



Directorate of Environmental  
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# SEEA in Biodiversity Strategy and Action Plan in Indonesia

# Indonesia One of the 17 “megadiverse” countries



Indonesia has 554 Terrestrial Protected Areas covering 27,13 million ha and 196 Marine Protected Areas Covering 23,14 million ha



- One of the world’s centers for agrobiodiversity of plant cultivars and domesticated livestock with estimated 25,000 flowering plants, 55% endemic
- It is estimated that around 30,000–40,000 species of seed plants (15.5% of the total number of plants in the world) are in Indonesia
- **The Highest in the world of endemicity** Birds, Mamals, Reptile Endemicity
- 8.157 vertebrates Species (Mamals, Birds, Herpetofauna, fish)
- 1.900 Butterfly species (10% of the total in the world)



It is known that around **74 types of ecosystems** can be found in Indonesia and create very complex formations that including

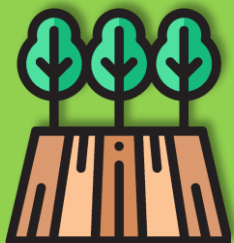
- marine ecosystems (deep/shallow sea, coral reefs and seagrass beds),
- limnic,
- semi-terrestrial (mangroves and riparian)
- terrestrial ecosystem
- artificial ecosystems (paddy fields, plantation, ponds, etc.)



Genetic resources from animal, plant, and microorganism that can be used for medicines and cosmetic trough traditional knowledge and biotechnology



# An example: Indonesia's Forest Cover within the last 20 years



In the last 20 years, Indonesia has lost **10,8 Million ha** forest cover due to land use conversion and forest fires

Forest cover in Indonesia is estimated to decrease by **17,2 Million ha** between 2000 and 2045, if no specific actions taken to protect the forest coverage area.

The value of biodiversity loss estimated **USD 295 million (2015)**

<https://www.worldbank.org/in/news/feature/2015/12/01/indonesias-fire-and-haze-crisis>

## Forest Coverage Area Loss by Island 2000-2020

**Sumatera Island**  
-3.916.000 ha

**Java Island**  
-270.475 ha

**Bali Island**  
+38.050 ha

**Kalimantan Island**  
-5.044.725 ha

**Sulawesi Island**  
-542.050 ha

**Maluku Island**  
-143.850 ha

**Papua Island**  
-685.450 ha

# The Implementation of SEEA in Indonesia



## SISNERLING

- Sistem Terintegrasi Neraca Lingkungan dan Ekonomi (SISNERLING) is issued by BPS annually
- The purpose of SISNERLING is to give the picture of development impact and economic activity for the natural resources and natural carrying capacity

BPS has compiled SISNERLING since 1990

Indonesia adopted guideline manual from UNSD in 2001

For the first time Indonesia implemented SEEA CF in SISNERLING in 2016 and continued until 2020

The scope of natural capital accounting in SISNERLING:

- 9 Types of Energy and Mineral Resources
- 2 Types of wood/timber resources
- Land accounting

## SPECIFIC STUDY FOR ENVIRONMENTAL AND ECONOMIC ACCOUNTING

2016-2017



Exclusive Survey for Environment Goods and Services Sector and Environment Protection Expenditure Account (EGGS/EPEA)

2018



In-depth Study SEEA for Agriculture, Forestry, and Fishery

2019-2020



Exclusive survey for sustainability tourism

2021-2022



In-depth Study Ocean Accounts



# Wealth Accounting and the Valuation of Ecosystem Services in Indonesia



## The Indonesia WAVES Program

Indonesia joined WAVES in 2013 and formalized the partnership in 2015

Steering  
Committee



### Strengthen SISNERLING

- New accounts were developed;
  - land cover accounts at national level
  - ecosystem extend accounts for Sumatera and Kalimantan
  - Initial water pilot accounts in Citarum Watershed

“to promote sustainable development by ensuring that natural resources are mainstreamed in development planning and national economic accounts”



### Integrated low carbon development to RPJMN

- LCDI has 5 (five) main strategies of Indonesia's Low Carbon Development to achieve high economic growth while reducing emission up to 27,3% in 2024
- SEEA compliant data these aspects were particularly useful to introduce and analyze carrying capacity



### The adoption of legislation on natural capital

- Issued a new Decree Number KEP.53/DEP.3/10/2017 for the establishment of the Coordinating Group for SISNERLING implementation
- Drafting the regulation on Fiscal Potential of Natural Resources

**2013:**  
Indonesia  
joined WAVES  
Program

**2014:** Initial study and stakeholder consultation to identify natural capital and ecosystem account related to government policy and feasibility assessment of WAVES land account

**2015:** capacity building for land accounting; WAVES's concept was agreed by WB

**2019:**  
publicity of  
new  
account,  
LCDI  
report,  
closing  
ceremony

**2018:** capacity building about macro economic indicator, review for land cover, ecosystem area, peat and ecosystem account, water account

**2017:** participation on WAVES training, conference; Coordination Team was formed; SC team was legalized; development of land account

**2016:** water account training; new decree about SISNERLING coordinating team; South to South Knowledge Exchange with MoF

## Existing Strategy:

# Environmental Issues has now been incorporated as Government's Priorities in the RPJMN 2020-2024



## Indonesia's Mid Term Planning Document (RPJMN)

Within Indonesia's planning document (RPJMN), through a long process, Indonesia has successfully incorporated three program (1) Increasing Environmental Quality (2) Enhancing Disaster and Climate Resilience and (3) Low Carbon Development included as one of the Development Priorities.

