

### Indonesia at a Glance



± 237 million people

More than 17,100 islands, 129 volcanoes

More than 300 distinct native ethnicities

742 different languages and dialects

Indonesia is the largest archipelago and the fourth most populous country in the world.

Extending 5,120 km from east to west and 1,760 km from north to south, with total land area 1.9 million km<sup>2</sup> and 7.9 million km<sup>2</sup> (including sea)

### MEGA BIODIVERSITY: Terrestrial

16% of the world's reptiles and amphibians

35 primate species, 25% endemic

17% of the world's birds,26% endemic

### **Forest Diversity**

About **59%** of terrestrial areas in Indonesia are tropical forest or **10%** from the total forest area in the world (Stone, 1994).

There are about **110 million Ha** of the total Indonesia's forest classified as preserved forest which **18.7 million Ha** are conservation area, including:

51 National Park Nature Recreation Park Nature Reserve Protected Forest

**121** butterflies species, 44% endemic

12% of the world's mammals, 36% endemic

Moreover, the percentage of endemic flora in Papua reaches 60-70%



### MEGA BIODIVERSITY: Marine

### **Coral Golden Triangle**



Indonesia has approximately
50.875 km² of coral reefs.

If this conservative estimate is accurate, it means that 51% of the South East Asia region's coral reefs and 18% (284.300 km²) of the world's coral reefs are found in Indonesian waters.

-World Resources Institute



This abundance of coral reefs is not only contributed to **biodiversity**, but also to **science and economic development** in Indonesia and the world



### IMPACT OF CLIMATE CHANGE ON TOURISM

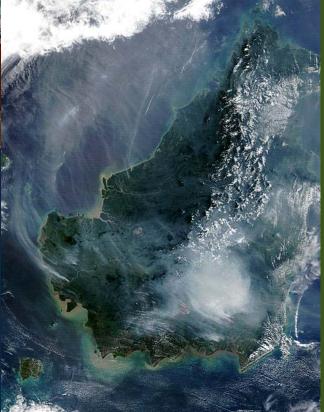
### **Facts & Figures**



Flooding | ©AP Photo Irwin Fedriansyah

The rise of sea level in Indonesia has caused changes of water current, enlarged damages of mangrove forest, intrusion of sea water to land, and the loss of small islands

About 20-30 % of flora and fauna species will become extinct if the temperature rises 1,5°C. If temperature rises 3°C extinction will reach up to 40-70% of species.



Main contributos of GHGemission are forestry and energy. **Forestry** sector contributes as much as **75%** of total GHG emission produced in Indonesia, while **energy and transportation** contribute as much as **25%**.

Satellite view of forest firing in Borneo ©Google Earth

#### INITIATIVES IN RESPOND TO CLIMATE CHANGE

National Government of Indonesia has collectively joined forces via its ministries to respond to climate change reduction initiatives. Indonesia had also hosted UNFClimate Change Conference in Bali, 2007.

### Regulation

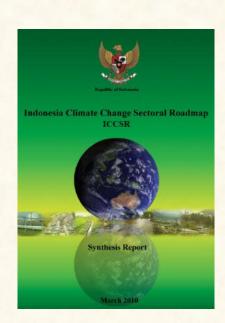
Indonesia aims to reduce GHG emissions by 26 percent by 2020

#### Indonesia Climate Change Sectoral Roadmap (ICCSR)

Set national goals, sectoral targets, milestones and priorities for actions with regards to adaptation and mitigation of climate change for all affected sectors (water, agriculture, marine and fishery, health, energy, forestry and peat land, waste, industry, and transportation sector). Serve as detailed policy guidance and mainstreaming tool for the sectoral and cross-sectoral development programs to take up climate change into all aspects of development planning

#### **Proper hotel standard**

Endorsed by by Ministry of Environment



#### INITIATIVES IN RESPOND TO CLIMATE CHANGE

### **Program and Project**



Reducing Emission from Deforestation in Developing countries (REDD) implemented by Ministry of Forestry <a href="http://redd-indonesia.org/en/">http://redd-indonesia.org/en/</a>

**Reforestation program by the Gol**: One Billion Tree Program

## Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI)

Action plan includes implementation of programs in each country and priority seascapes; development of marine protected areas network; alternative livelihood programs; and establishment of a rapid alert system for marine biodiversity in the Coral Triangle.

