



# Indonesia BON: toward the establishment



Dedy Darnaedi & Johanes Purwanto  
**MAB-Indonesia,**  
**Indonesian Institute of Sciences**

**WG-2: Asia-Pacific Biodiversity Observation Network (AP-BON)**  
9<sup>th</sup> GEOSS Asia-Pacific Symposium,  
11-13 January 2017, Tokyo-Japan

## SBSTTA 17, Montreal-October 2013.

Mr. Scholes, GEO-BON, Expert Workshop on biodiversity data and observing systems in support of the implementation of the Strategic Plan for Biodiversity 2011 – 2020

- Many countries had no biodiversity observation networks (BON) because they **lacked capacity, funding and guidance.**
- Patchy, project-based data, heterogeneity and incompatibility of terminology and methods, absence of information systems and human and technological capacities were common problems. However, many countries had made good and innovative progress on biodiversity observation networks, including through **regional cooperation**, the development of global databases, citizens science, earth observation and the use of essential biodiversity variables. In order to encourage public investment, a stronger case must be made for using biodiversity monitoring data to inform decision-making.
- In order to support the establishment and maintenance of national biodiversity observation systems, it had been suggested that the Group on Earth Observations should provide regionally-tailored start-up kits (**BON-in-a-Box**) and strategies to integrate remotely-sensed and *in situ* data.
- It could also help provide economic arguments for biodiversity and biodiversity observation systems, advocacy to funders, and capacity building on terminology, methods and standards. The Group's work plan was already largely in line with those priorities and further adjustments would be made in follow-up to the Workshop.
- The Group and its partners were keen to engage further, including by identifying ways to meet countries' needs for **specific forms of assistance.**

## Current situation

Ecological studies, monitoring, permanent/semi permanent plots scatter in different ecosystem types; heterogeneity and incompatibility of terminology and methods, absence of information systems)

Managed by researchers, institutions, organizations ----- **networking in the same language is needed**

## Institutional linkage, dialogues and group discussion lead by:

- **Biosphere Reserves (MAB-Indonesia)**
- RC Biology-LIPI (NFP of SBSTTA/CBD, CITES)
- R.C. Forestry, MoE and Forestry Department (NFP IPBES; CBD, CITES)
- Private Sectors
- Universities

## Refer to National Agenda

- National Biodiversity Strategy and Action Plan-Indonesia 2015-2020
- CBD-Aichi Targets implementation
- IPBES agenda
- SDG's target and national commitment

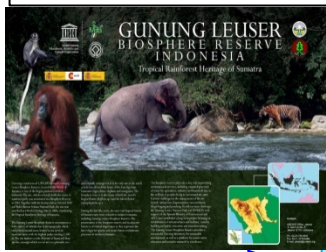
## Indonesian MAB

**669 Biosphere Reserve → 120 Countries (2016)**



**Indonesia → 11 Biosphere Reserves**

# Biosphere Reserve in Indonesia



6

7

3

4

8

5

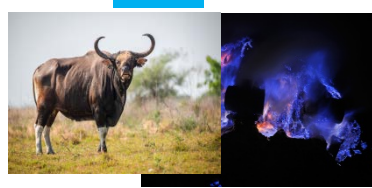
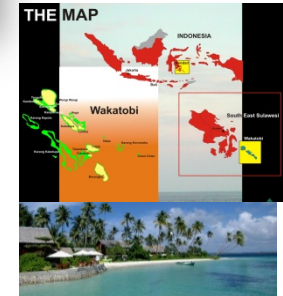
1

9

11

2

10



7, 8, 9, 10, 11 recently established (2010-2016)

