

MARINE PROTECTED AREAS (MPAs) AND TOURISM DEVELOPMENT

PATA New Tourism Frontiers Forum
25-27 November 2015; Legazpi, Albay, the Philippines



Petch Manopawitr
Deputy, IUCN Southeast Asia Group
petch.manopawitr@iucn.org

OUTLINE

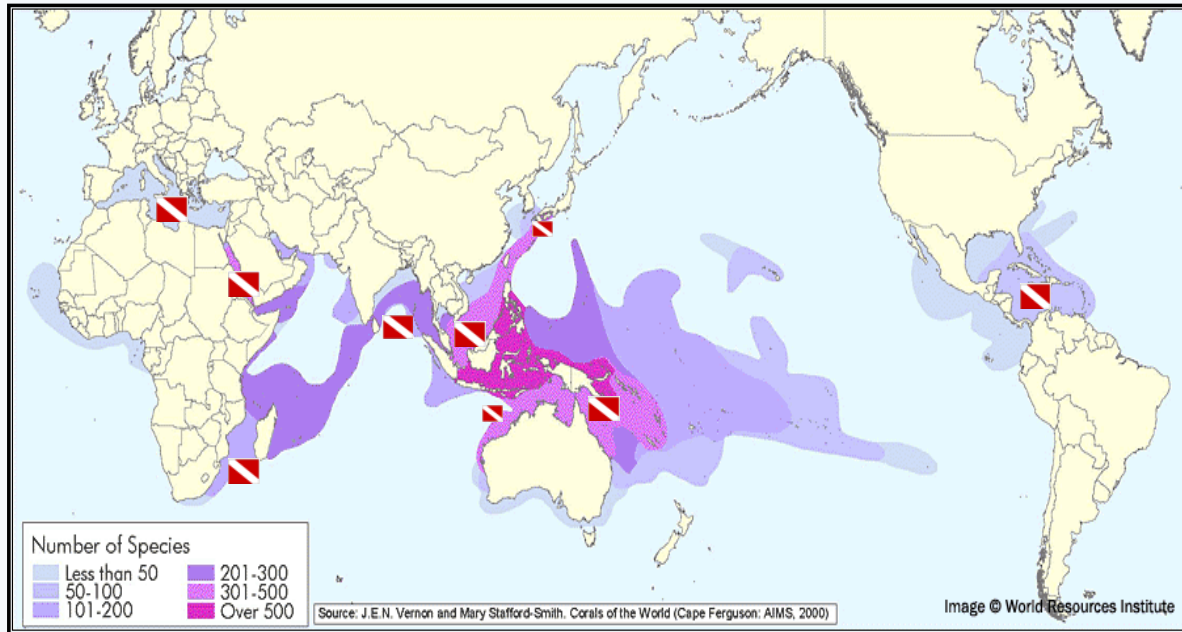
- INTRODUCTION TO COASTAL AND MARINE TOURISM
- A CASE STUDY OF KOH PHI PHI, THAILAND
 - ❖ Significance of Reef-based Tourism
 - ❖ Unsustainable Practices and Overdevelopment
- SUSTAINABLE TOURISM MANAGEMENT
- LINKING MPAs TO TOURISM
- PAYMENT FOR ECOSYSTEM SERVICES (PES)
- A CASE STUDY OF MALDIVES
 - ❖ Significance of Tourism
 - ❖ Management Approaches
- LESSONS LEARNED AND THE WAY FORWARD

MARINE AND COASTAL TOURISM

- **In-water activities:** swimming, snorkeling, SCUBA diving, interaction with wildlife, cruise and boating, recreational fishing
- **On-land activities:** beach relaxing, sun tanning
- **Major attractions:** healthy reefs, fish diversity and abundance, marine wildlife, water clarity, white sandy beaches, good weather, staff and service
- **Key marine tourism providers:** hotels, dive/ boat operating businesses, restaurants
- **Associated services:** transportation, internet café, bars



TOURISM IN CORAL ENVIRONMENTS



- Tourism, as a whole, is the most international trade item, with reef tourism becoming an increasingly large component.

