



SUPPLEMENTARY
REPORT

2016

Supplementary Report

The Environmental Status of Borneo

Cover page photo (C) WWF - Indonesia/Arief Destika
A landscape containing a complex of lowland rainforest, heath forest and upland rainforest at Tumbang Jojang, Murung Raya, Central Kalimantan

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WWF is one of the world's largest and most experienced independent conservation organisations, with more than five million supporters and a global network active in more than 100 countries.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption.



55% of Borneo at 40 million hectares is covered by forest (intact and disturbed).
31% of the 40 million ha is protected.

INTRODUCTION

Borneo has long been recognized by WWF as a globally significant biodiversity ‘hotspot’. Representing just 1% of the earth’s terrestrial surface, the

island is home to an estimated 6% of the world’s flora and fauna, including WWF flagship species, orangutan, elephant and endemic species, such as proboscis monkey and countless birds and plants.

A paradise of biological wonder. Described by Charles Darwin as: “*One great luxuriant hothouse made by nature for herself.*”

A paradise of biological wonder. Described by Charles Darwin as: “One great luxuriant hothouse made by nature for herself.”

But, all is not well in paradise!

Borneo’s forests and ecosystems are succumbing to the economic and social pressures of life in the 21st century. Many of these pressures are familiar: unsustainable logging, clearance for industrial agriculture and mining - as countries strive to develop their natural resource base.

With the completion of WWF’s latest Environmental Status of Borneo 2016, the effect of these pressures is brought into sharp contrast, revealing dire trends and grave consequences for a Business-As-Usual (BAU) approach to economic development on the island.

Borneo is in danger of losing its major ecosystems and the valuable ecoservices they provide which are critical to the long-term survival of local communities and the economies - both national and regional - of Brunei Darussalam, the Indonesian provinces in Kalimantan, and the Malaysian states of Sabah and Sarawak.

Brunei Darussalam



Indonesia



Malaysia



But it does not have to be this way. Whilst detailing the degradation of the island’s critical ecosystems, the very fact that the three Borneo governments endorse their monitoring offers hope for protection, restoration and rehabilitation. And where a gram of prevention is worth a kilogram of reparation, the results of the report reaffirm the value and immediate necessity of ‘truly sustainable’ development initiatives led by government, with support from local and international community members. Indeed, the findings in this report may be the ‘wake up’ call that all parties need to double their efforts to protect biodiversity and livelihood opportunities.

WWF’s Environmental Status of Borneo 2016 is the third edition of the report which details the environmental health of critical ecosystems and biological plant and animal indicators, from historical records and then in three, five-year intervals, from 2005 to 2015. Using the latest 2015 data, this year for the first time, the report’s brief was extended from the area designated as the Heart of Borneo to the whole of the island - a reflection of the cross boundary landscape approach needed to adequately address the loss of natural capital in globally significant environmental hotspots.

The WWF's Environmental Status of Borneo 2016 comprises a Main Report and a Supplementary Report.

This short document which forms the Supplementary Report presents a summary of the findings of a main report along with extensive recommendations for the future sustainable management of the island.

A detailed Main Report is published separately and provides for objective and scientifically based long-term monitoring of the biodiversity on the island, detailing a comprehensive range of ecosystems and biological indicator species.

Lowland rainforest in Murung Raya, Central Kalimantan



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THE BAD, THE GOOD AND THE INCONVENIENT TRUTH



Proboscis monkey populations are in a similar position with distribution areas estimated to have declined by 30% between 2005 and 2015, due to habitat loss and hunting pressure

31%
By 2005, the elephant habitat based on forest cover dropped to 37% of its estimated historical distribution, further falling to 31% by 2015

THE BAD

Continuing the trend observed with the very first Environmental Status report in 2012, Borneo's forests are in decline. Historical forest cover at the turn of the 20th century was 96% of the island. By 2005 this had dwindled to 71% and the latest report indicates by 2015, this had fallen to little more than half the island (55%) - a figure which includes both intact and degraded forest.

This rate of decline is uneven across the ecosystems, with freshwater swamp forest and heath forest down more than 75% of historic levels to 23% and lowland rainforest down by more than 50% of historic levels, to 42.3%.

By total area, lowland rainforest - a critical habitat for the conservation of many unique species - is by far the most converted ecosystem type in Borneo. Ease of access for logging and its suitability for palm oil production and agriculture have made it one of the most endangered habitats on earth. The consequences of any further loss of biodiversity in this ecosystem, projected between 2015 and 2020 to be 10-13 million hectares, in a BAU scenario, will be felt on a global scale.

