

# INDONESIA

## BASIC INFORMATION

### POPULATION

280,4 million people (2022)

### TOTAL AREA

1.919.440 km<sup>2</sup> (land area) and 3.257.483 km<sup>2</sup> (ocean area) – archipelago country (more than 17.000 island)

## BIODIVERSITY CONTEXT

- Indonesia is a megadiversity country. It is estimated that there are more than 300,000 wildlife species or 17% of the world wildlife live in Indonesia, even though Indonesia's land is only 1.3% of the world's land.
- A home for 515 mammals species, 1,539 bird species, and 45% of the world fish species.
- A home for endemic wildlife. There are 259 endemic mammals, 382 endemic birds, and 172 endemic amphibians (IUCN, 2011). The existence of the endemic species is important because if those endemic animals are extinct, it will also be extinct in the world.

## CHALLENGE

- The rapid and unplanned urbanization and urban sprawl contribute to the significant loss of Indonesia's rich biodiversity (68 species are critically endangered, 69 species are endangered and 517 species are vulnerable).
- The need for financial resources to achieve national and global biodiversity management targets.
- Internalization and alignment of biodiversity management synergies into national development planning and budgeting policies.

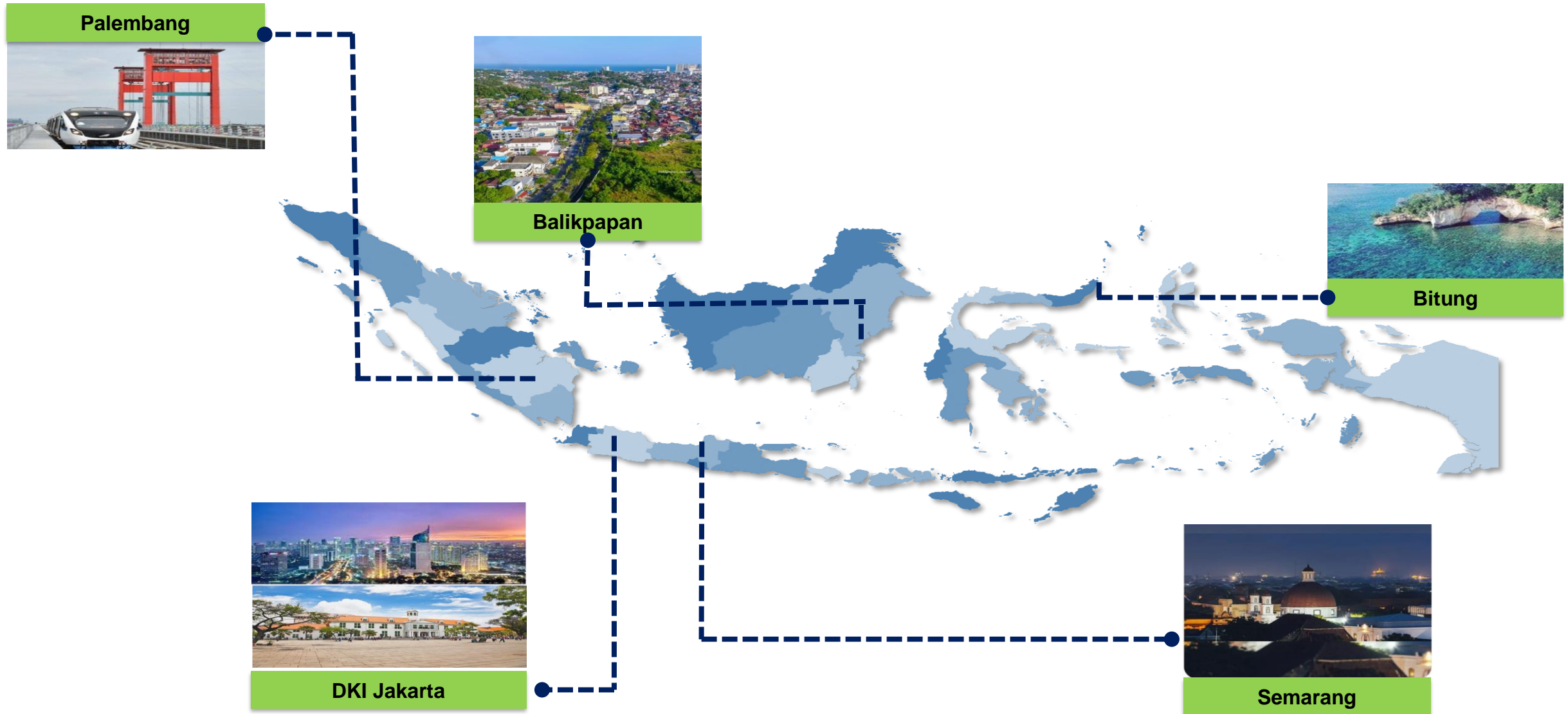


## OPPORTUNITY AND ACTION

- After the end of the 2015-2020 Indonesian Biodiversity Strategy and Action Plan (IBSAP), Indonesia is currently formulating The Post 2020 Global Biodiversity Framework (GBF Post-2020) which focuses internalization efforts and actions to save biodiversity into national planning documents.
- Principles and Directions for the Formulation of the Post-2020 Biodiversity Management Plan and Strategy:
  - Synergy with Climate Change Issues, Development Priorities, Green Economy, and SDGs;
  - Transformative Change, Not Business as Usual, Evidence/Scientific Based Policy, and Reliable; and
  - Formulate policy directions and strategies based on clear operational definitions, scope, key indicators to target locations.

