
41,330 Ha.
26. **Komodo**
132,572 Ha.
27. **Kelimutu**
5,356.50 Ha.

INDONESIAN CONSERVATION AREAS



- | | | |
|--|---|---|
| 28. Manupeu-Tanadaru
87,984.09 Ha. | 37. Kutai
198,629 Ha. | 46. Manusela
189,000 Ha. |
| 29. Laiwangi-Wanggameti
47,014 Ha. | 38. Bunaken
89,065 Ha. | 47. Aketajawe – Lolobata
167,300 Ha. |
| 30. Gunung Palung
90,000 Ha. | 39. Bogani Nani Wartabone
287,115 Ha. | 48. Teluk Cendrawasih
1,453,500 Ha. |
| 31. Danau Sentarum
132,000 Ha. | 40. Kepulauan Togean
362,605 Ha. | 49. Lorentz
2,505,600 Ha. |
| 32. Betung Kerihun
800,000 Ha. | 41. Lore Lindu
217,991.18 Ha. | 50. Wasur
413,810 Ha. |
| 33. Bukit Baka Bukit Raya
181,090 Ha. | 42. Bantimurung-Bulusaraung
43,750 Ha. | |
| 34. Sebangau
568,700 Ha. | 43. Taka Bonerate
530,765 Ha. | |
| 35. Tanjung Putting
415,040 Ha. | 44. Rawa Aopa Watumohai
105,194 Ha. | |
| 36. Kayan Mentarang
1,360,500 Ha. | 45. Kepulauan Wakatobi
1,390,000 Ha. | |

Biodiversity Conservation

Biodiversity conservation to protect potential seed pools is carried out through the management of ecosystems, plants and wildlife in 50 national parks and 477 conservation areas covering 27.2 million hectares.

- The potential, as well as the driver for the national forestry sector lies with the utilization of eco-tourism, environmental services and forest hydrological systems. Ecotourism can be developed through tourism permits for 50 national parks and conservation areas. Forest resources in the conservation of soil and water contributed 19.85 % to the economic value of forest services, while the role of forests in flood prevention contributed 12.33 % to the economic value of forest services. Community involvement is very important for utilising the potential of forest resources.
- To protect plant and wildlife species from extinction, the Government of Indonesia has identified 58 plant species and 236 animal species that are severely threatened. In handling this issue, Indonesia has signed the CITES convention and registered 1053 flora species and 1384 fauna species in Appendix I and II. The Ministry of Forestry expects that populations of endangered species in 2014 will have increased by 3% from those in 2009 due to biological conditions and loss of habitat.



Revitalization of Forest Use and Forestry Industries

The utilization of forests is done through permits. Community Forest Plantation Permit schemes, and Community Forestry and Village Forest permits give communities around the forest access to the forest and allows limited forest use. Forest use can also be granted through concession permit schemes, such as with the Business License of Timber Utilization of Natural Forests, as well as Forestry Timber Utilization - Ecosystem Restoration.

List of forest use permits:

Presently there are 4.3 million hectares of Plantation Forest, 65 thousand hectares of Community Forest Plantations, and 2.8 million hectares of Community Forests that provides wood for the timber, pulp and paper, and plywood industries.

Predictions and targets for timber production until 2014 :

Industry Type	Production Target 2014
Pulp	13.3 million tons
Paper	8.1 million tons
Plywood	8.6 million m ³
Carpentry	6.9 million m ³
Cut Timber	10.2 million m ³

Through the development of non-timber forest products (NTFPs), the government has identified 565 commodities. The six leading NTFP commodities are rattan, bamboo, bee's honey, silk, agarwood, and *Calophyllum inophyllum* (large evergreen tree sometimes called 'Ballnut'). The contribution of NTFPs to the provision of food is done through inter-cropping that has contributed 19.3 million tonnes to the national food supply. The potential of flour from breadfruit could reach 5.6 million tonnes (2010). If 34 million tons of rice are needed nationally per year, then crops from the forest could be a viable alternative to rice as a national food source.

