**Region: South East Asia (Islands)**

Countries Include: Indonesia, Island Malaysia (Islands), Philippines, Timor-Leste

**Biodiversity and Global Environmental Benefits Regional Highlights:**

|  |  |
| --- | --- |
| Country | Country-level biodiversity significance |
| Indonesia | * Indonesia is an archipelago which comprises over 17,000 islands, and 7 major biogeographic regions. Indonesia is considered one of the world’s megadiverse countries, with two of the world’s hotspots: the Wallacea and Sundaland Biodiversity Hotspot.[[1]](#footnote-0) A significant proportion of Indonesia’s population is dependent on the country’s coastal ecosystem services, particularly the mangroves, coral reef, and sea grass plain. * There are a number of endemic species to Indonesia's ecosystems, which are found throughout the archipelago. This distribution is matched in the geographic scope of species range-size rarity—relative to the global average coverage, Indonesia is among the homogeneously critical countries. * Key Biodiversity Areas (KBAs) within the country are protected at a rate below the global average, 24.92 to 44 percent, respectively. Large KBAs outside of/or partially within Protected Areas (PAs) clustered in Sumatra, Kalimantan, Papua, and Sulawesi, particularly Maputo and Gaza Province and include: [Rawa di Pesisir Kapuas](http://www.keybiodiversityareas.org/site/factsheet/15905), [Pulau Nias](http://www.keybiodiversityareas.org/site/factsheet/15804), [Kepulauan Selayar](http://www.keybiodiversityareas.org/site/factsheet/44852), [Kawaluso](http://www.keybiodiversityareas.org/site/factsheet/44748), [Wapoga](http://www.keybiodiversityareas.org/site/factsheet/26463), [Bumi - Tobo - Sirwo](http://www.keybiodiversityareas.org/site/factsheet/26434), and the [Hose-Laga mountains](http://www.keybiodiversityareas.org/site/factsheet/16058). PA protection of KBAs has risen from 2000, from 18.77 percent. * Mapping efforts by AMAN’s membership are found [here](https://www.aman.or.id/peta/), with BRWA’s ancestral lands database [here](https://www.brwa.or.id/sig/).[[2]](#footnote-1) * The Coral Triangle Initiative has a [marine biodiversity conservation prioritization](http://www.coraltriangleinitiative.org/sites/default/files/resources/8_Geographic%20Priorities%20for%20Marine%20Biodiversity%20Conservation%20in%20Indonesia.pdf) map, and academic studies have investigated [participatory mapping in conservation planning in Jor Bay, Indonesia](https://iopscience.iop.org/article/10.1088/1755-1315/414/1/012001/meta), among other regions. * Prioritization mapping efforts of the Wallacea Biodiversity Hotspot, conducted by CEPF have extensively profiled KBAs by irreplaceability, vulnerability, as well as climate risk, Indigenous and local community capacity, and funding as of 2014.[[3]](#footnote-2) * In the dated CEPF document for the Sundaland hotspot, the authors prioritized Sumatra, as it holds the highest levels of biodiversity under the most severe threat. In the years that followed this prediction of loss of habitats and species has continued.[[4]](#footnote-3) * Stores of irrecoverable carbon are relatively high throughout the country, with key concentrations in Kalimantan, and Papua. * The primary land cover types are Forest - 100Mha; Agriculture - 67.1Mha; Wetland - 15.9Mha; Water - 2.55Mha; and Sparse vegetation - 1.93Mha. This however, is not disaggregated by primary or natural forests, of which FAO produced estimates in 2015 as: Naturally Regenerated Forest - 40.0Mha; Primary Forest - 46.0Mha; Planted Forest - 4.95Mha.[[5]](#footnote-4) * Indonesia has 7 ramsar sites with additional context [here](https://rsis.ramsar.org/sites/default/files/rsiswp_search/exports/Ramsar-Sites-annotated-summary-Indonesia.pdf). * Indonesia is below the global average in ocean health, with large gaps in sustainable food provision, and moderate deficiencies in artisanal fishing opportunities, coastal livelihoods and economies, and clean waters. |
