# ABS Interventions to Strengthen Protected Area Management

#### Nagulendran Kangayatkarasu

Diplomatic and Administrative Officer, Public Service Department, Malaysia / University of Nottingham

#### Sivananthan Elagupillay

Department of Wildlife and National Parks, Malaysia

#### Nik Yusaimi Yusof

Ministry of Natural Resources and Environment Malaysia

1<sup>st</sup> Asia Parks Congress 13-17 November, Sendai, Japan

#### Outline

- Protected Area
  - Quick intro
- PA in Malaysia
- Gaps
- Emerging Potentials
  - o CBD, NP -ABS
  - Bioprospecting & Bio economy
- ABS Intervention
  - Recommendations
- Conclusion



#### **Definition of Protected Areas**

# The Convention on Biological Diversity defines protected areas as:

A geographically defined area which is designated or regulated and managed to achieve specific conservation objectives.

## The definition of a protected area adopted by IUCN is:

A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.



### An Analogue

- The Liver
  - Renew (metabolism)
  - Storage
  - Synthesis
  - Absorb toxins
  - Decompose

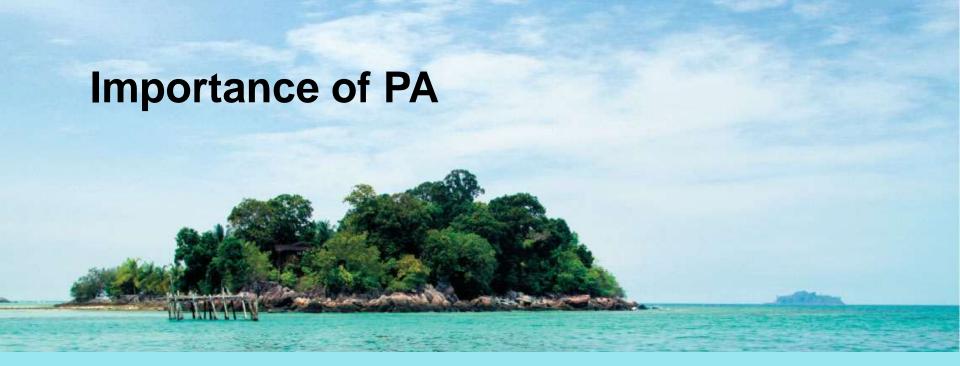


- Protected Area
  - Provisioning Services
  - Regulating Services
  - Supporting Services
  - Cultural Srvices



- ✓ Can regenerate but only to a certain limit
- ✓ Sustaining life PROTECTED AREAS



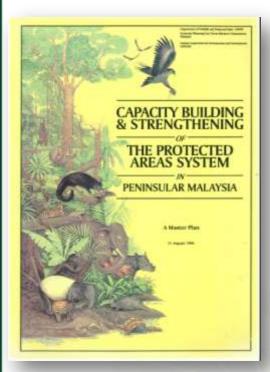


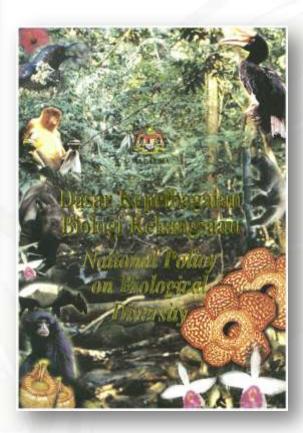
- Protected areas are internationally recognized as a major tool in conserving species and ecosystems
- They also provide a range of goods and services essential to sustainable use of natural resources including aesthetic and cultural value
- Reservoir for Carbon Stocks

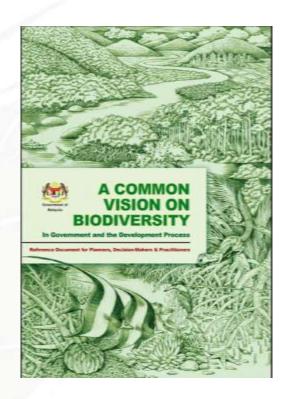
## What is PA (in Malaysia)













# BROAD CATEGORIES OF PA'S ACCORDING TO LAWS USED FOR THEIR ESTABLISHMENT

- National parks and state parks;
- Sanctuaries or reserves under wildlife laws;
- Protection forests under the forestry laws;
- Marine parks and fisheries prohibited areas under fisheries and forestry laws;
- Areas reserved for a public purpose under the land laws.