Similarly, certain species are in rapid decline, or face an uncertain future. The orangutan is perhaps the iconic species most closely associated with the tropical rainforests of Borneo. Yet in early 2016, the International Union for Conservation of Nature (IUCN) reclassified the threat status for the Bornean orangutan from 'endangered' to 'critically endangered', due to destruction, degradation and fragmentation of its habitats and hunting.

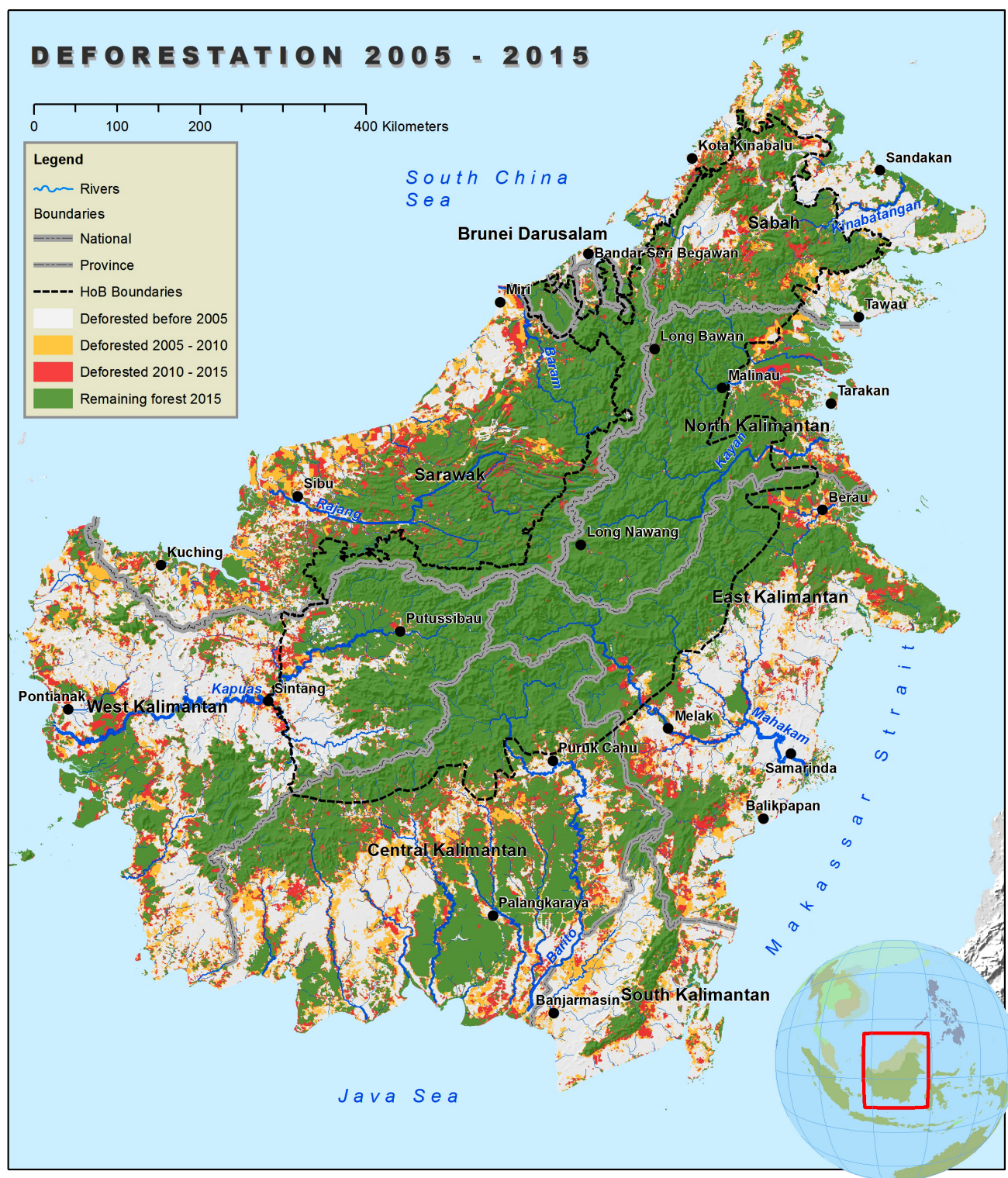
Between 1973 and 2005, orangutan lost almost half their distribution area due to large scale conversion and forest fire. The 2016 report indicates that between 2005 and 2015 another 9% of that was lost, with the addition of increased fragmentation of the area that was left.