http://www.cti-secretariat.net

National Policies and Strategies in Coral Reef Management

#### **Coral Reef Rehabilitation and Management Program (COREMAP)**

long-term program initiated by GoI to protect, rehabilitate, and achieve sustainable use of the Indonesian coral reefs and their associated ecosystems which, in turn, enhance the welfare of the coastal communities.

http://www.coremap.or.id

#### INITIATIVES IN RESPOND TO CLIMATE CHANGE

Although not yet mandated in the ICCSR; Ministry of Culture and Tourism supports and encouraged all initiatives in tourism sector. MoCT has been focusing its contribution in 3 major initiatives: by **policy and regulation**; **program and project**; and **award** 

### **Policy and Regulation**

Law No.10/2009 on Tourism

It underlines the importance of sustainable tourism development for Indonesia

### **Program and Project**

UNWTO Tourism Development Linking Biodiversity (implemented 2007-2009)
UNWTO Energy Efficiency for Sustainable Tourism in Pangandaran (to be implemented in 2011)

#### **Award**

Trihita Karana Citra Pesona Wisata Award by Ministry of Culture and Tourism



#### INITIATIVES IN RESPOND TO CLIMATE CHANGE

### Local government initiatives

**Aceh Green** is progressive vision of provincial government of Aceh on new development of Aceh, which highlights its consideration of sustainable use of natural resources and equitable distribution to local community.

One of its program is plan and supervise the involvement of Aceh government in Reducing Emissions from forest Deforestation and Degradation, particularly in **carbon trading**; as well as management of environmental services.



#### INITIATIVES IN RESPOND TO CLIMATE CHANGE

### Local government initiatives

#### **Bali Green Province**

Initiated on 22 February 2010, Bali Green Province is the commitment of provincial government of Bali with district and city government; private sector, NGO, academics, and local community groups. It **aims** to achieve Bali as a clean, healthy, comfortable, beautiful, and sustainable destination.

**BGP** has developed 3 core programs, which are: **Green Economy, Green Culture, and Bali Clean** and **Green** 



## INITIATIVES IN RESPOND TO CLIMATE CHANGE

## Local government initiatives

#### **Pangandaran**

As a major tourism destination in West Java, Pangandaran faces both opportunities and threats from tourism. Continuous degradation of natural resources and cultural values are the cost it has to pay.

Supported by UNWTO and MoCT; local community of Pangandaran and local government of Ciamis have initiated tourism planning which combine environmental consideration and biodiversity conservation to tourism development. Local community groups have started **adaptation** initiatives by developing coral adoption tours for tourists. UNWTO and MoCT will continue its support until 2012 in developing **mitigation** measures in Energy Efficiency program; together with local hotel, tour operators, and bussiness.



Coral Adoption in Pangandaran NGO + MoCT + UNWTO



#### INITIATIVES IN RESPOND TO CLIMATE CHANGE

## **Environmentally-friendly Hotel**

At the moment they are quite many environmentally friendly hotels operating in Indonesia. It ranges from international chain hotels who have received international awards; local

chain lodges, and also small lodges.

#### Gran Melia Jakarta

Received GREEN GLOBE 21 Benchmarked Certificate (2004) under the new GREEN GLOBE 21 Certification program. It has a series of **mitigation** measures, covering its energy and water consumption, waste production and disposal; as well as implementing an integrated environmental and social policy.

#### **Lodges Indonesia**

Ecolodge - local chain hotel is deeply committed to the conservation of this rich biodiversity area. All five lodges try to implement modest **mitigation** measures; while also contributing to **adaptation** initiative by putting a percentage of revenue to developing and supporting a range of conservation projects in the surrounding areas. Similar initiatives are also tried by other lodges, i.e. Sambodja.



#### INITIATIVES IN RESPOND TO CLIMATE CHANGE

## Indonesia EcoTour Alliance – IETA ecotouralliance

This initiative rises from the concern of tour operators on the degrading quality of natural resources and of natural based tours in Indonesia. This alliance is a network of tour operators in Indonesia, which are selling environmentally and community friendly tours.