- Account for more than 15% of GDP in at least 23 countries and territories
- Top destinations: Australia's Great Barrier Reef (GBR), the Red Sea, East Africa, the Bahamas and the Caribbean, Hawaii, Maldives, and Southeast Asia.

BENEFITS FROM REEF-RELATED GOODS & SERVICES

TABLE 6.3. SAMPLE VALUES: ANNUAL NET BENEFITS FROM CORAL REEF-RELATED GOODS AND SERVICES (US\$, 2010)

Extent of Study	Tourism	Coral-reef Fisheries	Shoreline Protection
Global ^a	\$11.5 billion	\$6.8 billion	\$10.7 billion
Caribbean (Regional) ^b	\$2.7 billion	\$395 million	\$944 million to \$2.8 billion
Philippines & Indonesia ^c	\$258 million	\$2.2 billion	\$782 million
Belize (National) ^d	\$143.1 million to \$186.5 million**	\$13.8 million to \$14.8 million**	\$127.2 to \$190.8 million
Guam (National) ^e	\$100.3 million**	\$4.2 million**	\$8.9 million
Hawaii (Subnational) ^f	\$371.3 million	\$3.0 million	Not evaluated

* All estimates have been converted to US\$ 2010.

** Estimates of the value of coral reef-associated fisheries and tourism for Belize and Guam are gross values, while all other numbers in the table are net benefits, which take costs into account.

a. Cesar, H., L. Burke, and L. Pet-Soede. 2003. *The Economics of Worldwide Coral Reef Degradation*. Zeist, Netherlands: Cesar Environmental Economics Consulting (CEEC).

b. Burke, L., and J. Maidens. 2004. *Reefs at Risk in the Caribbean*. Washington, DC: World Resource Institute.

c. Burke, L., E. Selig, and M. Spalding. 2002. *Reefs at Risk in Southeast Asia*. Washington, DC: World Resources Institute.

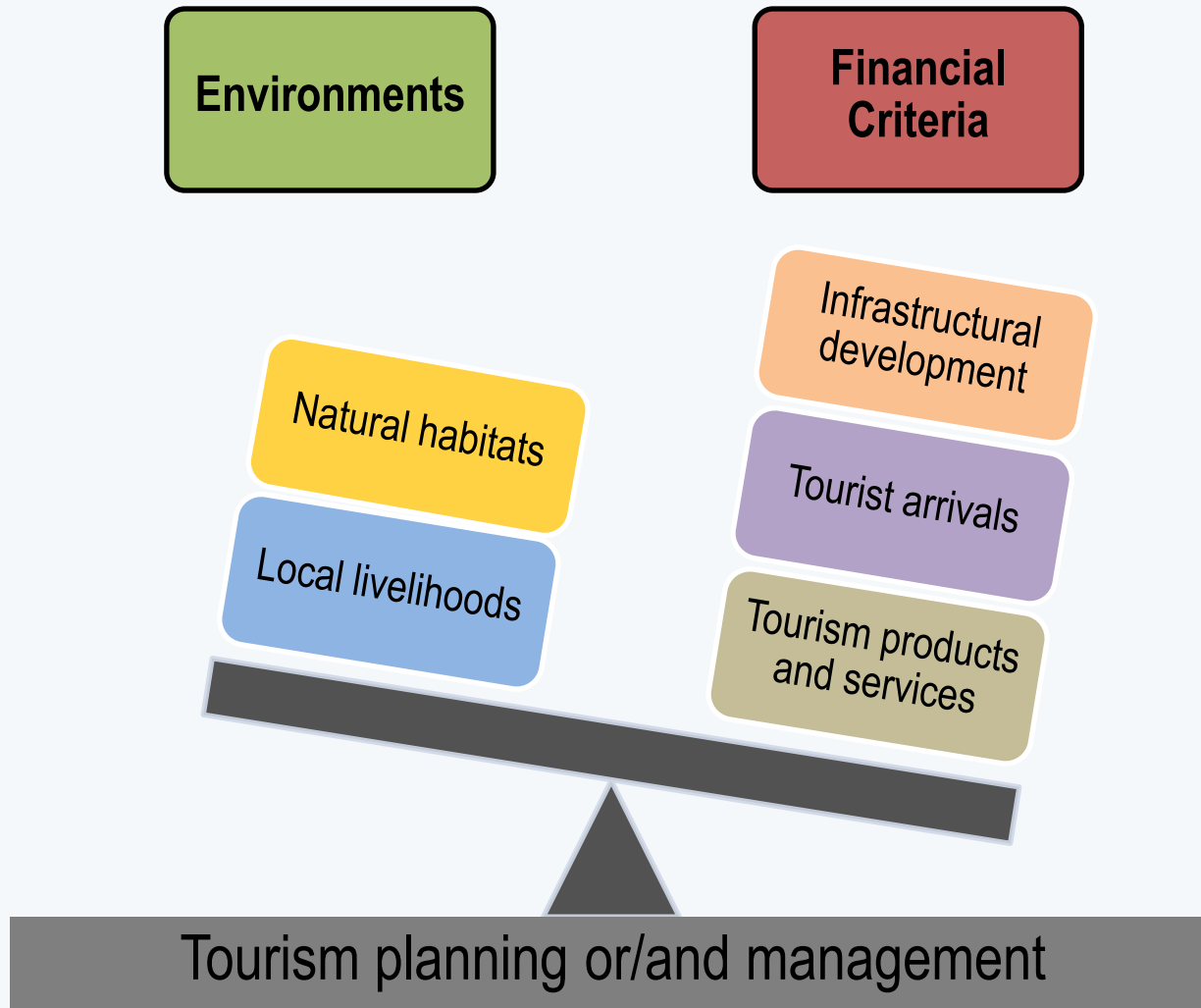
d. Cooper, E., L. Burke, and N. Bood. 2008. *Coastal Capital: Belize The Economic contribution of Belize's coral reefs and mangroves*. Washington, DC: World Resource Institute.