Proboscis monkey populations are in a similar position with distribution areas estimated to have declined by 30% between 2005 and 2015, due to habitat loss and hunting pressure. The Borneo elephant population is also in trouble. By 2005, the elephant habitat based on forest cover dropped to 37% of its estimated historical distribution, further falling to 31% by 2015.



Orangutan near Punggualas, Sebangau National Park

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Map 1: Deforestation in Borneo 2005 - 2015

THE GOOD

The 2016 report does provide good news on some ecosystem fronts.

Upland rainforests and montane forests do not suffer high rates of deforestation, with nearly 90% and 96% respectively of historical coverage still remaining.

Indeed, the area known as the Heart of Borneo has fared far better than the lowlands and coastal areas. Highlighting perhaps the wisdom, forethought and relative success of the three Borneo Member Countries' 2007 historic Declaration to conserve the Heart of Borneo (HoB), an area then covering 22 million, but now 23 million hectares (234,000 km²) in the centre of the island. Considerable work has been carried out under the HoB banner by the three Member Countries and its local and international supporters, including WWF.

With 2017 being the 10th anniversary of the HoB Declaration, the 2016 Environmental Status report findings may provide the impetus for a renewed focus on Borneo's environmental issues. A new focus is needed because, if action is not taken, the projections in the report reveal an 'inconvenient truth' regarding the future of the island's stunning biodiversity.

THE INCONVENIENT TRUTH

The inconvenient truth revealed by the report is that it is almost too late for some ecosystems in Borneo. Without unprecedented, concerted and large scale efforts in restoration, reforestation and protection, the majority of the original ecosystem conservation goals set by WWF's team of international and Bornean experts, are rapidly moving out of reach.

For example: lowland rainforest, with an original conservation goal of 45% as determined in 2012, was down to 43% in 2015, and is projected to be as low as 32% by 2020. Limestone forest with a conservation goal of 60%, declined from 71% to 53%. Freshwater swamp forest at a goal of 40% is down from 45% to 23%; and the original goal of mangrove ecosystems at 60% is now down to 50%. Likewise, the original conservation goals for heath forest and peat swamp forest of 50% and 60% respectively, can no longer be realistically met, unless there is rapid and dramatic policy change to provide enabling factors to reverse the trends.

What's more, according to projections in the report, if the 2005-2015 deforestation rates continue, under a Business-As-Usual scenario (BAU), a further 6 million ha of forest may be deforested over the next five year period from 2015 and 2020.

The largest projected deforestation will occur in lowland rainforest and peat swamp forest, but deforestation rates in heath forest, limestone forest and freshwater swamp forest will also be unsustainably high.

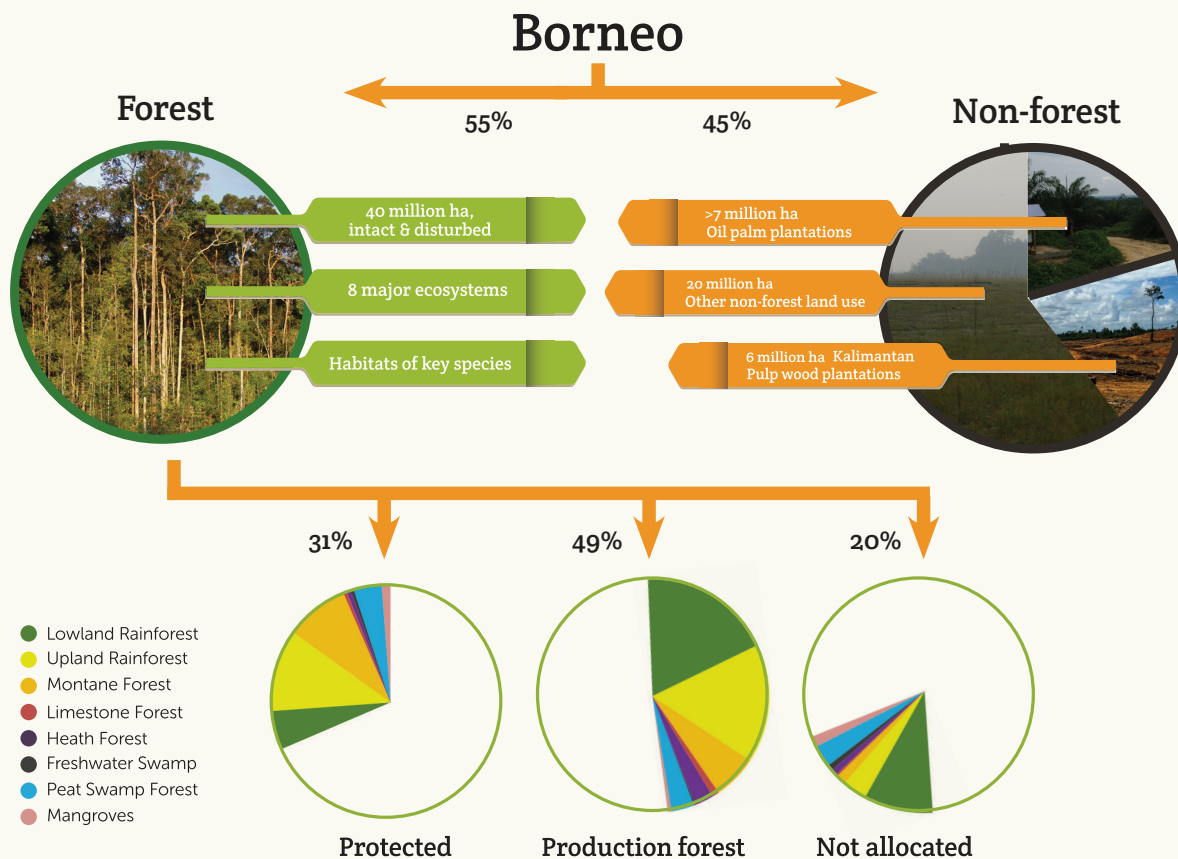
Better news is that for upland rainforest and montane ecosystems, the original conservation goals of 80% and 90% respectively, could easily be achieved with an immediate reduction of deforestation rates.