# Biosphere Reserves in Indonesia

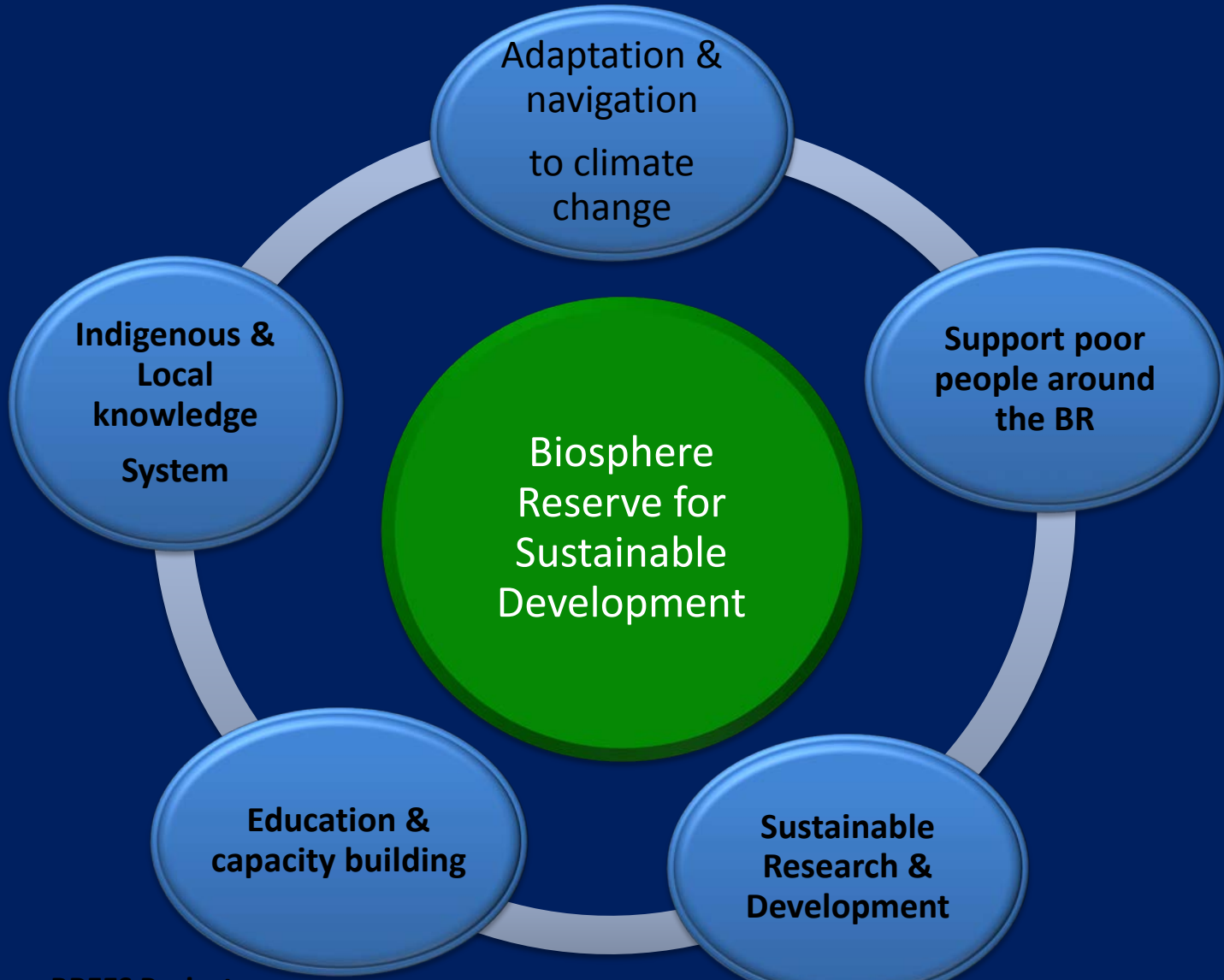


No.	Cagar Biosfer	Luas (ha)			Size TOTAL (ha)
		Core area	Buffer Zone	Transitional Zone	
1	Gede-Pangrango	24.500,00	54.800,00	87.700,00	167.700,00
2	Komodo	173.300,00	288.353,00	656.350,00	1.118.003,00
3	Tanjung Puting	501.988,94	264.685,77	203.023,79	969.698,50
4	Lore Lindu	217.991,18	503.738,00	1.461.263,00	2.182.992,18
5	Pulau Siberut	190.500,00	128.277,00	84.223,00	403.000,00
6	Gunung Leuser	1.094.692,00	1.494.877,52	2.705.192,12	5.290.761,64