e. Haider, W. et al. 2007. *The economic value of Guam's coral reefs*. Mangilao, Guam: University of Guam Marine Laboratory.

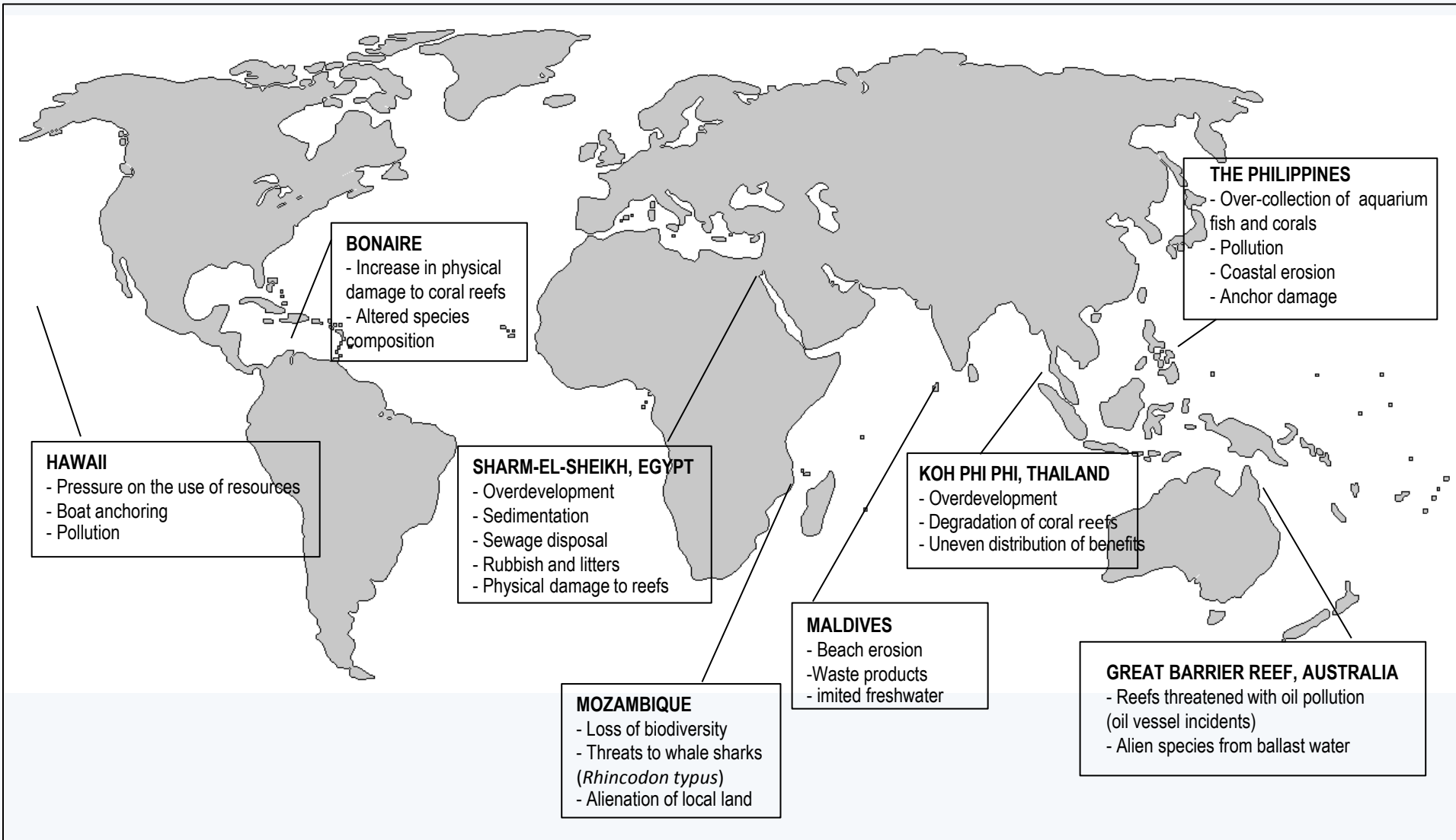
f. Cesar, H. 2002. *The biodiversity benefits of coral reef ecosystems: Values and markets*. Paris: OECD.

