



BIODIVERSITY AND ECOTOURISM

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OVERVIEW

- ◆ **What is Ecotourism? Biodiversity?**
- ◆ **Ecotourism Policies**
- ◆ **Biodiversity: Ecotourism Asset**
- ◆ **Situationer, Challenges and Prospects**
- ◆ **Conclusion**



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Pahalagahan, Pangalagaan.



WHAT IS ECOTOURISM?

It is a form of sustainable tourism within a natural and cultural heritage area where (1) **community participation**, (2) **protection and management** of natural resources, culture and indigenous knowledge and practices, (3) **environmental education and ethics** as well as (4) **economic benefits** are fostered and pursued for the **enrichment of host communities** and satisfaction of visitors.



GUIDING PRINCIPLES IN ECOTOURISM DEVELOPMENT

- **Conservation and sustainable use of biodiversity;**
- **Ownership by the local communities providing them business opportunities to sustain their well-being;**
- **Promotion of learning experience and conservation awareness;**
- **Responsible action on the part of tourists and the tourism industry;**

ECOTOURISM POLICIES

EXECUTIVE ORDER NO. 111 (1999) Establishing the Guidelines for Ecotourism Development in the Philippines



- Mandated the formulation of the National Ecotourism Strategy (NES)
- Created the Ecotourism Bodies