Furthermore, a number of animal indicators such as clouded leopard and banteng which are currently doing well, could thrive under such a scenario, while those under more threat could see a reduction in their risk status. Indeed, almost all the indicators in the report could be significantly improved with concerted and targeted action by the three Member Countries and state and provincial governments, with support from international and local agencies.



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THREATS

As part of the analysis, the report looked at the developments and ‘threats’ currently facing Borneo’s ecosystems and not surprising, a number of usual suspects were identified.

Fire: Fires are a major threat, particularly to peat swamp forest and lowland rainforest and especially at the edges of oil palm plantation areas, where their ‘accidental’ nature must be questioned as they pave the way for further development of the existing plantations.

Land conversion: Expansion of oil palm and pulpwood plantations and large areas of natural forest destruction inside mining concessions, are major factors in the continued deterioration of Bornean ecosystems.

Inadequate spatial planning: The lack of coordinated spatial planning has resulted in allocation of licenses into environmentally sensitive areas as well as habitats for species that include orangutans and elephants. Conversely, spatial planning has a huge role to play in moving away from Borneo’s BAU model. The 2016 report notes that 31% of the remaining 40 million ha natural forest is currently allocated for protection (constituting 17% of Borneo’s total land area) while 49% is allocated for production forest. The remaining 20% has not yet been allocated or designated for retention as forest. Terms, however, can be deceiving. In Kalimantan, for example, the classification of APL (*Areal Penggunaan Lain* / Other Land Use) can effectively mean ‘allocated for conversion.’ Likewise, the 17% of Borneo’s land area allocated for protection appears to be in line with the IUCN protected areas targets. However, this figure includes large areas (such as *Hutan Lindung*/Protection Forest) which do not conform to the IUCN definition of a protected forest.



Fires are a major threat, particularly to peat swamp forest and lowland rainforest



Map 2: Borneo Protected Areas and Production Forests

REMAINING FOREST 2015 NOT (YET) ALLOCATED FOR PROTECTION AND PERMANENT PRODUCTION FOREST



Map 3: Remaining Forest 2015 Not (Yet) Allocated for Protection and Permanent Production Forest



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Elephants in Sabah

As such, systematic spatial planning that integrates the environmental conservation aspects across the island, a better clarity of classifications based on 'tighter' definitions, as well as rigorous enforcement of forest regulations, would do much to halt the slow march of deforestation across Borneo.

There are continuing difficulties in enforcing protected status. It is essential to remember that even the designated Heart of Borneo landscape was never a 'national park', as many have erroneously perceived it to be. It was always a 'mosaic' of protected areas, wildlife corridors and sustainable land-use areas. The value of the Heart of Borneo approach was that it recognized the need to balance conservation and sustainable development to ensure a secure future for biodiversity, habitat conservation and indigenous livelihoods as well as meeting the ever-present government requirements for development.