Sector	Action
Forest and Land	Management of protected areas and conservation areas with high biodiversity value
	Prevention of disturbances and threats in forest areas, peat ecosystems and other ecosystems
	Monitoring the habitat quality of endemic, protected and threatened species
	Restoration and rehabilitation of forest cover through replanting activities on conservation and non-conservation lands
	Increasing the role of the community in reducing threats through community partnerships with social forestry, customary forest and private forest schemes
Mineral and Energy Resources	Protection of karst ecosystems for threat reduction
	Reducing potential threats to biodiversity through mining activities that are oriented towards environmental preservation
Agriculture and Planning	Reduction of potential threats to biodiversity through sustainable plantations
Maritime	Protection of the preservation of biodiversity
	Restoration and rehabilitation of ecosystems in water conservation and non-conservation areas
	Environmental pollution control
	Marine resources and fisheries control

## Participated Indonesian Cities







# BALIKPAPAN



## BASIC INFORMATION

- **Population:** 710.293 people (2021) and for the next 10 years will increase to **794.293** people (2032).
- **Total Areas:** 51.101,24 Ha

## URBAN BIODIVERSITY CONTEXT



- 52% of total area is conservation area (mangrove, protection forest, city forest and city park).
- A home for endangered animals and plants (nepenthes, honey bear, balikpapan ginger, timber, orang utan, proboscis monkey, dolphin and rubber sea cucumber).

## CHALLENGE



- Its territory predominantly a conservation area but now is threatened by rapid urban development
- Population growth faster as impact of relocation of New Capital
- Lack of supporting resources (financial and human capacity)
- Availability of biodiversity data (inc. map)

## OPPORTUNITY AND ACTION



- Government commitment to preserve the protected forest area (inc. mangrove) and Balikpapan Botanical Garden on northern part of Balikpapan.
- Target of conservation area determined in Balikpapan Spatial Plan (Balikpapan Local Regulation No. 12 Year 2012 about Balikpapan Spatial Plan 2012-2032).
- Coal mining is not allowed in Balikpapan (Mayor Regulation No. 12 Year 2013 about Balikpapan Restriction Coal Mining).
- Balikpapan has implemented Climate Change Regional Action Plan (RAD) and Green Space Masterplan



# PALEMBANG



## BASIC INFORMATION

- **Population:** 1.668.848 people (2021) and projected will increase to 2.248.673 people (2042).
- **Total Areas:** 40,061 Ha

## URBAN BIODIVERSITY CONTEXT



- Percentage of green open space: 10,18% from total area (4,077.43 Ha).
- Known as Venice from the East due to the area that divided by long and wide river.
- A home for endangered animals such as bald eagle, brontok eagle, mouse eagle, estuarine crocodile, ivory turtle, belida fish.

## CHALLENGE



- Decline in river water quality due to waste from slum settlements and from industries along the Musi River
- Lack of Green Open Space

## OPPORTUNITY AND ACTION



- Target of conservation area (inc. river borders, green open space and conserved swanp) determined in Palembang Spatial Plan (Palembang Local Regulation No. 15 Year 2012 about Balikpapan Spatial Plan 2012-2032).
- Palembang Medium-Term Development Plan support Climate Change mitigation, where one of Key Performance target is to reduce Greenhouse Gas Emission.
- Palembang will develop Integrated Waste Water Management Installation and Incenerator (Groundbreaking 2023).
- Palembang revitalizes slum settlement near Musi River.
- Integrated monitoring is conducted by Local Environment Agency to prevent pollution from industries.
- Palembang initiate “Kampung Iklim” program.





# BITUNG



## BASIC INFORMATION

- **Population:** 227.177 people (2021)
- **Total Areas:** 31.350,35 Ha

## URBAN BIODIVERSITY CONTEXT

- Has 95 Diving Spots in Lembeh Strait Area
- 42,67% of total area is protected area (inc. protected forest and conservation forest).
- Home for 47 endangered animals species such as. black monkey, anoa, hog, sulawesi weasel, rangkong bird, maleo bird, yellow crested cockatoo, cuscus, tarsier.