NEDC

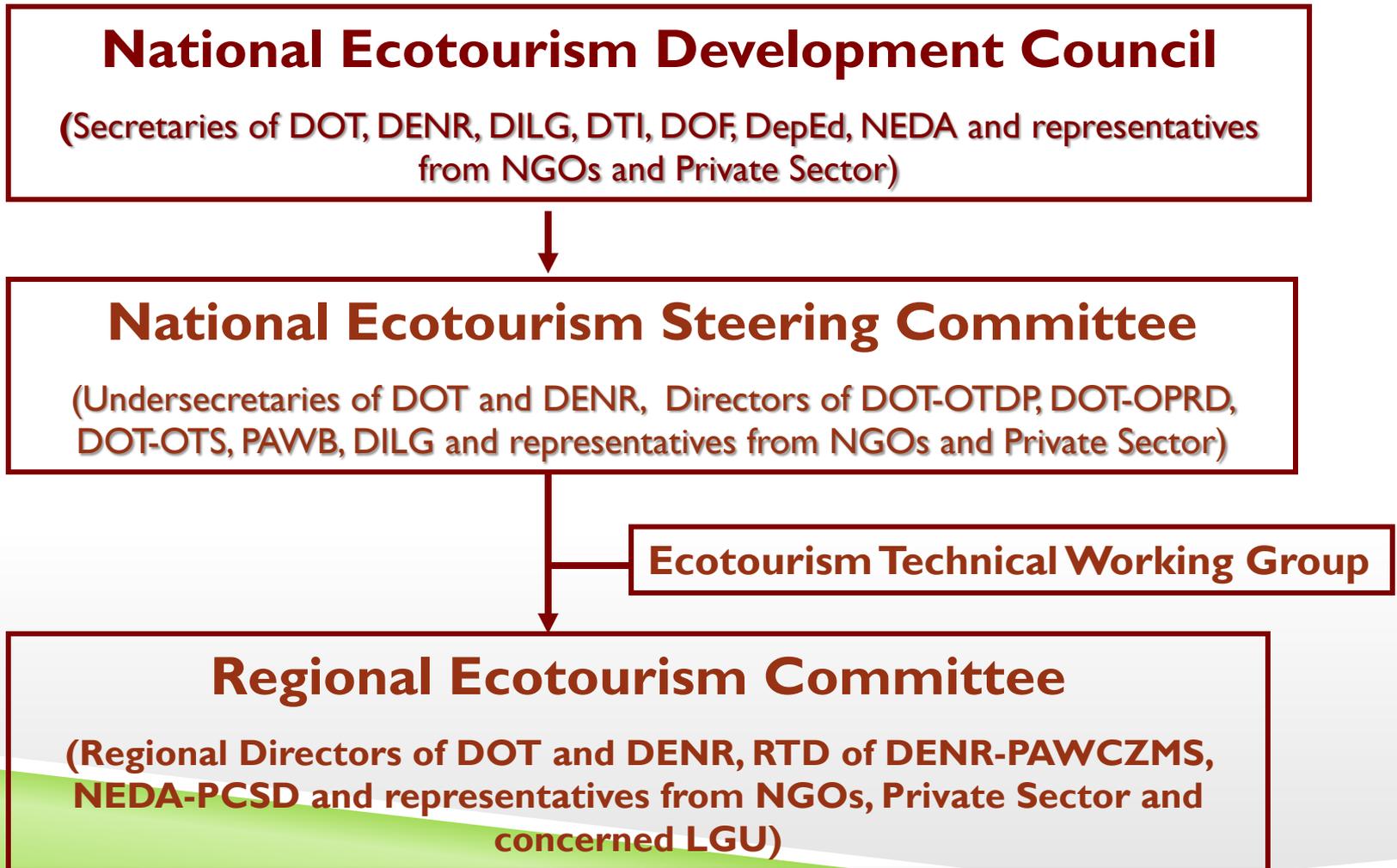


NESC



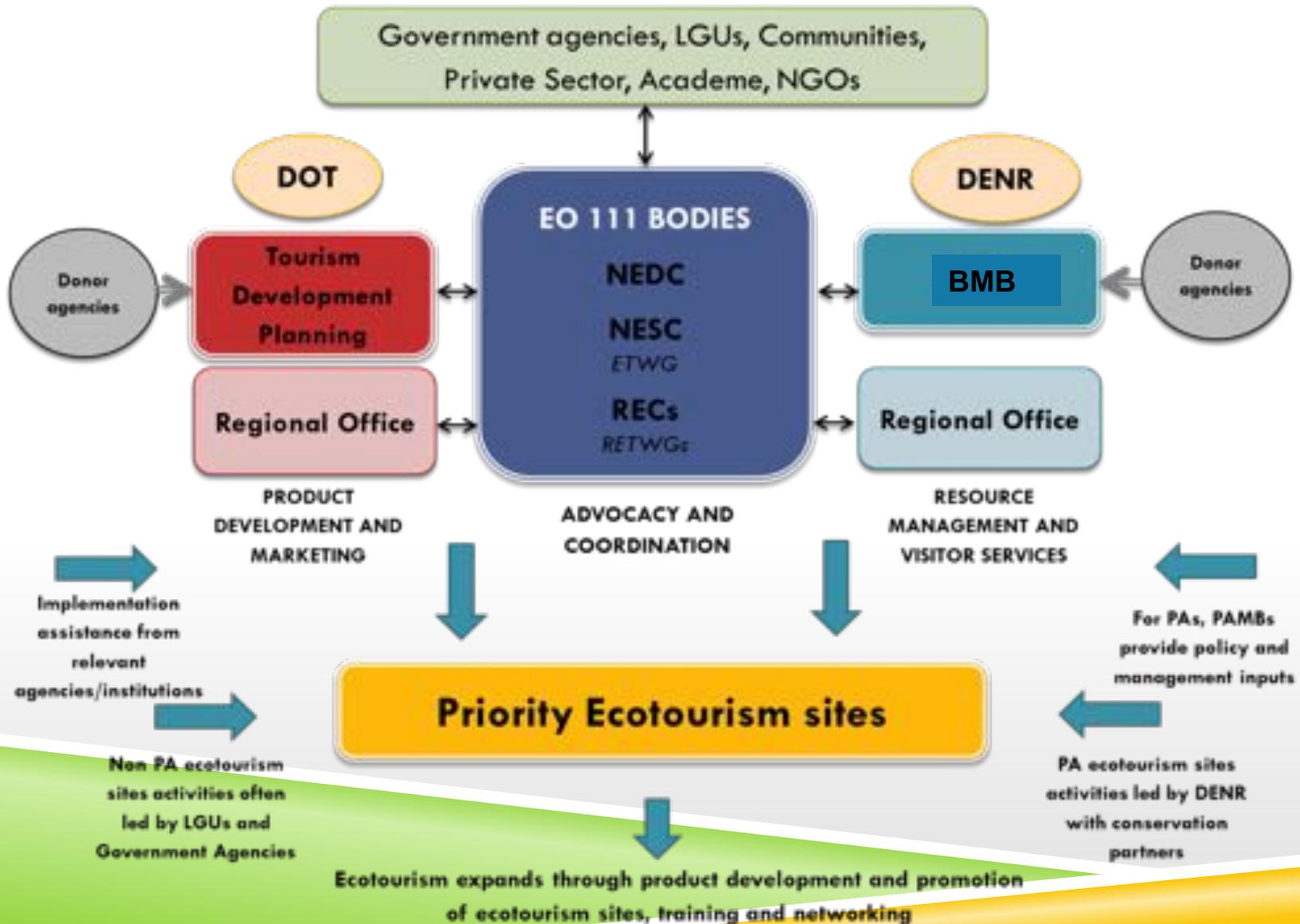
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Ecotourism Bodies