7	Giam Siak Kecil- Bukit Batu, APP	178.722,00	222.425,00	304.123,00	705.270,00
8	Wakatobi	54.568,00	839.732,00	495.700,00	1.390.000,00
9	Bromo Tengger Semeru-Arjuno	78.144,50	96.349,55	238.880,51	413.374,56
10	Taka Bonerate- Kepulauan Selayar	530.765,00	702.260,00	3.117.711,00	4.350.726,00
11	Belambangan	127.855,62	230.277,40	320.814,34	678.947,36
TOTAL		<b>3.173.027,24</b>	5.056.052,64	9.674.980,76	<b>17.673.783,35</b>

Core areas

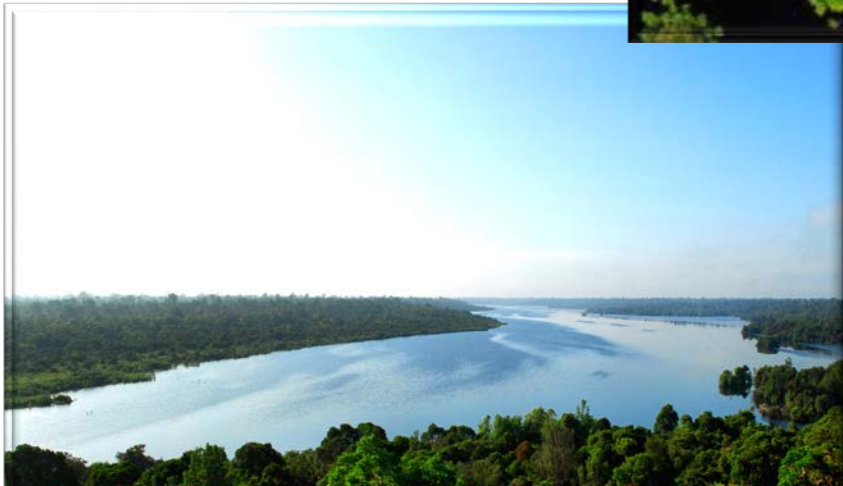
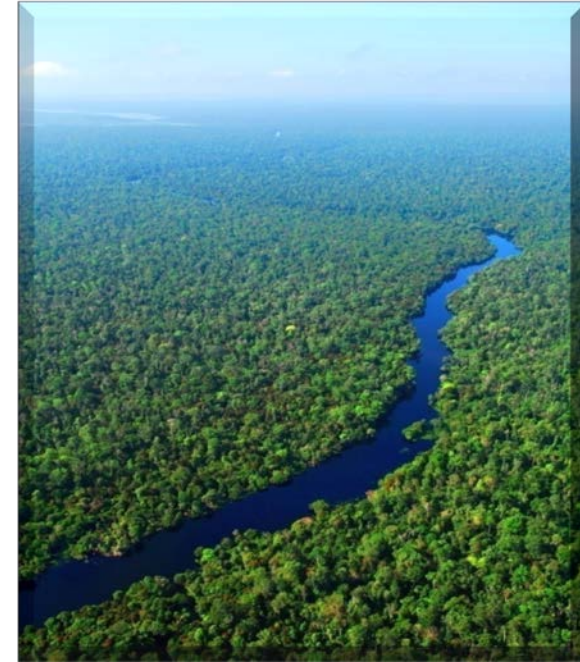
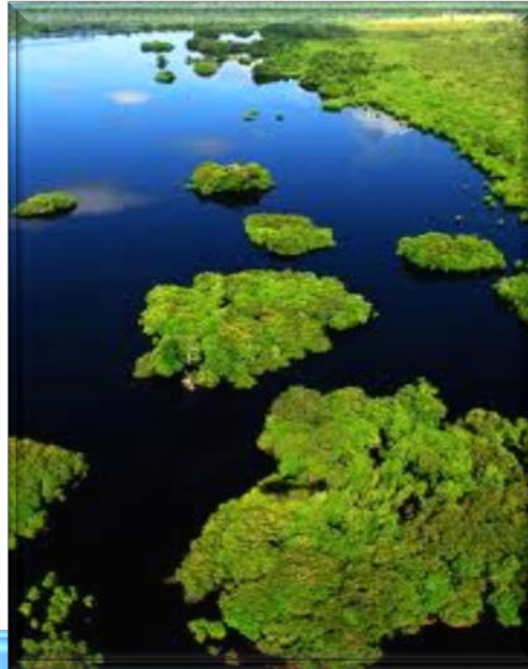
Total areas