	Terrestrial	Marine
World	12.9	6.3
MALAYSIA	10.6*	1.1

<sup>\*</sup> Latest yet to be published study, NRE 2012



#### **GAPS**

- Ecosystem Representation
- Financial
- Manpower

Science-Policy Interface

**Benchmark** 

196 staff / 1,000 km<sup>2</sup>

USD 1,000 / km<sup>2</sup>

 Awareness, Appreciation & Internalisation



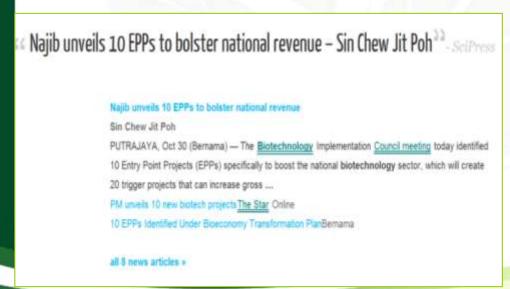
#### Emerging potentials

- CBD & the Nagoya Protocol (NP)
  - Sovereign right over biological resources
  - The role of PA in meeting the 3 Objectives of CBD
  - ABS, ILC and TK
  - NP- international regime established
  - Need domestic implementation
- New Economy Model, Malaysia 2010
- Bioprospecting and Bioeconomy



## Bioeconomy

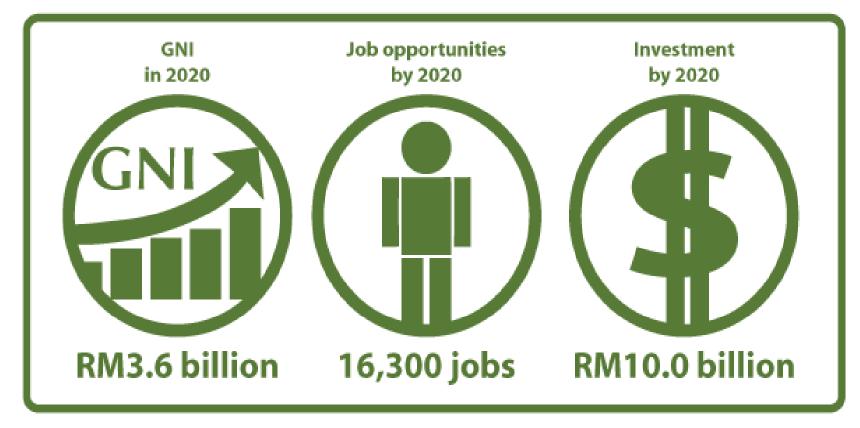
 Economic activities and services derived from the sustainable utilisation of biological resources with the continued commercial application of biotechnology







### Bio-economy and Malaysia



Source BiotechCorp

Malaysia's Biodiversity
My Life, My Heritage, My Future
www.nre.gov.my



### Bio-economy and Malaysia

- Leverage on our rich and unique biodiversity
- OECD estimates bioeconomy's global contribution at an average of 2.7% to GDP by 2030.
- Bioeconomy Initiative Malaysia (BIM) launched by Rt Hon PM in 2011
- To reflect its potential in transforming Malaysia into a high income, inclusive and sustainable economy, the
  - BIM has been transformed into the Bioeconomy
     Transformation Programme (BTP) which is one of the implementation strategies under the Economic Transformation Programme (ETP).



## Tapping the wealth of our biodiversity

#### NST 22/7/13

#### MORE COORDINATION:

Malaysia needs to rethink its policies if it is to reap the bounty of its natural heritage

VERYONE agrees there is strength in diversity. But what do we do to tap into this strength? This can be diversity in ethnicity, gender, language, culture and skill, just to name a few.

In an age where multi-disciplinary knowledge is viewed as an asset, countries more able to capitalise on the synergy of diversity are ahead in the race for global competitiveness. In recent years, a branch of diversity which has become a topic of public debate is biodiversity. This is the diversity of life forms, including plants and animals. Many are concerned that through the activities of man, the planet's biodiversity is under serious threat. Unless acted upon soon, this can eventually threaten the survival of man himself.

Biodiversity has often been referred to as the "fabric of life". There is evidence to show that without biodiversity, man will perish. What are we doing then to preserve biodiversity? In the ruthless pursuit of progress, has man compromised the sanctity of biodiversity?

