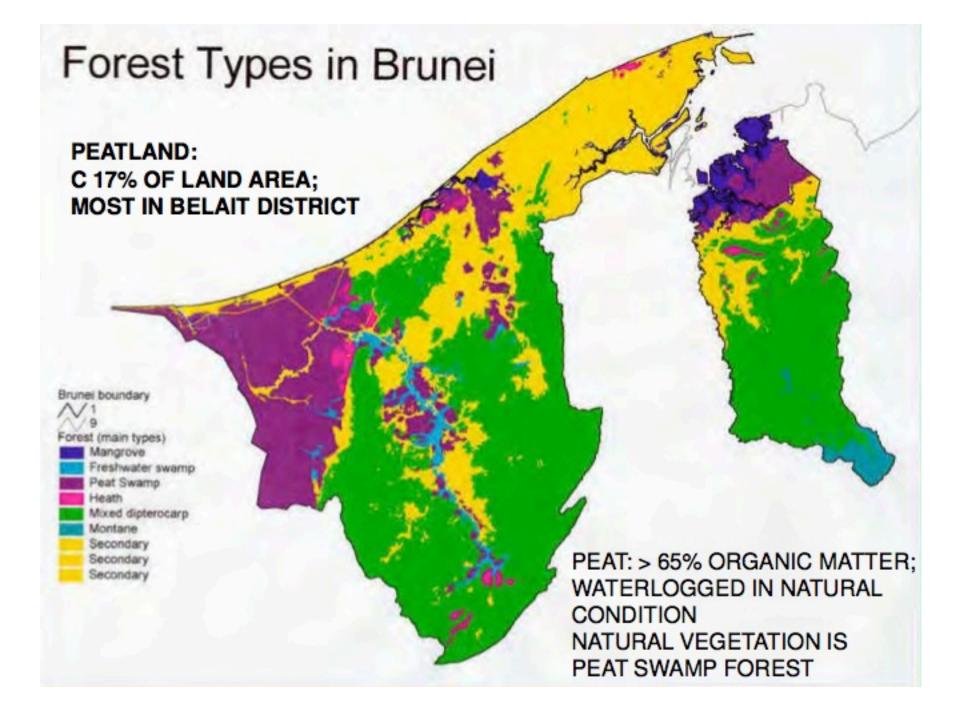
### **BRUNEI DARUSSALAM**

# UPDATE ON NATIONAL ACTION PLAN AND ONGOING EFFORTS ON PEATLANDS MANAGEMENT



Our National Action Plan on Peatlands Management involves:

### 1. INVENTORY AND ASSESSMENT

Monitoring and evaluate of peatland status and management research

#### **Established:**

- Tropical Biodiversity Centre in Sg Liang
- ii. Biodiversity Research and Innovation Centre (BioRIC)
- iii. Institute for Biodiversity and Environmental Research (IBER)
- iv. Upcoming Biological Resources Centre at the Agrotech Park

#### AIMS:

To cater the biodiversity resource management strategies in Brunei Darussalam and to help meet the objectives of the Convention on Biological Diversity (CDB).

### 2. RESEARCH

 Activities at improving management and conservation of peatlands.

 Project on natural succession on degraded peatland where drainage has occurred and where there has been no drainage.

Drainage, groundwater and fire interrelationships in catchments

 Pilot rehabilitation projects, reviewing existing research on suitable tree species and suitable planting methods.

 Collaboration of research sections of relevant government agencies.

### 3. <u>AWARENESS RAISING AND CAPACITY BUILDING</u>

- Enhance public awareness of peatland management and consequences of peatland degradation.
  - Develop locally- relevant awareness material for the public highlighting detrimental effects and penalties for non-compliance with regulations.
  - Invite students to attend talk on biodiversity as a whole.

### 4. INFORMATION

 Establish web- based database for information storage and exchange.

- Develop and maintain centralized spatial web-based database on peatlands of Brunei, holding data obtained from the inventory and assessment activities.
- Provide regular PSI updates to the public through the national media and its official website.
- Updating the open burning prohibition promo materials.