# Biosphere Reserves and their environment



# Biosphere Reserve Giam Siak Kecil -Bukit Batu, Pekanbaru, Sumatera

(The largest peat land in Sumatera, 705.270,00 ha)





# Points of interest for Indo-BON

Indonesian Biosphere Reserve Program:

- 1. Establishment of New BRs*
- 2. Community Development Program*
- 3. Maintains current Ecosystem Services*
- 4. Partnership between multi-stakeholders in R and D for community development;*
- 5. Capacity building and promoting the program*
- 6. Strengthening legal aspect*
- 7. Strengthening Institution management systems*
- 8. Branding product of BR*
- 9. Create Trust fund*



## **Previous meetings in October and November, 2016 :**

### **Working Groups :**

RC Biology-LIPI : Dedy Darnaedi, Ruly Susanti

MAB-Indonesia : J. Purwanto, Endang Sukara, Kuswata Kartawinata

Research Center for Forestry, MoE and Forestry Depart: Ismayadi  
Samsudin

APP, Belantara Foundation : Dolly Priatna

Universities: Tatang Mitra Setya, Universitas Nasional, Jakarta

Nurainas, Universitas Andalas, Padang

Charly Hehatubun, Universitas Cendrawasih, Papua

Botanic Gardens: Bayu Adji, Titien Ng. Praptosuwiryo

### **Indo-BON**

**Next meeting will be in (May 2017 ? ) September 2017, during the National Seminar on Plant Diversity and Ecology, Universitas Andalas, Padang**