### Goals



#### Program Priority 1 Improving Environmental Quality

Improving the quality of the environment, through improving the quality of water, air, sea water, land cover and handling pollutants



#### Program Priority 2 Enhancing Disaster and Climate Resilience

Enhancing disaster and climate resilience, through strengthening the convergence between disaster risk reduction and climate change adaptation



#### Program Priority 3 Low Carbon Development

Implementing Low Carbon Development, through emission reduction policies and emission intensity in priority areas (energy, transportation, land, waste. Industry, and marine)

### Measures

Increasing Environmental Quality Index

69.7

In 2024

2020: 70,27

Reduction of GDP potential loss due to disasters and climate issues

1,25%

compared to total GDP in 2024

no data available

Emission Reduction Target

27,3%

compared to baseline in 2024

2019: 23.46%

Emission Intensity Reduction Target

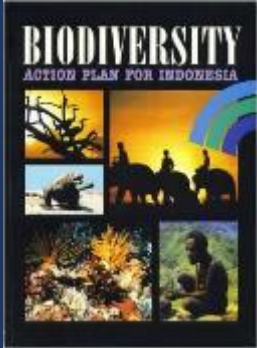
31,6%

compared to baseline in 2024

2019: 20.77%

Next:  
Biodiversity Index

# Indonesia Biodiversity Strategy And Action Plan (IBSAP)



1993

## Biodiversity Action Plan for Indonesia (BAPI)

Goal: To conserve as much as possible of the biodiversity on which the livelihood and prosperity of Indonesia depends



2003-2020

## INDONESIA BIODIVERSITY STRATEGY and ACTION PLAN 2003-2020.

Into 3 Books:

1. National Document
2. Ecoregion Document
3. Network Document (database)



2015-2020

- UPDATE IBSAP 2015-2020
- The Aichi Targets are translated into 22 National Targets (NP) of IBSAP 2015-2020.
- Several NP have become priorities in the 2015-2019 RPJMN and in the Ministry Strategic Plan



2020-?????

- **Next The IBSAP Post 2020**
- **With main Indicators/Common Goals**
- **Synergy with The Post 2020 GBF, Climate Change Issue, Indonesia 2045 Vision, RPJMN, Green Economy, & SDGs**





The Indonesian government relies the national development for the natural resources and biodiversity management. Indonesia's economic development is oriented towards improving human welfare which cannot separate from the carrying capacity of the environment and natural resources to have a sustainable national development



The important of composing the Post 2020 Biodiversity Management in Indonesia and integrated it to the regulation with

- The end of IBSAP 2015-2020
- Strategy for management biodiversity as one of Mega-Biodiversity Country
- The ongoing Post 2020 Global Biodiversity Framework (GBF Post-2020)
- The end of Indonesia's Mid Term Planning Document (2020-2024) and Indonesia's Long Term Planning Document (2005-2025)



## With consideration:

- The synergy with The Post 2020 GBF, Climate Change Issue, The Priority of Development in RPJMN and Indonesia vision for 2045, Green Economy, dan SDGs
- Formulating Biodiversity Policy and Strategy Directions based on clear operational definitions, scope, main indicators to priority locations
- The mapping of the issues and underlying causes with involving all related stakeholders
- The direction of document: Transformative Change, Not Business as Usual, **Evidence/Scientific Based Policy**, and Reliable



# Strategy for Post 2020 Biodiversity Management

## Policy Intervention, Strategi & Program

### Scope/Focus



The clear definition and scope

### Baseline



The update of data and information about Biodiversity Status



The evaluation of previous IBSAP and existing document

System of Environmental Economic Accounting

### Gap/Problem Statement



### Suplemen Evidence/ Science-Based policy

**Biodiversity Status in 7 Ecoregion**  
(as though update on ecology book by Tony Whitten)

**Main Indicator for Biodiversity Management Strategy**

**Interlinkages Between Biodiversity-Climate Change**

**Money Mechanism and CHM**

**Resources Mobilization Strategy**

**Communication Outreach Strategy**

**Action Plan and Priority Location for Indonesia Biodiversity Management**



**Strengthen the Institutional and Regulation**



**Integrated Monitoring and Evaluation System**



**Resource Mobilization Strategy**



**Indicator/ Common Goal**

System of Environmental Economic Accounting

**Indonesia Vision:**  
Biodiversity has been valued, conserved, restored, and used sustainably and ecosystem services have been maintained by 2050

**Global Vision:**  
Living in Harmony with Nature by 2050

# SEEA Role in Biodiversity Management in Indonesia



The SEEA can be used to inform biodiversity policies in an integrated manner and develop indicators for monitoring progress toward the National Biodiversity Targets



The SEEA's role on biodiversity to supporting the economy aspect helps make the economic case for conservation. Its integrated systems approach can identify key trade-offs and support the development of "win-win" conservation approaches (in terms of physical and monetary)



Methodological Basis for Target Achievement in IBSAP Post 2020, the next RPJPN & RPJMN for Biodiversity Aspect



Assist the law enforcement for the violations of the use of natural resources and the environment cases with the correct value of natural resources and the environment



The SEEA can be an helpful tool to formulating policies designed at addressing the drivers of biodiversity loss and degradation



# Thank you

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