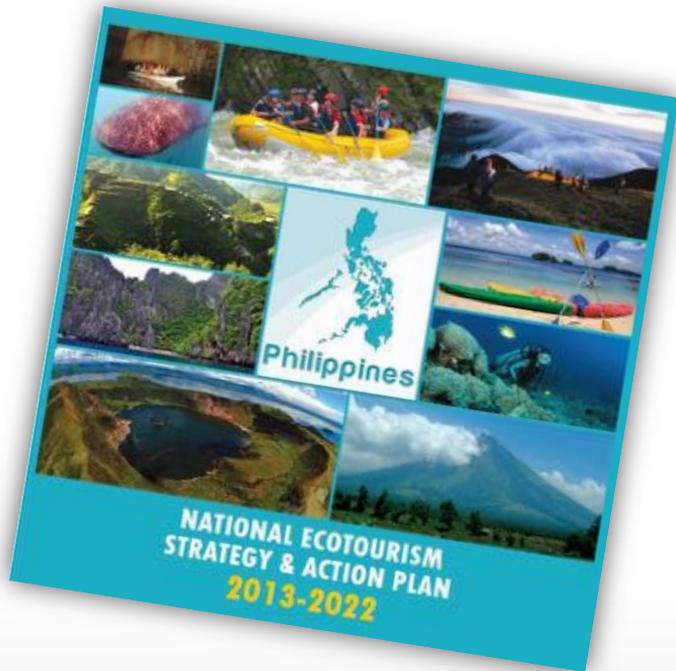


Note: Chairmanship of Ecotourism Committees is on rotation basis between DENR & DOT every 3 years

Institutional Framework



National Ecotourism Strategy and Action Plan 2013-2022



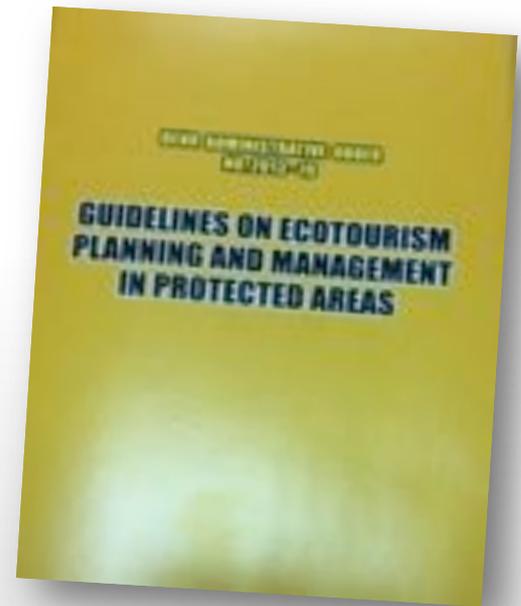
- ▶ Set the country's vision, goals and the 8-point strategic framework and action plan for ecotourism for 10 years up to 2022.
- ▶ Implemented thru the ecotourism bodies.

ECOTOURISM POLICIES ...

DENRAO 2013-19

Guidelines on Ecotourism Planning and Management in Protected Areas

- Provides for the planning and management process
- Component Strategies for Ecotourism Management



ECOTOURISM POLICIES ...

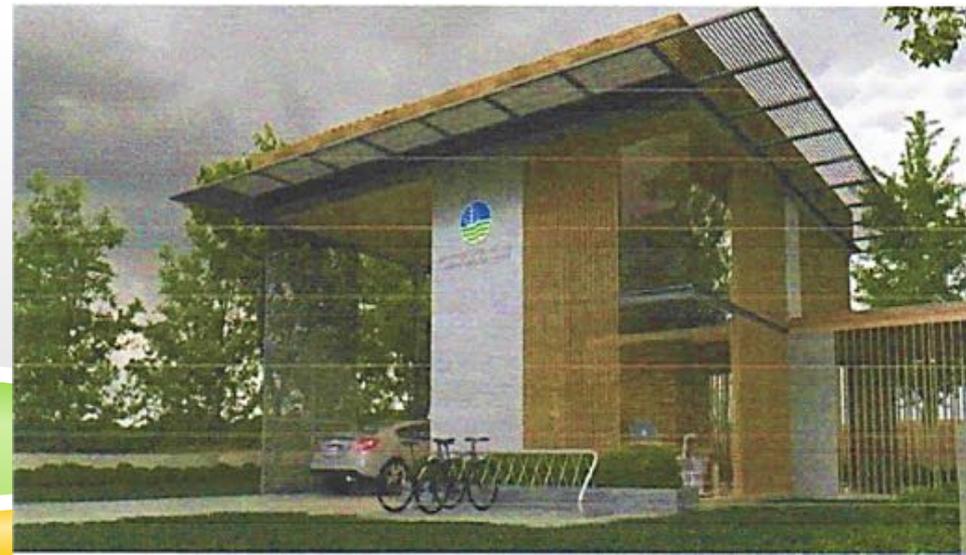


**DENR
Administrative Order**
No. 2009-09
*STANDARD DESIGN AND
SPECIFICATION OF SIGNS,
BUILDINGS, FACILITIES AND
OTHER INFRASTRUCTURE THAT
MAY BE INSTALLED AND/OR
CONSTRUCTED WITHIN
PROTECTED AREAS*