STATE AND PROVINCIAL DEVELOPMENTS

The report also provides an update on individual states, provinces and in the case of Brunei, country progress on all relevant biological indicators. Here there is hope for the optimist, but encouragement also for the pessimist. Hope springs eternal in the new protected areas in Sabah, more forests to be retained in Sarawak, ongoing protection in Brunei and more watershed forest cover in Kalimantan, measures that were undertaken during 2016 and therefore outside the scope of this analysis.

However less hopeful are the large natural forest areas not allocated to be retained across the island, as well as the very many locations of illegal forest conversion and expansion by stealth around many of the palm oil plantations.

RECOMMENDATIONS AND A WAY FORWARD



Identify all idle non-forest land as the only alternative for new plantations

There are many responses possible to the challenges ahead. Whilst not prescriptive, the 2016 Supplementary Report puts forward a number of recommendations for state and federal government policy makers, industry, international agencies and civil society. There are many challenges in adequately enforcing protection: illegal logging; forest fires; conversion to agriculture, palm oil and pulpwood; wildlife trade and mining are among the most difficult of those. The 2007 Heart of Borneo (HoB) Declaration was in some respects a line in the sand from which all three national governments acknowledged the need to begin to address these challenges.

The HoB, however, does not exist in isolation and neither do Borneo's endangered species. For example, a majority of orangutans live outside the HoB. The goals for HoB conservation cannot be truly achieved without taking the whole of Borneo into consideration, hence our recommendations span priority conservation landscapes across the island.

With 2017 being the 10th anniversary of the HoB Declaration, the 2016 Environmental Status report findings may provide the impetus for a renewed focus on Borneo's environmental issues and challenges within and beyond the HoB.

Summary of recommendations to all relevant government agencies and stakeholders

1. Ensure ecological connectivity of the landscapes of Borneo through island-wide spatial planning for effective conservation of biodiversity and ecosystem services.
2. Evaluate spatial planning per location or landscape to ensure retention of as much natural forest and species habitats as possible.
3. Evaluate biodiversity and ecosystem values in forest areas that have been allocated or designated into other non-forest land use. Retain these ecologically valuable forests for protection or sustainably managed natural forest.
4. Consider non-forest land as the only alternative for new plantations. New oil palm and pulpwood plantations should only be established in areas that are neither forested nor containing values for biodiversity conservation and protection of ecosystem services.
5. Expand protected areas to include entire landscapes and increased representation as well as connectivity of all ecosystems and species habitats. This is a long process of changing the status of regions through the mechanism of spatial planning changes.

6. Follow up on the HoB successes of preserving the ecosystems in most of the interior of Borneo.
7. Ensure the conservation of the entire HoB landscape by extending the HoB boundaries to include biodiversity rich lowland rainforest areas as part of commonly managed landscapes that contain climate resilience wildlife connectivity corridors.
8. Develop monitoring systems and prescriptive action to ensure that all production forests remain sustainably managed under natural forest cover. Timber harvesting in forest concessions should emphasize Reduced Impact Logging with minimal environmental disturbances. Clear-cutting and replanting with exotic pulpwood species should be forbidden, though indigenous pulpwood species may be considered.
9. Preserve as protected areas all remaining freshwater swamp forest, heath forest and limestone forest that stand at a total of only 2.83 million ha or merely 4% of the whole Borneo land mass.



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POLICY RECOMMENDATIONS

To the Government of Indonesia:

- a. Strengthen the protection of Hutan Lindung: establish overseeing management bodies at provincial level and conduct field checks and monitoring.
- b. Prohibit further conversion of lowland rainforest: together with stakeholders, identify idle non-forest land that does not contain biodiversity and ecosystem values for development into plantations. Establish a directorate within the forestry department to identify and solve legal and customary issues pertaining to idle non-forest land of Kalimantan.
- c. Preserve the remaining pockets of primary lowland rainforest areas that have never been logged and are almost untouched as Virgin Jungle Reserves (VJR). Such VJR are still present in the interior foot slope areas of West, Central and East Kalimantan.

- d. Create awareness and promote the extremely diverse limestone areas of Kalimantan as scientific and major tourism destinations.
- e. Exclude from production forests and redesignate as protection forests core heath forest areas with extremely shallow soils in Central and East Kalimantan.
- f. Identify and protect the peat swamp forest of East and North Kalimantan. The unique flora of these areas that is different from the peat swamp forest in other parts of Borneo should be recognized and preserved. To date, none of the peat swamp forest is protected.
- g. Protect remaining mangroves of East and North Kalimantan for coastal protection and spawn areas for fishery. To date, a majority of the mangrove is allocated for conversion.
- h. Ensure that the only population of Bornean elephants in North Kalimantan does not face local extinction by protecting key corridors and habitats.