Both **mitigation** efforts and contribution to **adaptation** initiative are applied in their tours. The tours follow the Standard for Ecotourism Product. IETA members include: Sumatra Ecoventure (North Sumatra), PT. Indonesia Ecoventure (Jakarta), indonesiaecotravel.com, Pacebo Tours (South Sulawesi), Likes Tours (Moluccas), Tangkoko EcoGuide (North Sulawesi), and many others









#### INITIATIVES IN RESPOND TO CLIMATE CHANGE

## **NEWTREES Program**

This is an *adaptation* initiative, which initiated by WWF Indonesia and Garuda Indonesia on 7<sup>th</sup> December 2007. The Indonesian airline has supported the replantation of 100.000 new trees at 250 ha area at Sebangau National Park in Central Kalimantan.

At the moment, all trees have been planted. After plantation, the activities are continued by maintenance, monitoring, and nursery. All activities are conducted jointly with Sebangan National Park and the surrounding community groups.



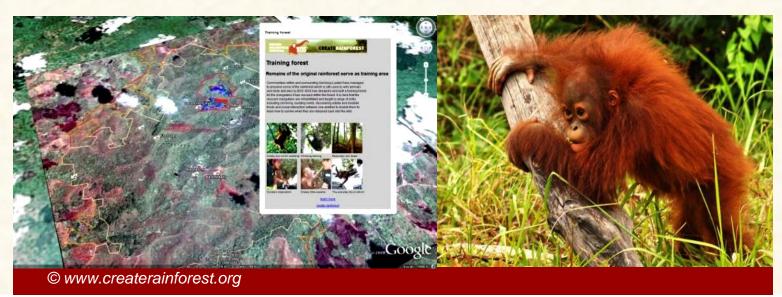
#### INITIATIVES IN RESPOND TO CLIMATE CHANGE

## Forest Rehabilitation Program - BOS

Borneo Orangutan Survival Foundation (**BOS**) is an Indonesian non-profit environmental organization established in 1991 in Balikpapan, East Kalimantan.

#### Forest Rehabilitation Program (Sambodja Lestari)

Located in Kutai Kartanegara, particularly at four villages; *Margomulyo*, *Sei Merdeka*, *Amburawang Darat*, and *Tani Bakti*. The program covers 1,852.63 ha (end 2009), and 983.24 ha of the area has a Right to Use Certificate issued by the National Land Agency Board (BPN). This **adaptation** program was initiated by BOS Foundation and local government.



#### INITIATIVES IN RESPOND TO CLIMATE CHANGE

## Forest Rehabilitation Program - BOS

#### **Forest Rehabilitation Program**

Objective: transform unused lands into a productive forest and wildlife protection area; especially for the unreleasable orangutans due to diseases, old age, or handicap.

Samboja Lestari area is divided into 9 zones:

- ■Arboretum (72 ha),
- ■Forest School (75 ha),
- Orangutan Island (7 ha),
- ■Sunbear Sanctuary (58 ha),
- ■Visitor Plants (25 ha),
- ■Organic Farm/Compost (1 ha),
- ■Urban Forest (50 ha),
- ■Land Rehabilitation (1.561,63 ha).

The program integrates technology, academic, research and community empowerment

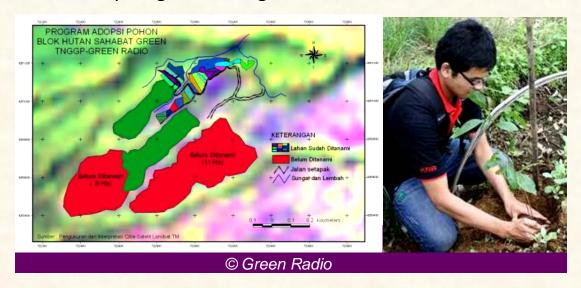
Create Rain Forest NGO + Government

## INITIATIVES IN RESPOND TO CLIMATE CHANGE

## Tree Adoption Program - Green Radio and Gede Pangrango NP

This *adaptation* initiative was started by Green Radio (an Indonesian radio station 89.2FM) that focuses on green issues together with Gede Pangrango National Park.

It resulted in the planting of 6.000 trees, the improvement of soil quality, and the provision of alternative production opportunities for local farmers. The Radio started its broadcasting on 28 February 2008. Currently it has about 200.000 listeners mainly made up of environmentally-concerned younger adults aged between 25 and 35.



Adopt a Tree
Community Groups
+ Media +
Government



#### INITIATIVES IN RESPOND TO CLIMATE CHANGE



### OTHER DESTINATIONS IN RESPOND TO CLIMATE CHANGE



Bintan Island



Raja Ampat

wonderful indonesia 2011

Mount of Bromo

# Wonderful Bintan Island



Terima Kasih Thank you