**Thank you very much**

*Dedy Darnaedi*

**darnaedi@gmail.com**

# BROMO-TENGGGER-SEMERU

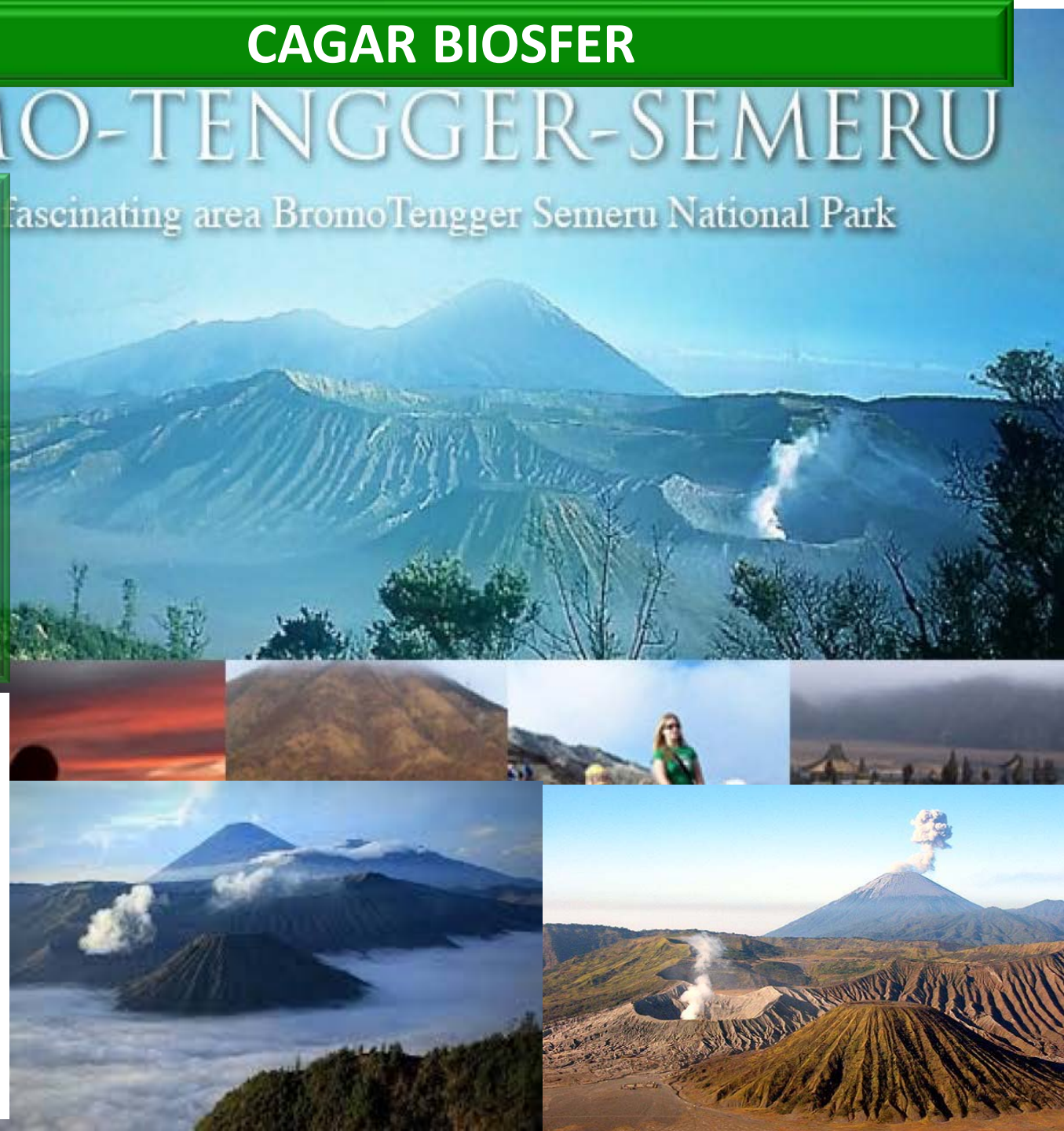
## TANTANGAN:

- ✓ Illegal activities
- ✓ Carrying Capacity
- ✓ Polusi dan kebakaran hutan
- ✓ Bencana alam (gunung meletus)
- ✓ Urbanisasi
- ✓ Pengaruh perubahan budaya
- ✓ Konflik tata ruang dan pemanfaatan lahan

## PELUANG:

- ✓ Penyeimbang ekosistem
- ✓ Jasa ekosistem: menara air dan ekowisata
- ✓ Pusat studi kawasan gunung berapi
- ✓ Pusat studi sosial budaya, etc.