### 5. POLICIES AND LEGISLATION

- Review and strengthen policies and legislation relating to the use of peatlands.
  - Strengthen enforcement activities within peatland areas
  - Strengthen regulations and resource use in peatlands
- To develop the Biodiversity Law

### 6. FIRE PREVENTION, CONTROL AND MONITORING

- Develop a strategic National Action Plan for disaster risk reduction
- Reduce occurrence of fire and associated haze
  - National Disaster Management Centre (NDMC) established
  - Implement water control measures during dry periods.
  - Devise and implement zero burning strategies

- Continue to undertake preventive and mitigation measures:
  - ground surveillance
  - on-the spot advice to curb open burning activities
  - hotline services for query
  - receiving open burning complaints.

 Undertake the expansion and improvement of existing air quality monitoring network.

 The establishment of mobile air quality monitoring station.

### 7. BIODIVERSITY CONSERVATION

- Promote conservation of peatland biodiversity
  - Support management plan and strategy for Tasek Merimbun ASEAN Heritage Park
  - Collaborate with the Brunei Tropical
     Biodiversity Centre (TBC) and the Heart of
     Borneo (HoB) initiative in identification and
     conservation of peatland areas.

#### Wetland Protection

- Brunei HoB initiative provides the guiding principles to support development polices to ensure the sustainable management of the world's remnant pristine wetland area in Brunei especially Belait peat swamp forest.
- Projects under Brunei HoB initiative are carried out and generally aimed to enhance the conservation value of these wetland areas.
- 90ha of wetlands economic potential and can be ecologically managed to maintain healthy ecological services
- Party RAMSAR and wetland international have been considered.

### 8. INTEGRATED MANAGEMENT OF PEATLANDS

Promote integrated/ multi-stakeholder

 Ensure peatland issues are integrated into national and district physical plans

### 9. RESTORATION AND REHABILITATION

- Implement pilot projects on strategies to rehabilitate degraded peatlands
  - Blocking of canals
  - Sourcing seedlings for replantation
  - Rehabilitation on sand mining areas including identifying options for water-based recreational activities.

### 10. PEATLANDS AND CLIMATE CHANGE

- Maintain the carbon storage and sequestration functions of peatlands
  - Obtain baseline data on carbon storage, carbon sequestration and carbon emissions from intact and degraded peatlands
- Assess impacts of climate change and develop adaptation measures
  - Integrate peatland issues into national climate change adaptation plans

### 11. REGIONAL COOPERATION

- Promote regional and trans-border cooperation and transfer of expertise in addressing peatland management issues
  - Ensure that activities are carried out in collaboration with the Heart of Borneo (HoB) project
  - Identify trainers, resource persons and experts from local and other ASEAN countries to share expertise.

### 12. FINANCING OF THE INITIATIVE

- Identify funding agencies and funding mechanism and prepare proposal for submission to donors.
  - Explore opportunities for funding under the Convention on Biological Diversity (CBD) via the Heart of Borneo project. Sources of funding are required.
- Explore opportunities for funding rehabilitation and conservation projects under innovative mechanisms such as avoided deforestation and avoided carbon emission funds.

### BRIEF INFO & STATUS ON BIODIVERSITY LAW IN BRUNEI DARUSSALAM

In response to the growing need of biological resource utilization (for research and commercialization), the Government of Brunei Darussalam through the Ministry of Industry and Primary Resources took the initiative to develop the Biodiversity Law. The Law will serve as a strong legal foundation or back-up on any biological resource utilization matter (Access and Benefit Sharing -ABS & Major Training Area - MTA), which is in-line with the CBD framework.

The 1<sup>st</sup> Workshop on The Formulation of the National Biodiversity Law was conducted on the 15<sup>th</sup> January 2013 with the assistance from the Attorney General Chamber of Brunei Darussalam (AGC) and the Asean Centre for Biodiversity (ACB). The workshop was attended by relevant Government agencies, Higher Educational Institutions and other relevant agencies on biodiversity.

The Biodiversity Law is still in its early stage of drafting. The Drafting of the Biodiversity Law involves inputs from relevant Government agencies that has concern on biodiversity.