DENR Administrative Order 2009-09

Standard Design and Specification of Signs, Buildings, Facilities and Other Infrastructure that may be Installed and/or Constructed Within Protected Areas

- ***PA information center***
- ***Lodging facility / cottage***
- ***View deck***
- ***Camping facilities***
- ***Trails***
- ***Boardwalks***
- ***Signs and sign boards***



ECOTOURISM POLICIES ...

BMB TECHNICAL BULLETINS

BMB TB No. 2014-03, Prescribing Tools for Impact Monitoring of Ecotourism Activities

- Resource Monitoring
- Socio-economic Survey

BMB TB 2016-03 Climate Resilient Design

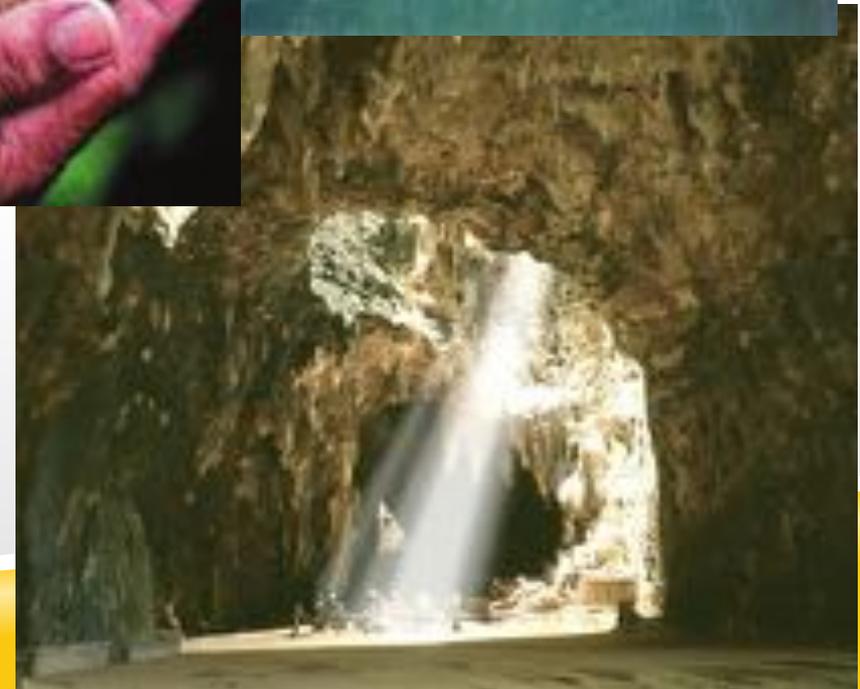
- *Design should be resilient to geologic hazard and hydrometeorological hazards associated to climate change*

ECOTOURISM POLICIES ...

RA 11038 OR EXPANDED NIPAS ACT

- **ALLOWS SPECIAL USES SUCH AS ECOTOURISM WITHIN PROTECTED AREAS**
- **GUIDED BY THE MANAGEMENT PLAN AND ZONING OF PROTECTED AREAS**
- **SUBJECT TO THE APPROVAL OF THE MANAGEMENT BOARD**
- **SUBJECT TO EIA**

PHILIPPINE BIODIVERSITY as Ecotourism's Greatest Asset



STATUS OF PHILIPPINE BIODIVERSITY

- The Philippines is one of the 17 mega-diversity countries in the world that consist of 2/3 of the Earth's biodiversity and 70-80% of the world's endangered species

MEGADIVERSITY COUNTRIES



Philippine Fauna

Philippine Eagle,
the world's largest eagle.



719 species of Birds
with 230 endemics



Philippine Fauna ...



5th in the world in mammal endemism. Of its **207 mammal species, 133 or 64%** are endemic.

Philippine Fauna ...



Of its 352 reptile species, 244 or 69% are endemic.

Philippine Fauna ...

There are 118 **species** of amphibians in the Philippines, 97 or **82%** of these are endemic.



Polillo forest frog



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Biodiversity



Philippine Fauna ...