To the State Government of Sarawak:

- a. Expand the Permanent Forest Estates system through gazettelement of the remaining intact forest and enhance them via forest management certification as well as promote it to national and international audiences.
- b. Enhance implementation of strong conservation measures to prevent the degradation and loss of peat swamp forest and freshwater swamp forest.
- c. Save at least 25% of the remaining lowland rainforest that is the most species-rich ecosystem of Borneo. Adopt climate resilience ecological corridors to connect these lowland rainforests to the HoB areas.
- d. Identify additional lowland rainforest for protection and re-designate large areas allocated for conversion into protected forests, especially those in the middle Rajang and middle Baram region.
- e. Additional heath forest area of Usun Apau in the Rejang headwaters should be allocated for protection.
- f. Protect and/or sustainably manage mangroves and the last remaining peat swamp forest of the Rajang delta and vicinity of Kuching.



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To the State Government of Sabah:

- a. Ensure all Commercial Forest Reserves are sustainably managed for long-term timber production including restoration of degraded areas.
- b. Enforce spatial planning to ensure that no further upland and montane forest is converted, while setting aside remaining steep slopes as totally protected forests.
- c. Promote successful protection of mangrove forest to the other states and provinces of Borneo.
- d. Retain the connectivity of orangutan and elephant habitats through spatial planning at district level.
- e. Identify the possibility of connecting the Tabin Wildlife Reserve to the upper Segama Forest Reserve through a wildlife corridor.

To Brunei Government:

- a. Ensure that the current forest cover of all the ecosystems is retained and legally established as conservation forest.
- b. Promote that the largest remaining freshwater swamp forest of Borneo is in Brunei.
- c. Stop the declining cover trend of lowland rainforest.

SPECIFIC RECOMMENDATIONS FOR SELECTED GROUPS

To Governments/decision makers:

- Evaluate forest areas that have been allocated to non-forest land use on the presence of high biodiversity and conservation values. Throughout Borneo, areas that contain extremely high biodiversity lowland rainforest and which have been allocated for conversion are:
 - » Middle Baram in Sarawak
 - » Middle Rajang in Sarawak
 - » East of Bintulu in Sarawak
 - » North of Sintang in West Kalimantan
 - » Arabela landscape south-west of the Schwanner mountains in Central Kalimantan
 - » Murung river in East Kalimantan
 - » Kutai Barat (south-west) in East Kalimantan
 - » Malinau (south-east) in East Kalimantan
 - » Upper Mahakam Landscape (Kutai Barat and Mahakam Ulu) in East Kalimantan
 - » Kayan Mentarang Landscape (Malinau, Nunukan and Bulungan) in North Kalimantan

Canopy of a lowland rainforest in Sabah



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- Establish climate resilience wildlife corridors spanning administrative districts and provincial boundaries in Priority Conservation Landscapes using systematic conservation planning. The priority landscapes should include lowland areas that contain population distribution such as orangutans, clouded leopards, elephants and other wildlife.
- Enhance the conservation of the entire HoB landscape to include biodiversity rich lowland rainforest areas as part of a commonly managed landscape.
- Follow up on the HoB successes of preserving the ecosystems in most of the interior of Borneo.
- Strengthen law enforcement to protect orangutans, proboscis monkey populations and other species from habitat destruction and hunting.
- Facilitate collaborative framework and sourcing of funds to upscale artificial

reproduction of the last remaining rhinoceroses.