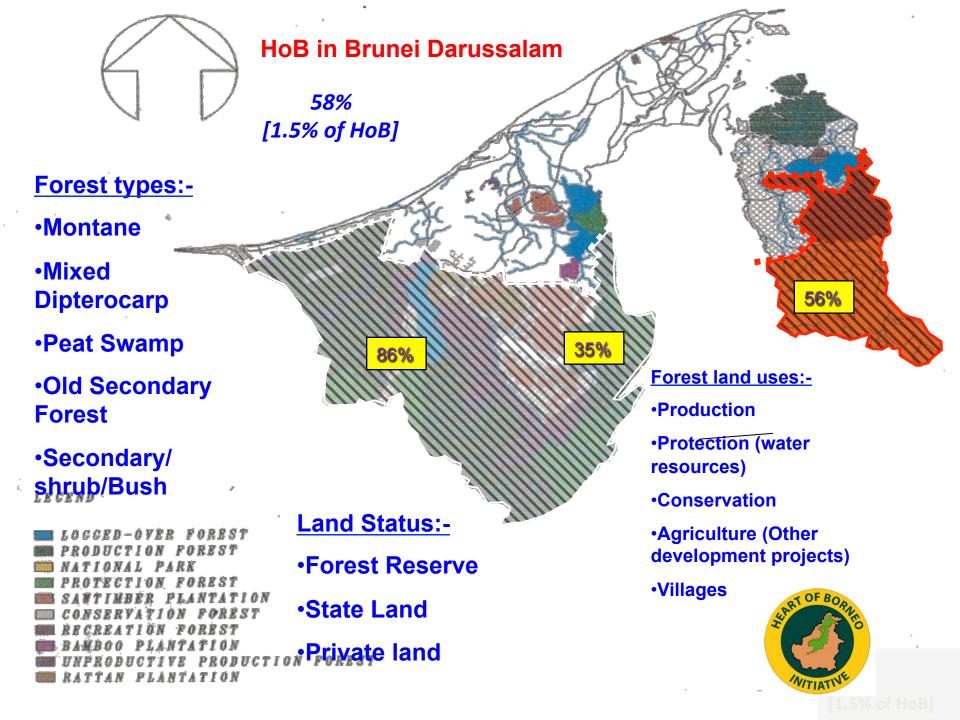
### BRUNEI DARUSSALAM HEART OF BORNEO (HOB) CENTRE

### MINISTRY OF INDUSTRY & PRIMARY RESOURCES NEGARA BRUNEI DARUSSALAM



# SHARING A COMMON VISION: CONSERVING BORNEO'S RAINFOREST ON A LARGE SCALE FOR THE BENEFIT OF THE PEOPLE OF BORNEO





# HOB Project Implementation Framework (PIF) Roadmap to achieve the vision

### **Strategic thrusts**

- Conserve the Unique biological resources for sustainability of ecosystem, to focus on strengthening a network of protected area, transboundary cooperation and improving management capacity;
- Enhance to package tourism in the HoB through nature and ecotourism development taking into consideration environmental and cultural sensitivity of the developed areas;
- Sustainable development and utilization of non-renewable resources as not to jeopardize the environment and forest connectivity; and
- Ensure the sustainability of HoB initiative through continuous awareness program and community-based programs.





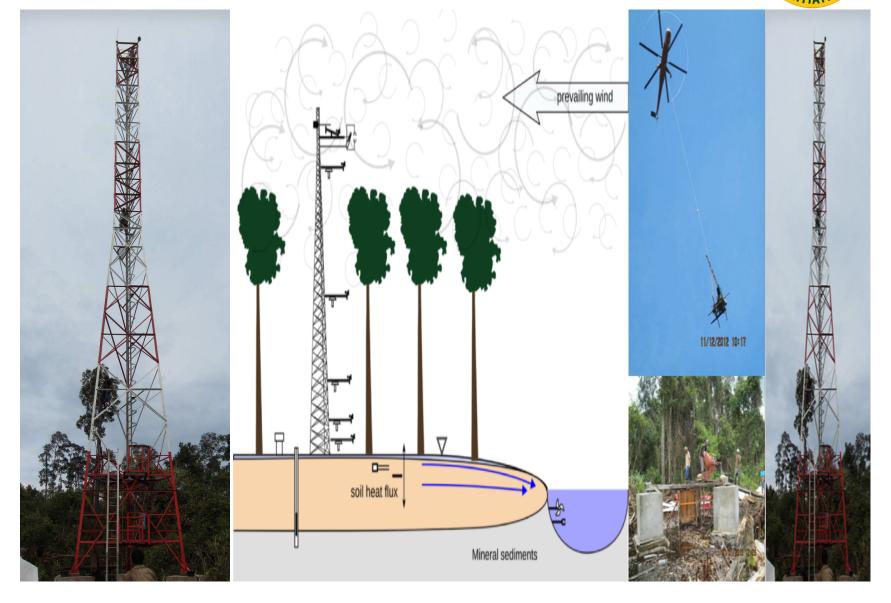
- Endorsed by HoBNC to be included under the purview of Brunei Darussalam HoB Initiative
- Project Coordinator: Singapore-MIT Alliance for Research & Technology (SMART) in collaboration with MIPR
- Objective: To study the dynamics and the carbon sequestration within the tropical peat forests in which measurements of carbon exchange between the atmosphere and the forests are made (as well as nutrients within the soil & peat) for a period of 10 years (or more).
- Project Rationale: Findings from the project may give us a better understanding on the forests' ecosystem which may assist on rehabilitation & conservation initiatives of PSF & on the issue of climate change