MARINE

The Center of the Center of Marine Shorefish Biodiversity: the Philippine Islands

Kent E. Carpenter
Biological Sciences, Old Dominion University
&
Victor G. Springer
Fish Division
U.S. National Museum, Smithsonian Institution



Philippine Flora

5th in the world in number of plant species harboring 16,000 species

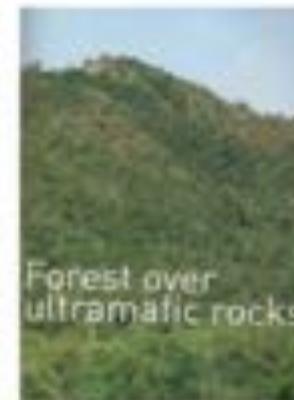
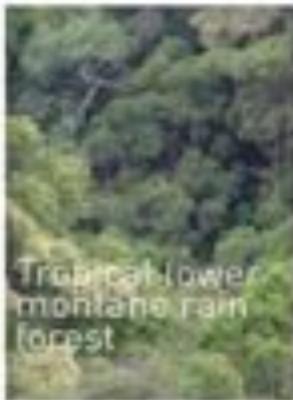
Gingers, begonias, gesneriads, orchids, pandans, palms, and dipterocarps are particularly high in endemism.



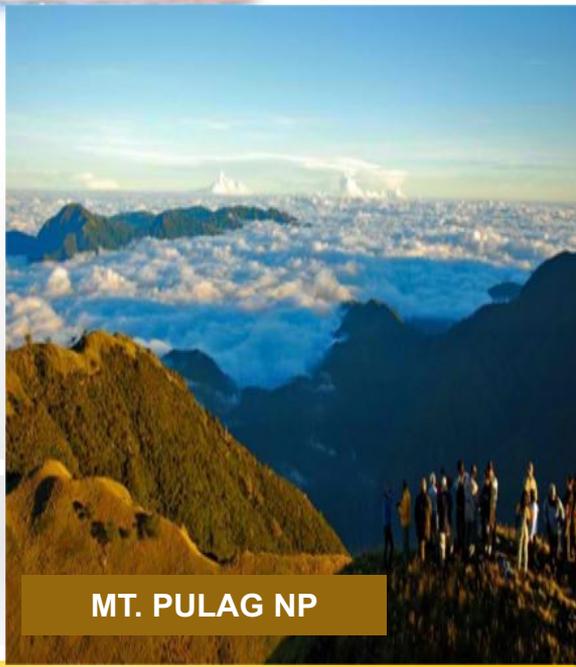
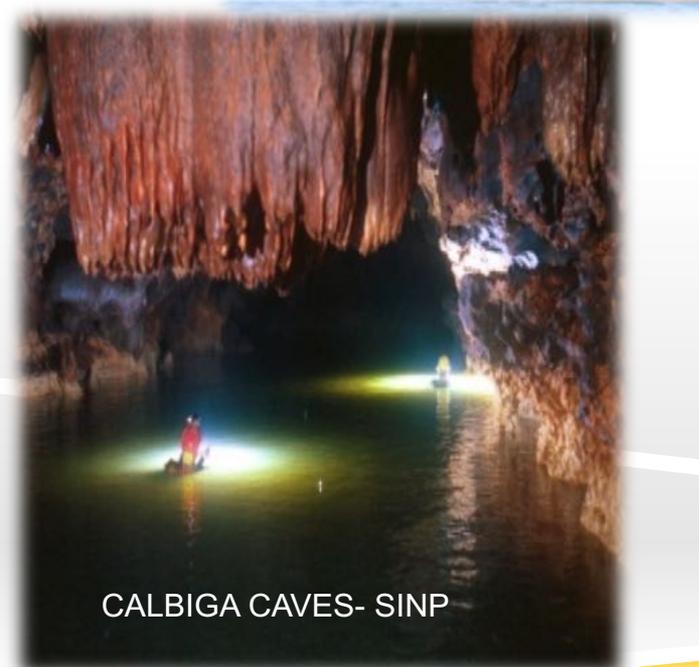
Philippine Flora ...