| Malaysia (Islands) | * Malaysia is one of the world’s megadiverse countries, with equal importance of its terrestrial and marine habitats. Due to a strong commitment by the national government at Rio in 1992, Malaysia’s forest cover remains high, covering over 50 percent of land area. Hill and montane forests have a high level of endemism, which rises with altitude. Malaysia’s tropical peatlands are a highly vulnerable category of wetland, and provide significant ecosystem services from carbon storage to fish provision for local communities.[[6]](#footnote-5) * Malaysia’s coastal regions are dominated by mangroves, which cover 544 kHa of Malaysia’s Exclusive Economic Zone (EEZ). Also within the EEZ, is the Coral Triangle area, which has the greatest concentration of marine biodiversity in the world. Malaysia’s coral reefs are predominantly located along the east coast of Peninsular Malaysia, Sabah, and Sarawalk. Valuation of the ecosystem services of these reefs were estimated in 2014 at $45B/yr.[[7]](#footnote-6) * There are a number of endemic species to Malaysia's ecosystems, which are found predominantly in Western Peninsular Malaysia (Perak, Selangor, and Negeri Sembilan States) and in Island Malaysia (Northern Sarawak and Northern Sabah). This distribution is matched in the geographic scope of species range-size rarity—relative to Peninsular and Island Malaysia, the States of Sarawak and Sabah have a higher concentration of important ranges. * Key Biodiversity Areas (KBAs) within the country are protected at a rate below the global average, 37.08 to 44 percent, respectively. Large KBAs outside of/or partially within Protected Areas (PAs) are clustered in Southern Sarawak and Peninsular Malaysia and include: [Kelabit Highlands](http://www.keybiodiversityareas.org/site/factsheet/16067), [Hose-Laga mountains](http://www.keybiodiversityareas.org/site/factsheet/16058), [South-East Pahang peat swamp forest](http://www.keybiodiversityareas.org/site/factsheet/16040), [Belum-Temenggor](http://www.keybiodiversityareas.org/site/factsheet/16003), [Bintang Range](http://www.keybiodiversityareas.org/site/factsheet/16005), and [Ulu Muda](http://www.keybiodiversityareas.org/site/factsheet/16048). PA protection of KBAs has risen from 2000, from 36.55 percent. * PACOS Trust has ongoing projects with Indigenous or local communities in Gana village, Kota Marudu; Wasai village, Tamparuli; Kipouvo village, Penampang; Kipouvo village, Penampang; Kibunut village, Penampang; and Togudon village, Penampang.[[8]](#footnote-7) * Academic studies include a dated [multi-criteria decision making case study in Sabah](https://www.sciencedirect.com/science/article/pii/S0169204604000763) and recent [mapping research agendas for tropical peatland management](https://www.cambridge.org/core/journals/environmental-conservation/article/research-agendas-for-the-sustainable-management-of-tropical-peatland-in-malaysia/B36784C62D03B95324F1A6228D5BEA0C). * The Coral Triangle Initiative has a [marine biodiversity conservation prioritization](http://www.coraltriangleinitiative.org/sites/default/files/resources/8_Geographic%20Priorities%20for%20Marine%20Biodiversity%20Conservation%20in%20Indonesia.pdf) map, which includes limited prioritization of Island Malaysia. In 2018 WWF produced a [marine priority conservation area mapping report](https://d2ouvy59p0dg6k.cloudfront.net/downloads/hob_spatial_planning_report_fa.pdf) for Island Malaysia, considering climate change mainstreaming, proactive engagement with state authority, and community conservation efforts. * The CEPF document for the Sundaland hotspot, contains no information for Malaysia.