Sg Damit

Sg Mendaram





|  | 2010 |   | 2011 |    |  |    | 2012 |    |  |    | 2013 |  |
|--|------|---|------|----|--|----|------|----|--|----|------|--|
|  | H2   | H | 1    | H2 |  | H1 |      | H2 |  | H1 |      |  |
| Hydrological measurements                |      |   |      |    |  |    |      |    |  |    |      |  |
| Water table installation and measurement |      |   |      |    |  |    |      |    |  |    |      |  |
| Rainfall installation and measurement    |      |   |      |    |  |    |      |    |  |    |      |  |
| Hydrological modeling                    |      |   |      |    |  |    |      |    |  |    |      |  |
| Soil chemistry                           |      |   |      |    |  |    |      |    |  |    |      |  |
| Measurements                             |      |   |      |    |  |    |      |    |  |    |      |  |
| Published soil chemistry paper           |      |   |      |    |  |    |      |    |  |    |      |  |
| Peat core sampling                       |      |   |      |    |  |    |      |    |  |    |      |  |
| Core collection                          |      |   |      |    |  |    |      |    |  |    |      |  |
| Carbon dating                            |      |   |      |    |  |    |      |    |  |    |      |  |
| Core chemical analysis                   |      |   |      |    |  |    |      |    |  |    |      |  |
| Damit carbon exchange measurement        |      |   |      |    |  |    |      |    |  |    |      |  |
| Airlift for soil testing                 |      |   |      |    |  |    |      |    |  |    |      |  |
| Airlift of solar power materials         |      |   |      |    |  |    |      |    |  |    |      |  |
| Solar power supply built                 |      |   |      |    |  |    |      |    |  |    |      |  |
| Airlift for 35 m tower construction      |      |   |      |    |  |    |      |    |  |    |      |  |
| 35 m tower construction                  |      |   |      |    |  |    |      |    |  |    |      |  |
| Mendaram carbon exchange measurement     |      |   |      |    |  |    |      |    |  |    |      |  |
| Airlift for 65 m tower construction      |      |   |      |    |  |    |      |    |  |    |      |  |
| 65 m tower construction                  |      |   |      |    |  |    |      |    |  |    |      |  |

# BSP-WI Biodiversity Action Plan (B)

- Endorsed by HoBNC to be included under the purview of Brunei Darussalam HoB Initiative
- Project Coordinator: Brunei Shell Petroleum (BSP) in collaboration with Wetland International (WI) Malaysia
- Started in late 2012 for a period of 18 months
- Objectives:
  - Objective 1: To produce a Biodiversity Action Plan (a set of future actions that will lead to the conservation or enhancement of biodiversity) for the onshore footprint of BSJV in Brunei Darussalam;
  - Objective 2: To develop a communications plan aimed at preventing fire incidents in peat areas; &
  - Objective 3: To develop an implementation plan for ecological restoration of disturbed key areas.

### **BSP-WI Biodiversity Action Plan (BAP)**



### **BSP-WI Biodiversity Action Plan (BAP)**

### **Status:**

- •Objective 1: Field surveys on the biodiversity have been concluded
- •Objective 2: Outline for the draft Peat Fire Communication Plan (UBD, local communities & Shell's Firefighting team)
- Objective 3:
  - Hydrology monitoring programme
  - Development of tree nursery concept for the project (rehabilitation)



### **THANK YOU**