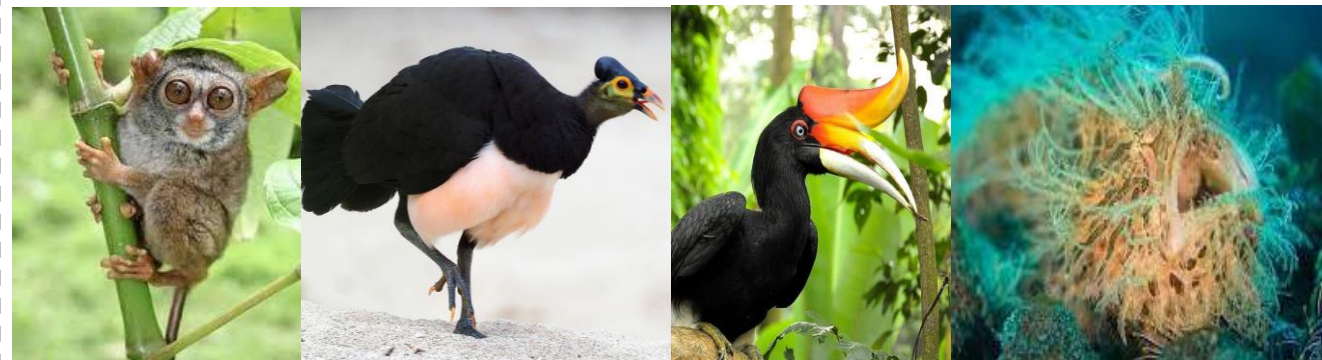
## CHALLENGE

- Lack of industrial waste water treatment and municipal solid waste and added by tourism activity, threatening the biodiversity of the Lembeh Strait.
- Flood occurred frequently.



## OPPORTUNITY AND ACTION

- Bitung Local Government initiate to establish:
  - Lembeh Strait Development Masterplan;
  - City Drainage Masterplan;
  - Waste Water Management Masterplan; and
  - Waste Management Masterplan
- Bitung has implemented Low Carbon Development.
- Target of conservation area determined in Bitung Revision Spatial Plan.







# SEMARANG



## BASIC INFORMATION

- **Population:** 1,8 million people
- **Total Areas:** 373.3 square km



## URBAN BIODIVERSITY CONTEXT

- Semarang is one of two cities in Indonesia that are members of the 100 Resilient Cities network in the world.
- The landscape is a mixture of various ecosystems (from mountains and hills to flat land and sea).



## CHALLENGE

- Flood & Land Subsidence
- Solid Waste Management
- Clean Water Access



## OPPORTUNITY AND ACTION

- One of our mission on Regional Medium-Term Development Plan 2021 – 2026 (RPJMD) is to make a Metropolitan City which is dynamic and environmentally friendly.
- Conservation Area & Building Coverage Limitation are regulated in Semarang Spatial Plan Year 2011-2031.
- Semarang has a concept “collaborate together” for all problems and initiatives encountered, which means that each stakeholder (Government and Private Sector) manages and monitors urban biodiversity together.
- Some initiatives in Semarang:
  - Public Private Partnership (PPP) West Semarang Water Supply System
  - Maintain, restore & make Green Spaces
  - Semarang Waste to Energy
  - Rechanneling The City (*Integrated Urban Water Management Program*)
  - *Urban Drainage System (Integrated Toll Road – Sea Dyke, Semarang river revitalization, Pumping Station)*





# JAKARTA



## BASIC INFORMATION

- **Population:** 10.60 million  $\pm$  3 million (commuter) people (2021) and for the next 10-15 years will increase into 11.45 million (2035).
- **Total Areas:** 661,5 km<sup>2</sup>

## URBAN BIODIVERSITY CONTEXT

- Percentage of green areas: 5,183% (3.334 ha) (public) dan  $\pm$  4% (private).
- 1,6% of total area is protected area (inc. protected forest, national park, coral, mangrove, etc).
- Home for protected species such as mouse eagle, asian Snakehead, bluwok stork, hawksbill turtle



## CHALLENGE

- Climate Change Impact: biodiversity loss (animal and plant habitats destruction).
- Increasing Quality of Life Through Recovery of City Ecosystems and Low-Carbon Development Implementation.
- Law enforcement improvement: sustainable land use to support urban biodiversity.



## OPPORTUNITY AND ACTION

- Jakarta has some regulations for developing urban nature and biodiversity:
  - Green city planning document for long term planning (RTRW/RPJPD), medium term planning (RPJMD) and annual planning (RKPD, regional strategic activities) that coordinated by Regional Development Planning Agency;
  - Biodiversity Master Plan coordinated by Environmental Agency;
  - Green Open Space Master Plan coordinated by City Parks and Forest Agency.
- Jakarta has Special Institution Unit focus on Biodiversity Management Program.
- Biodiversity database is routinely updated.
- Increase the number of tree in the existing park (ex. Tebet Ecopark – more than a hundred new trees were planted)