- Develop and implement Payment for Environmental Services mechanisms in all of the priority watersheds of Borneo as well as other forms of financing systems that include Conservation Financing and Sustainable Financing.
- Prevent the extinction of the freshwater swamp forests of Borneo by allocating additional protected areas. Set a time-bound target above the present protected area representing a mere 19% of the historical extent. The largest still remaining freshwater swamp forest areas in Borneo are:
 - » Sugut river swamps in Sabah
 - » Belait district in Brunei
 - » Upper Kapuas between Sintang and Putusibau in West Kalimantan
 - » Middle Barito in Central Kalimantan
 - » Vicinity of Mahakam lakes in East Kalimantan
 - » Sebuku in North Kalimantan
- Include values of mangrove for coastal protection, spawn areas for fishery and check-risk locations to prevent conversion of this vital ecosystem. Large mangrove areas have been allocated for non-forest land use in Sarawak, East Kalimantan and North Kalimantan.
- Retain the value of heath forests and limestone forests by mandating Environmental Impact Assessment for all development projects.
- Consider non-forest land as the only alternative for new plantations. New oil palm and pulpwood plantations should only be established in areas that are neither forested nor containing values for biodiversity conservation and protection of ecosystem services. This can be ensured through adequate land evaluation prior to mapping out concession areas.
- Prevent recurrence of forest fire by enhancing legislations and improving investigative procedures around the edges of oil palm plantations. Likewise, scrutinize logging concessions with high numbers of hotspots on their compliance with sustainable forest management practices.
- Retain all production forests for natural forest management in compliance with international standards. Develop a strategic policy toward a 100% forest management certification by:
 - » Providing enabling conditions such as fiscal incentives and processing of value-added forest products
 - » Including High Conservation Value assessment and Reduced Impact Logging into forestry legislations
 - » Creating a stakeholder participation framework to foster collaboration between different resource users, both within and across forest concessions
- Include a legal chapter in mining exploitation concession permits that prohibits encroachment along new access roads.

To private sector:

Summary

1. Instil a sense of responsibility that private sector representatives are the major stewards of the last remaining tracts of lowland and upland rainforest.
2. Secure connectivity for conservation areas inside plantations by linking riparian greenbelts to forested areas that serve as wildlife habitats and corridors.
3. Invest in development of non-forest land without converting natural forest. Encourage the financial sector to adopt procedures on presence of both natural forest and idle non-forest land prior to approving loans.
4. Undertake concerted efforts to prevent encroachment in concession areas including the support of law enforcement and providing alternatives for livelihood development for local communities.
5. Collaborate with neighbouring concessions and support government initiatives to foster joint conservation and sustainable development across Priority Conservation Landscapes.

To private sector:

- Secure connectivity for conservation areas inside plantations by linking riparian greenbelts to forested areas that serve as wildlife habitats and corridors. Even so, orangutan habitats inside plantations require more than just greenbelts; they need connectivity to orangutan habitats outside the concession areas.
- Instil the sense of responsibility that they are now the major stewards of the last remaining tracts of lowland and upland rainforest. This requires adoption of Forest Management Plans that retain natural forest in areas licensed into plantations, mitigating threats to wildlife species, managing areas with high conservation value, and harvesting of timber in a sustainable manner through Reduced Impact Logging.
- Undertake a wildlife population survey of endangered species in upland rainforests. Ensure sufficiently large habitats remain available in the production forest and preserve habitat connectivity to lowlands and adjacent protected areas.
- Collaborate with neighbouring concessions and support government initiatives to foster joint conservation and sustainable development across Priority Conservation Landscapes such as that of the HoB Corridor Project Implementation.
- Promote and preserve “virgin jungle reserves” inside concessions with high concentrations of endemic species.
- Phase out development of plantations in heath forest, for plant growth cannot occur without large volumes of artificial fertilizers.
- Invest in development of non-forest land without converting natural forest. Encourage the financial sector to adopt procedures on presence of both natural forest and idle non-forest land prior to approving loans.
- Certify the production of timber and plantation crops following sustainable production and environmental requirements.
- Mitigate potential human-elephant conflicts in Sabah and North Kalimantan.
- Enforce strict burning control by employees, their contractors and suppliers in the concessions.

- Support environmental stewardship among the local communities to ensure resource utilisation is done according to customs and traditions of the Indigenous Peoples. This necessitates restriction of hunting and sustainable collection of Non-Timber Forest Products (NTFP) in the concession areas.
- Provide alternatives for livelihood to local communities in order to reduce dependence on hunting of game and collection of natural resources prohibited by law.
- Restrict access into concession and operational areas to prevent poachers from entering the forest and adjacent protected areas.

To civil society

Summary

1. Provide the governments with maps showing areas of high conservation values forests including areas allocated into non-forest land use; advocate re-gazetting of these forests into protected areas and sustainable production forests.
2. Promote the priority conservation landscapes and identify key areas for connectivity and wildlife corridors. A good start to do this is by producing a detailed map of the six WWF priority landscapes that also covers vital areas outside the HoB.
3. Explore the opportunities of extensions of current protected areas. Priorities should be given to include more lowland rainforest, heath forest and swamp forest. Identify measures for restoration of degraded lands.
4. Conduct mapping and inventories of large areas of non-forest land and recommend to governments the possible locations for new plantations, as alternatives to conversion of natural forests. Where conversion of natural forests is inevitable, biodiversity offsets should be incorporated into such areas.