- **Timber Utilization License - Timber Estates (IUPHHK-HTI)**, permit for utilization of forest timber in Production Forest, given to the state / public enterprises / BUMN/BUMD/BUMS.
- **Timber Utilization License - Community Forest Plantation (IUPHHK-HTR)**, business license for the utilization of timber in Production Forest, granted to individuals or cooperatives.
- **Timber Utilization License - Natural Forest (IUPHHK-HA)**, permit for utilization of timber in Natural Production Forest, given to BUMN / BUMS.
- **Timber Utilization License - Timber Forest Ecosystem Restoration (IUPHHK-RE)**, permit for utilization of timber in Production Forest that prioritizes ecosystem restoration, given to BUMN / BUMS.
- **IUPHHK-HTR** permit granting communities access to the forest for forest management.
- **Public Forest (HR)** permit for forest management in an area / land owned by the community located close to the forest.
- **Village Forest (HD)** permit for utilization of timber and non timber, given to village institutions located close to the forest.
- **Community Forest**, permit for the utilization of timber and non timber provided to individuals or community groups located close to the forest.



Through the Presidential Instruction No. 10/2011, since 20 May 2011, the government has delayed issuing new permits for Primary Natural Forest and Peatlands for two years.

Project Area	Size
Sumatra	11.3 million ha
Java	886,020 hectares
Bali and Nusa Tenggara	1,484,300 hectares
Kalimantan	15,904,650 hectares
Sulawesi	6,549,130 hectares
Maluku	1,917,400 hectares
Papua	23,050,300 hectares

The focus of development for forest-based timber industries is through Industrial Plantation Forest (HTI), Community Forest Plantation (HTR), village forest and community forestry.

Certification of sustainable forest management has been developed to ensure that raw materials used in the forestry industry come from legal sources. So far, about 50% of the permit holders for timber forest products - both natural forests and forest plantations - have obtained the certification of sustainable forest management.

The biggest contributor to revenues from forestry-sector related industries are from the pulp and paper industry, which is the main supplier of the world's pulp and paper. Indonesia's pulp production is now 6.5 million tonnes and 10.9 million tons for paper.



Empowerment of Communities around Forests

Community empowerment is done by providing forest communities with the legal means to manage village forests, and by providing access to financial institutions and markets.

Implementation is done through Community Forest Plantation (HTR) that has allocated 60% of the total forest plantation development area of 9 million hectares. Through the HTR development program, community empowerment until 2014 is also being implemented through the development of Community Forestry in an area of 2 million hectares and Village Forest areas of 500 thousand hectares. Community Forest Partnerships are being developed between farmer's groups and the timber industry for 250 thousand hectares.

Development of forestry and climate change

As a commitment to tackling climate change, Indonesia is targeting a 26% reduction in emissions by 2020, with 14% of this reduction coming from the forestry sector.

The Ministry of Forestry is in the process of implementing REDD + (Reducing Emissions from Deforestation and Degradation), as an approach to climate change mitigation from forestry and forest resource utilization, as well as from other sectors such as agriculture, mining, plantations, and energy.

Indonesia is active in international cooperation. In addition to participating in the UNFCCC forum, Indonesia is the originator of tropical forest countries forum - Forestry Eleven/Forest-11. Indonesia is promoting international cooperation in the field of conservation and sustainable forest management through collaboration in MRV and reduction of emissions through REDD + schemes.

Associated with mitigation and adaptation to climate change, the Ministry of Forestry has conducted a program of rehabilitation and restoration of ecosystems. These programs include:

- *Rehabilitation of 700 thousand hectares of deforested land.*
- *Planting 50 thousand hectares of energy crops annually to reduce deforestation.*
- *Planting program to supply of industrial raw materials through industrial plantation forest, community plantation forest, village forests, and community forests - average 700 thousand hectares per year.*
- *Enrichment planting program of 200 thousand - 600 thousand hectares per year.*
- *Program to eradicate illegal logging of 500 thousand hectares per year to 0% in 2020.*
- *Reforest degraded land area of 35.4 million hectares:*
 - *13.2 million hectares for forest product utilization in natural forest,*
 - *7.4 million acres for ecosystem restoration,*
 - *9.2 million hectares for industrial forest plantations,*
 - *5.5 million hectares of community forest plantations for people.*
- *Restoration of ecosystems is an ideal single scheme for the incentive mechanisms of REDD +, because it can cover all components of REDD + such as conservation, sustainable management of forests and enhancement of carbon stock. Reserved area for the RE is allocated for 7.4 million acres (23 units) while its realization is presently 185,005 hectares (2 units IUPHHK-RE)..*



In accordance with Indonesia's commitment to mitigating climate change, the Ministry of Forestry is working through bilateral and multilateral agreements.

Ministry of Forestry

Gedung Manggala Wanabakti
Jl. Jenderal Gatot Subroto, Senayan
Jakarta Pusat 10270
Indonesia

Tel: +62 (0) 21 570 4501

Fax: +62 (0) 21 572 0226

<http://www.dephut.go.id/>