Seeing a very fascinating area BromoTengger Semeru National Park



# CAGAR BIOSFER TAKA BONERATE-KEPULAUAN SELAYAR

## TANTANGAN:

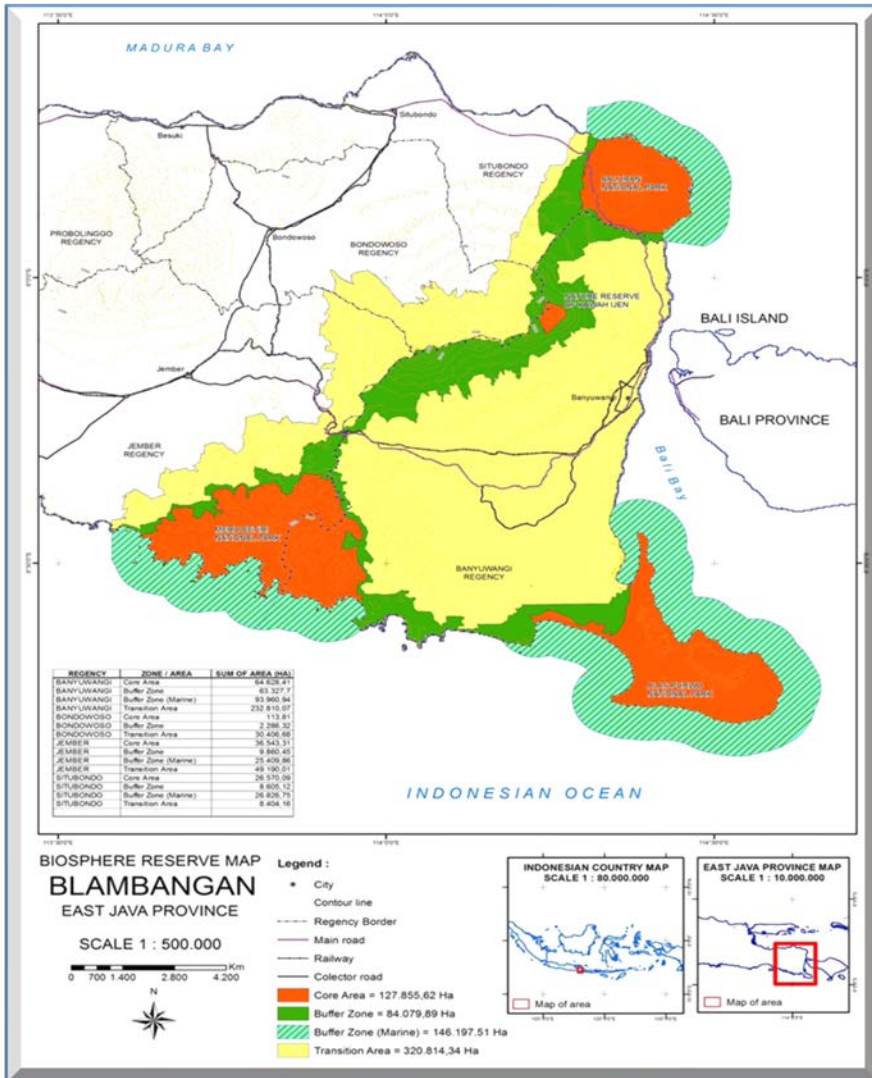
- ✓ ILLEGAL FISHING
- ✓ POLUSI
- ✓ KONFLIK TATA RUANG
- ✓ MASALAH SOSIAL BUDAYA
- ✓ AKSESIBILITAS
- ✓ PERUBAHAN IKLIM
- ✓ DUKUNGAN ASPEK LEGAL

## PELUANG:

- ✓ JASA EKOSISTEM → EKOWISATA
- ✓ KOORDINASI, KERJASAMA DAN KOMUNIKASI
- ✓ MODEL PENGELOLAAN KAWASAN PULAU-PULAU KECIL SECARA BERKELANJUTAN
- ✓ PUSAT STUDI KELAUTAN DAN PULAU-PULAU KECIL
- ✓ PUSAT PENDIDIKAN LINGKUNGAN



# CAGAR BIOSFER BELAMBANGAN



## TANTANGAN:

- ✓ FOREST FIRE
- ✓ KEGIATAN ILLEGAL:  
Pembalakan,  
encroachment, illegal  
hunting
- ✓ Koordinasi, komunikasi  
dan kerjasama
- ✓ Aspek legal dan  
kelembagaan

## PELUANG:

- ✓ JASA EKOSISTEM
- ✓ IMPLEMENTASI  
PEMBANGUNAN  
BERKELANJUTAN
- ✓ PENINGKATAN KUALITAS  
KEHIDUPAN
- ✓ PUSAT PENDIDIKAN  
LINGKUNGAN



# PHENOMENA *BLUE FIRE* VAN JAVA IN KAWAH IJEN NATURAL RESERVE



# EXOTIC PANORAMA OF KAWAH IJEN NATURAL RESERVE