To NGOs

1. Provide the governments with maps of high conservation values in forest areas that have been allocated to non-forest land use, and advocate for re-gazetting of these forests into protected areas and sustainable production forests.
2. Promote the WWF priority landscapes and identify key areas for connectivity and wildlife corridors. A good start to do this is by producing a map of the landscapes that expand from the HoB into outside lowland areas.
3. Explore the opportunities of extensions of current protected areas. Priorities should be given to include more lowland rainforest, heath forest and swamp forest. Forest restoration should be undertaken for such areas.
4. Conduct mapping and inventories of large areas of idle non-forest land lacking biodiversity values to recommend to governments the possible locations for new plantations.
5. Promote the uniqueness of undisturbed lowland rainforests; make a list of endangered species restricted to lower elevations (<500 m asl, but also following each province/state's classification of lowland rainforest). Identify potential lowland rainforest areas for protection, with a target of 17% of the 2012 baseline year of forest coverage / historical extent.
6. Investigate the potential of upland rainforest as a refuge for lowland species in climate change scenarios.



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7. Inform the general public on the unique but largely unknown ecosystems of heath forest and limestone forest. Explain that damage to these ecosystems is irreversible.
8. Make an inventory and evaluation of all Indonesian Protection Forests (Hutan Lindung) and explore possibilities to increase conservation status. In Sarawak, identify and recommend management prescriptions for non-operation areas such as steep areas and sources of rivers within production and plantation forests.
9. Adopt a methodology for continued monitoring of ongoing conversion in WWF priority landscapes on forests in accordance to ecosystem types, and provide 6-monthly updates in a newsletter communication strategy.
10. Raise awareness, and support NGOs specialising on wetlands such as Wetlands International on the state of freshwater swamp forests and back-mangroves, as well as proboscis monkey habitats.
11. Encourage other NGOs and institutions to further investigate and take up issues relating to limestone areas in Kalimantan.
12. Recruit a mining specialist and produce a position paper on mining, including an inventory of potential conservation conflicts with mining concessions.

To HoB Member Countries:

1. Facilitate transboundary collaboration among stakeholders and connectivity of priority conservation landscapes, using the corridors concept for the core areas.
2. Enhance a network of local communities to promote sustainable development and conservation in the Heart of Borneo.
3. Establish an international Borneo network on wildlife trade control.
4. Facilitate international collaborative scientific deliberations on transboundary conservation and regeneration of the last rhinoceroses of Borneo.
5. Institutionalize green ecotourism and destination development in HoB, including supporting the involvement of local community and private sector initiatives.

6. Invite civil society such as that of The Borneo Initiative to support forest management certification throughout Borneo.
7. Institutionalize High Conservation Value (HCV) assessment in the allocation of concessions and approval of operation plans:
 - a. Undertake compilation of all HCV assessments implemented within the HoB and adjacent areas.
 - b. Conduct analysis on how HCV supports conservation of biodiversity and protects ecosystem services at the landscape level.
 - c. Formulate recommendations for HCV to be incorporated into national, provincial, state and district regulations.
8. Adopt a multinational and multi-stakeholder framework for conservation and sustainable financing for the enhancement of conservation and sustainable development in the HoB:
 - a. Undertake a mapping of funding portfolios from various sources such as the Asian Development Bank, Green Climate Fund, and Global Environmental Facility to identify HoB projects that could qualify for funding.
 - b. Facilitate development of project proposals for both transboundary and national financing projects, including those related to the HoB Corridor Project Implementation.
 - c. Establish a financing mechanism that is able to absorb a variety of government aid funding, private sector investments, sustainable financing, CSR and philanthropic contributions as well as a fund disbursement mechanism for project implementation.



BORNEO FOREST FACTS

PAPER FROM
RESPONSIBLE
SOURCES

WWF · 2016 SUPPLEMENTARY REPORT: THE ENVIRONMENTAL STATUS OF BORNEO

FOREST LOSS

About half of Borneo's natural forest has been lost and losses continue at a rapid pace.

3rd LARGEST

Borneo is the third largest island on the planet.



850,000

Between 1985 and 2005 Borneo lost an average of 850,000 hectares of forest every year. If this trend continues, forest cover will drop to less than a third by 2020.

75.5 MILLION

East Kalimantan alone is believed to lose over €75.5 million a year in business tax revenue due to illegal logging and illegal timber processing.



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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