[[9]](#footnote-8) * Stores of irrecoverable carbon are moderate throughout the country, with key concentrations along protected corridors. * The primary land cover types are Forest - 20.2Mha; Agriculture - 10.8Mha; Wetland - 1.35Mha; Water - 389kha; and Settlement - 382kha. * Malaysia has 7 ramsar sites with additional context [here](https://rsis.ramsar.org/sites/default/files/rsiswp_search/exports/Ramsar-Sites-annotated-summary-Malaysia.pdf). * Malaysia is below the global average in ocean health, with large gaps in sustainable food provision, and moderate deficiencies in clean waters. |
| Philippines | * The Philippines are located in the North of the Coral Triangle, and are one of the world’s marine megadiverse countries. The marine ecosystems of the Philippines include coral reefs, mangrove forests, and seagrass meadows.[[10]](#footnote-9) The Philippines are classified as their own hotspot by CEPF, due to the islands having among the highest rate of endemism—with plant endemism estimates between 45 - 60 percent.[[11]](#footnote-10) Overall the country contains two-thirds of the world’s biodiversity and between 70 - 80 percent of the world’s plant and animal species.[[12]](#footnote-11) * The Philippines’ endemic species ranges are high throughout the island chain, with the geographic scope of important areas based in species range-size rarity homogeneously distributed throughout the country. * Key Biodiversity Areas (KBAs) within the country are protected at a rate below the global average, 41.94 to 44 percent, respectively. Large KBAs outside of/or partially within Protected Areas (PAs) are scattered throughout the island chain and include: [Busuanga Island](http://www.keybiodiversityareas.org/site/factsheet/9748)/[Culion Island](http://www.keybiodiversityareas.org/site/factsheet/9749), [Southwestern Negros](http://www.keybiodiversityareas.org/site/factsheet/9765), [Mount Kaluayan - Mount Kinabalian Complex](http://www.keybiodiversityareas.org/site/factsheet/9792), [Mount Kampalili-Puting Bato](http://www.keybiodiversityareas.org/site/factsheet/9788), and [Babuyanes Islands](http://www.keybiodiversityareas.org/site/factsheet/22324). PA protection of KBAs has risen from 2000, from 30.58 percent. * Academic studies include a recent thesis on the Coral Triangle which produced a [prioritization mapping platform](http://uoa.maps.arcgis.com/apps/webappviewer/index.html?id=2f36a9ec18674a13a4e57fd290fc020a) for conservation expansion, and [accompanying documentation](https://sites.google.com/view/coral-triangle-digital-map/coral-triangle?authuser=0). * The dated CEPF documentation highlighteted priority areas in the Sierra Madre, Palawan, and Eastern Mindanao Corridor.[[13]](#footnote-12) * The accompanying resilience atlas mapping platform contains extensive spatial data on Indigenous Peoples land rights and claims throughout the Philippines.[[14]](#footnote-13) * Stores of irrecoverable carbon are moderate throughout the country, with key concentrations in Mindanao and Luzon island groups. * The primary land cover types are Agriculture - 18.6Mha; Forest - 9.78Mha; Wetland - 926kha; Water - 700kha; and Settlement - 238kha. * The Philippines have 7 ramsar sites with additional context [here](https://rsis.ramsar.org/sites/default/files/rsiswp_search/exports/Ramsar-Sites-annotated-summary-Philippines.pdf). * The Philippines are representative of the global average in ocean health, with moderate coastal livelihoods and economies, and sustainable food provision/artisanal fishing opportunities. |