PHILIPPINE ECOSYSTEMS

Forest formations of the Philippines



232 Protected Areas are within the Tourism Development Areas



CHALLENGES

Biodiversity loss due to:

1. *FOREST FIRE*
2. *DESTRUCTION OF HABITAT*

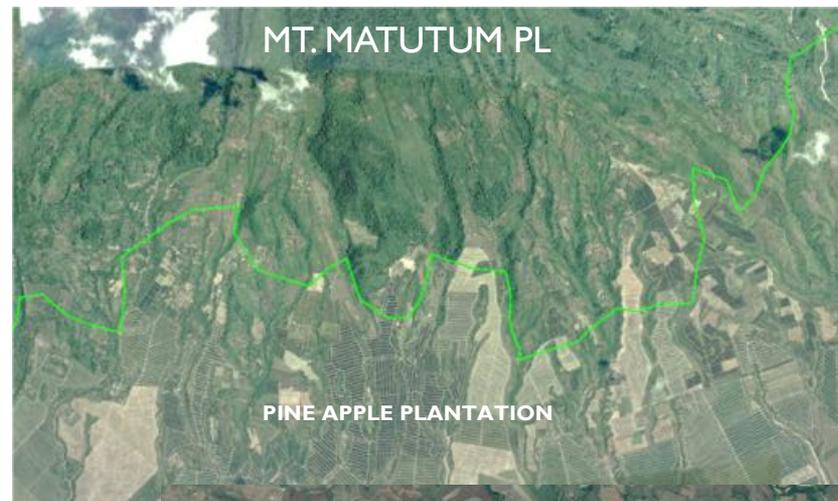


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CHALLENGES...

3. LAND CONVERSION



CHALLENGES...

4. ALIEN INVASIVE SPECIES (some brought in by tourists) *Janitor fish, golden apple snail, Hagonoy, mahogany*

Golden apple snail



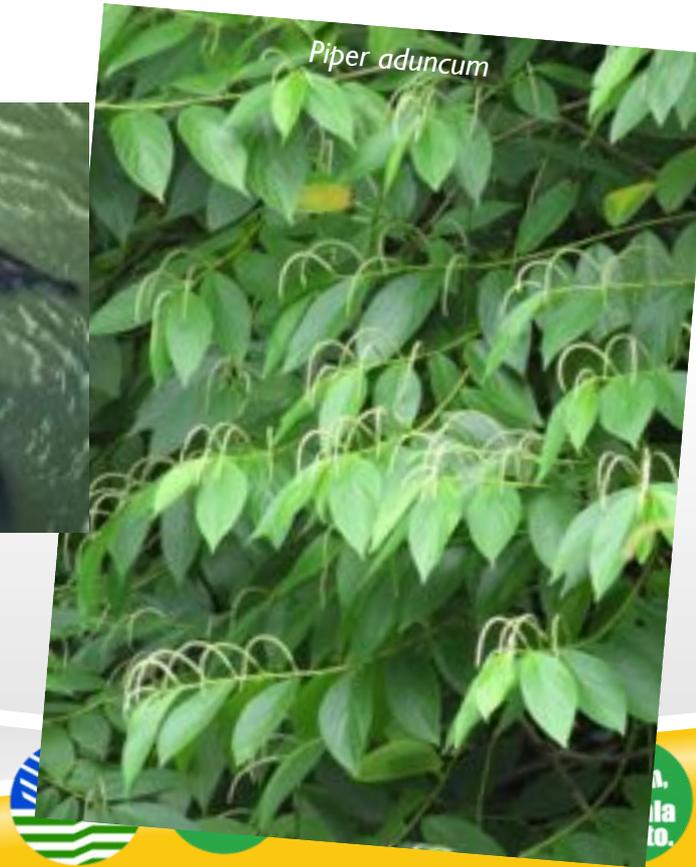
Janitor fish



Hagonoy



Piper aduncum



CHALLENGES...

5. DISREGARD OF CARRYING CAPACITY or LACK of C.C. STUDY



CHALLENGES...

6. POLLUTION AND SOLID WASTE



CHALLENGES...

7. LACK OF APPRECIATION

- ❑ Unregulated and/or excessive development in some areas.



CHALLENGES...

❑ Inappropriate Infrastructure



TOURISM SITUATIONER

Global Situation

- ❑ International tourism ranks 4th in global exports. (UNEP 2012)
- ❑ Nature tourism is growing at 10%-12% per annum in the international market
- ❑ UNWTO projects international tourist arrival in Asia and the Pacific to grow at a rate of 5%-6% in 2018
- ❑ It is believed that nature tourism and ecotourism may comprise 40-60% of the tourism market, increasing at 10-30% annually (World Resource Institute).



TOURISM SITUATIONER

- ❑ 38% travelers worldwide said that environmentally friendly tourism is a consideration when travelling, 9% specifically seek out such hotels, while 34% are willing to pay more to stay in environmentally friendly hotels
- ❑ Survey in European countries indicate increased willingness of tourists to pay 5% more for their vacations abroad if the money ensures good wages to the local community and promote preservation of the host environment.