Evidence has also shown that biodiversity offers potential economic benefits to mankind. Such riches can be in the form of compounds that can provide the solutions to man's continuing search for medical therapies to combat new diseases, nutritious food for a growing population and other materials for fuel and energy. How do we extract such wealth without inflicting irreversible destruction to the fragile biodiversity?

Malaysia is one of the twelve mega-biodiversity countries in the world. Such countries are blessed with a diversity of species, flora and fauna, many of which are still unknown. We are in fact the envy of many countries. But what have we done to benefit from such wealth? Do we have a plan?

So far we have launched a number of attempts to study the diversity of the country's untapped resources. The impact has unfor-

tunately been minimal. We need a better coordinated strategy.

A mega-science study on biodiversity conducted by the Academy of Sciences Malaysia has produced a number of recommendations on how we can get better organised to realise value from the potential wealth in the country's biodiversity.

Dr Ahmad

Fellow, Academy

Ibrahim

of Sciences

Malaysia

The study not only addresses the conventional wisdom of conserving biodiversity, but also novel wealth creation opportunities. The alm is to make biodiversity a viable source of the country's income, without of course compromising its richness and its natural ecosys-

tem function. Can we do it?

A number of findings and recommendations have been put forward from the study. First, there is a need to understand how man's activities threaten biodiversity.

Second, we need to determine what treasures lie hidden in our biodiversity through scientific re-

> search. Unless we know what we have, it is difficult to plan what we want to extract for potential economic gain.

Adequate funding for such exploratory research is the key to success. It is not unlike the investment oil companies put in exploration.

On the policy front, notwithstanding the existence of more than 40

environment-related rules and regulations in the country, there may still be a need for new rules and regulations to address new and emerging issues.

But we need to ensure proper coordination, consolidation and communication of rules and regulations on biodiversity and its resources between and within different ministries and departments at the federal level and also their state counterparts.

There is no denying the need to revisit the various national plans to ensure they do not contradict sustainable development.

Research on biodiversity should have a balance of basic and applied R&D. We also need to build the appropriate human resource including taxonomists, molecular biologists, biotechnologists, biochemists, and bioinformatics.

If there is a lack of expertise in specific sectors of biodiversity within the country, efforts should be made to source from other countries. It is high time for the country to establish a National Biodiversity Centre along with its National Natural History Institute.

The main task of the centre is to consolidate and coordinate the conservation, the sustainable use and the wealth creation from the biological resources of mega-diverse Malaysia. Only then can we truly tap its riches.



#### **ABS Intervention - Recommendations**

- Domestic ABS measures
  - Clear, transparent, predictable, distinction between academic and commercial research
  - PA management plans
- Regulating access
- Ensuring benefit sharing
  - Developing in-situ capacities to capture real share of the benefits
  - Mechanisms to manage biodiversity fund
- Participation of ILC
  - Community protocol



#### **ABS Intervention - Recommendations**

- Traditional knowledge
  - Guided by Art. 8(j) CBD- document preserve, protect
- Participation of key stakeholders
  - Decision, management, alternative income
- Institutional restructuring
  - Provide for ABS
- Capacity building
- Awareness



#### Conclusion

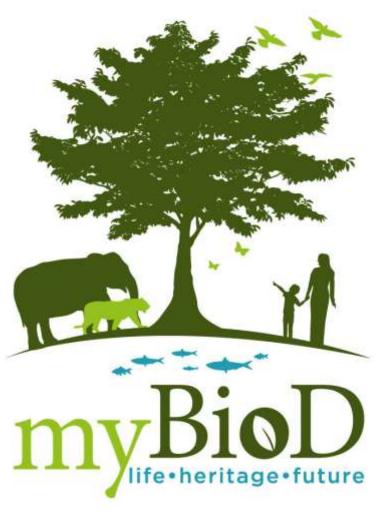
- With the concretisation of an international regime on ABS via Nagoya Protocol, enhances the potential of biodiversity for new wealth generation.
- Need to be translated to domestic measures and also implemented at Park level
- An promising opportunity for enhancing PA management



#### Acknowledgement

- Ministry of Natural Resources and Environment, Malaysia
- Department of Wildlife and National Park, Malaysia
- United Nations Development Programme (UNDP)
- Global Environment Facility (GEF)
- University of Nottingham
- Public Service Department





# THANK YOU