| Timor- Leste | * Timor-Leste is located in the biodiversity hotspot of Wallacea and the Coral Triangle. The country’s potential EEZ of 75,000 Km2 is a habitat to numerous marine species and a key area for conservation.[[15]](#footnote-14) * Timor-Leste has species ranges throughout the country, which due to its size does not have considerable variation in species range-size rarity. * Key Biodiversity Areas (KBAs) within the country are protected at a rate below the global average, 32.28 to 44 percent, respectively. Large KBAs outside of/or partially within Protected Areas (PAs) are scattered along the North of the country and include: [Be Malae](http://www.keybiodiversityareas.org/site/factsheet/16256), [Maubara](http://www.keybiodiversityareas.org/site/factsheet/15794), [Perairan Subaun](http://www.keybiodiversityareas.org/site/factsheet/45004), and [Nari](http://www.keybiodiversityareas.org/site/factsheet/44996). PA protection of KBAs has risen from 2000, from 12.43 percent. * Academic studies include a recent thesis on the Coral Triangle which produced a [prioritization mapping platform](http://uoa.maps.arcgis.com/apps/webappviewer/index.html?id=2f36a9ec18674a13a4e57fd290fc020a) for conservation expansion, and [accompanying documentation](https://sites.google.com/view/coral-triangle-digital-map/coral-triangle?authuser=0) which highlights several areas for potential expansion. * [Timor-Leste’s NBSAP (2011-2020)](https://www.cbd.int/doc/world/tl/tl-nbsap-v2-en.pdf) contains recent prioritization mapping done at the national level, though there is less clarity on the involvement of Indigenous communities. This however, was [extensively documented in an earlier capacity development plan](https://www.cbd.int/doc/meetings/mar/cbwsoi-seasi-01/other/cbwsoi-seasi-01-timor-leste-01-en.pdf) (indicating that there is national appetite for IPLC involvement). [This CBD document](https://www.cbd.int/financial/micro/timor-local.pdf) illustrates an effort to map Indigenous Knowledge and priorities in 2011. * Stores of irrecoverable carbon are low to moderate throughout the country, with concentrations in the Southern coast and in the East of the country. * The primary land cover types are Agriculture - 1.27Mha; Forest - 209kha; Wetland - 15.2kha; Water - 13.4kha; Settlement - 6.83kha; and Sparse vegetation - 3.38kha. * Timor-Leste has no ramsar sites. * Timor-Leste is well below the global average in ocean health, with insufficient access to sustainable food provision, coastal livelihoods and economies, and moderate deficiencies in clean waters. |

1. <https://www.cbd.int/countries/profile/?country=id> [↑](#footnote-ref-0)
2. **There are ongoing disputes over the accuracy of this mapping effort and the level of recognition given by the government to communal lands in the one map policy.** [↑](#footnote-ref-1)
3. <https://www.cepf.net/sites/default/files/ecosystemprofile_wallacea.pdf> [↑](#footnote-ref-2)
4. <https://www.cepf.net/sites/default/files/sundaland-ecosystem-profile-2001-english.pdf> [↑](#footnote-ref-3)
5. <http://www.fao.org/forest-resources-assessment/current-assessment/en/> [↑](#footnote-ref-4)
6. <https://www.cbd.int/doc/world/my/my-nbsap-v2-en.pdf> [↑](#footnote-ref-5)
7. Ministry of Natural Resources and Environment.(2014). Fifth National Report to the Convention on Biological Diversity. Putrajaya,

   Malaysia. <https://www.cbd.int/doc/world/my/my-nr-05-en.pdf> [↑](#footnote-ref-6)
8. <https://pacostrust.com/projects/> [↑](#footnote-ref-7)
9. <https://www.cepf.net/sites/default/files/sundaland-ecosystem-profile-2001-english.pdf> [↑](#footnote-ref-8)
10. https://researchspace.auckland.ac.nz/handle/2292/37462 [↑](#footnote-ref-9)
11. <https://www.cepf.net/sites/default/files/final.philippines.ep__1.pdf> [↑](#footnote-ref-10)
12. <https://www.cbd.int/countries/?country=ph> [↑](#footnote-ref-11)
13. <https://www.cepf.net/sites/default/files/final.philippines.ep__1.pdf> [↑](#footnote-ref-12)
14. <https://ici.resilienceatlas.org/map?tab=layers> [↑](#footnote-ref-13)
15. <https://www.cbd.int/countries/profile/?country=tl#facts> [↑](#footnote-ref-14)