TOURISM SITUATIONER

Philippine Situation (2017)

- ❑ 6.6 million foreign tourists
- ❑ 448.6 billion Php inbound receipts
- ❑ 2.66 trillion domestic tourism expenditure
- ❑ 12.2% share in GDP
- ❑ 5.3 million employed in the tourism industry
- ❑ Protected Area Visitors – 2.38M in 2017 (both foreign and local)
- ❑ PA income in 2017: 48M (partial report)

2017 PSA and BMB data



OPPORTUNITIES FROM ECOTOURISM

I. Nature education



Interpretive signs

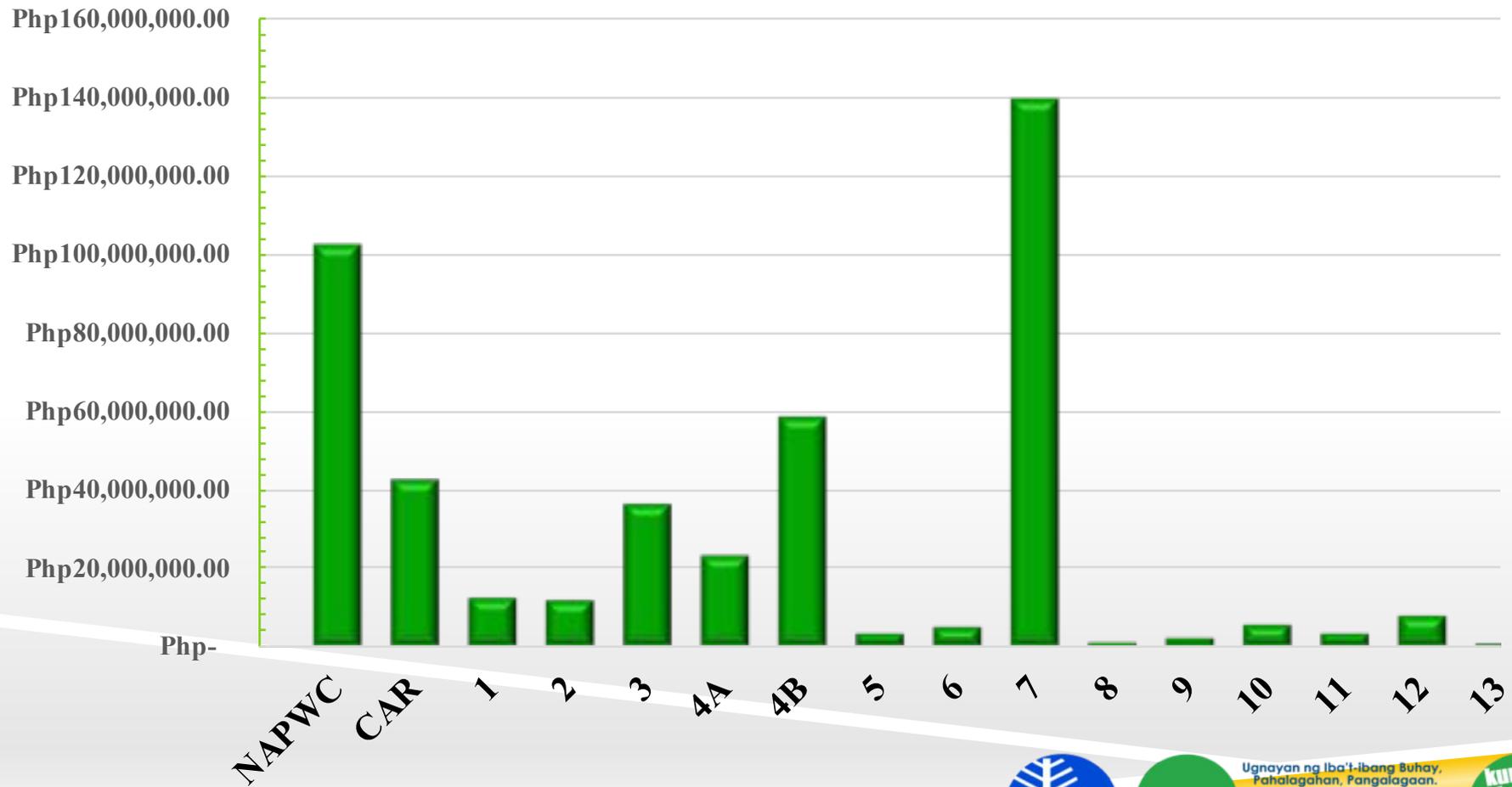


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2. Sustainable financing

Collection of IPAF as of 2017



Case in point: Mount Pulag NP

- Hosted 47,852 eco-tourists which paid fees amounting to 6.4M
- Employed 337 eco-guides/porters
- Generated php 8.2 m from eco-guiding/portering
- Php 2.3M estimated income from catering Services in Kabayan
- 4 transport groups with 126 members composed of jeepneys, vans, and motorcycles associations were established from 2010-2014
- PhP 12.2M estimated income from transport services in Kabayan
- Establishment of ecotourism-related enterprises (ecolodges, gallery arts and crafts shop, variety stores, health and safety facilities, bush side park facilities



- * 2014 data



Case in point: APO REEF NATURAL PARK



SCUBA diving



Bird Watching



Land Lagoon Rafting

CY	No. of Visitors	Income (PhP)
2014	4,651	3.6M
2015	5,426	4.5M
2016	7,551	6.5M

Projected Income of Sagay Marine Reserve

Year	Reef Day	Suyac Discovery	Twin Islands	SMR Island Cruise	TOTAL
2017	14,787,198.00	22,637,192.00	13,874,408.00	7,484,878.00	58,783,676.00
2018	15,764,260.50	24,132,942.00	14,791,158.00	7,979,440.50	62,667,801.00
2019	16,741,302.75	25,628,661.00	15,707,889.00	8,473,992.75	66,551,845.50
2020	17,718,365.25	27,124,411.00	16,624,639.00	8,968,555.25	70,435,970.50
2021	18,695,427.75	28,620,161.00	17,541,389.00	9,463,117.75	74,320,095.50
2022	19,672,470.00	30,115,880.00	18,458,120.00	9,957,670.00	78,204,140.00
2023	20,649,532.50	31,611,630.00	19,374,870.00	10,452,232.50	82,088,265.00
2024	21,626,595.00	33,107,380.00	20,291,620.00	10,946,795.00	85,972,390.00

3. Promotion of green infrastructures

- Architectural design should blend with the natural environment/use indigenous materials

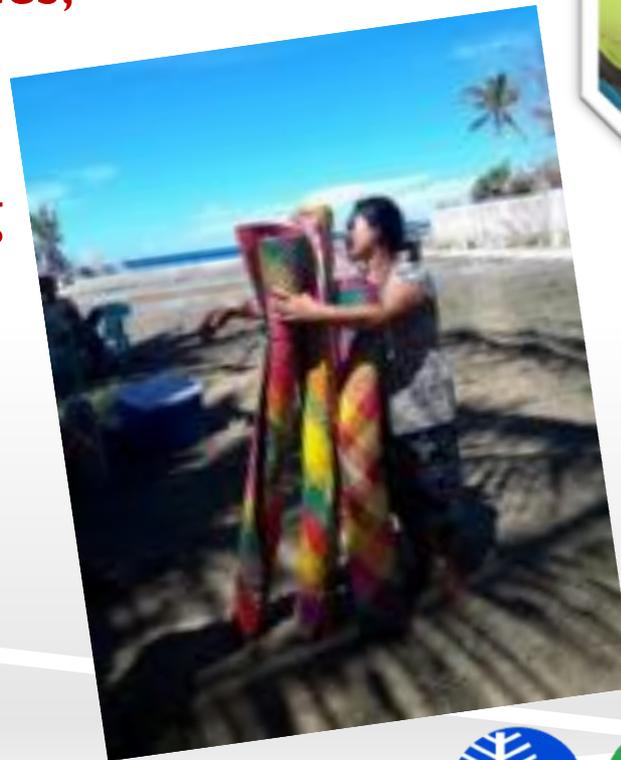


- Low energy consumption technologies for lighting (e.g. solar energy and/or biogas, natural lighting)



4. Promotion of biodiversity-friendly enterprises and products

economic activities that promote the sustainable use of biological resources; create wealth and value; and open opportunities for the equitable sharing of benefits among stakeholders.



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Pahalagahan, Pangalagaan.



5. Inclusive growth for local communities

- Sustainable income opportunities suited for the local communities and indigenous peoples



6. Support to LGU and community-led conservation



- Barangay Ordinance for no hunting and bat sanctuary
- Critical habitat under RA 9147
- LGU support
- Ecotourism
- Marine Sanctuary



Tungawan Critical habitat, Zamboanga-Sibugay

7. Promotion of culture, local cuisine



8. Cultural empowerment and cultural exchange



CONCLUSION

- ✓ Environment and its diversity is the greatest asset of ecotourism for which the country is richly endowed.
- ✓ There are lots of challenges that involves multi-faceted intervention and approach.
- ✓ Ecotourism puts premium value on the naturalness and diversity of the environment and cultural heritage.
- ✓ Tourists are demanding for green tourism.
- ✓ Protected areas with ecotourism potential has the capability to be financially self-sufficient.



THANK YOU!!!