- Global net benefits of reef tourism: US\$ 11.5 billion (2010)
- A wide range of economic values of reef tourism: from US\$ 2 to 1 million per hectare per year

CONCEPTUAL ISSUES/CONSTRAINTS TO SUSTAINABLE TOURISM



IMPACTS OF REEF-BASED TOURISM



KOH PHI PHI, THAILAND

- Located in the Andaman Sea, a short boat ride from Phuket.
- Started as a backpacker destination but became popular and underwent intense construction after “The Beach” was filmed in 2000.
- Prior to 2004, annual tourist arrivals reach 1.2 million (at times 5,000 tourists a day and 2,000 day visitors).
- Building legislation and EIA in place but no enforcement.
- Issues: pollution, shortage of freshwater, rapid and unplanned development, blackouts, uneven distribution of benefits, high cost of living.



KEY FACTORS TO UNSUSTAINABLE MANAGEMENT



- Limited knowledge and awareness (surrounding the sustainability concept) → overdevelopment and encouragement of mass tourism
- Economic priority over social and environmental concerns
- Gaps in legislation
- Weak enforcement (and corruption)
- Lack of coordination (vertical and horizontal scales)

SUSTAINABLE TOURISM



Sustainability Concept and Stakeholder Theory

- The conservative use of natural and social resources
- The competitive advantage for the tourism businesses
- The quality of life of the host community
- A high level of tourist satisfaction

MANAGEMENT STRATEGIES FOR MARINE TOURISM

- **Management approaches:**
 - Economic approaches (e.g. entrance fees)
 - Regulatory approaches (e.g. zoning)
 - Institutional approaches (e.g. property right)
 - Educational approaches (e.g. briefings)
 - Voluntary approaches (e.g. green fins)

- **Target or site specific:**
 - At dive sites (e.g. buoys, alternative dive sites)
 - At dive operators (e.g. best practices)
 - At tourists/ divers (e.g. responsible behaviors)



LINKING MPAS AND TOURISM

Benefits to Tourism from MPAs

- Safeguarding critical habitats
- Protecting iconic species
- Habitat restoration
- Cultural and historic resource preservation
- Healthy coral reefs and abundant and diverse reef-associated fish communities can add value to the experience of visiting tourists

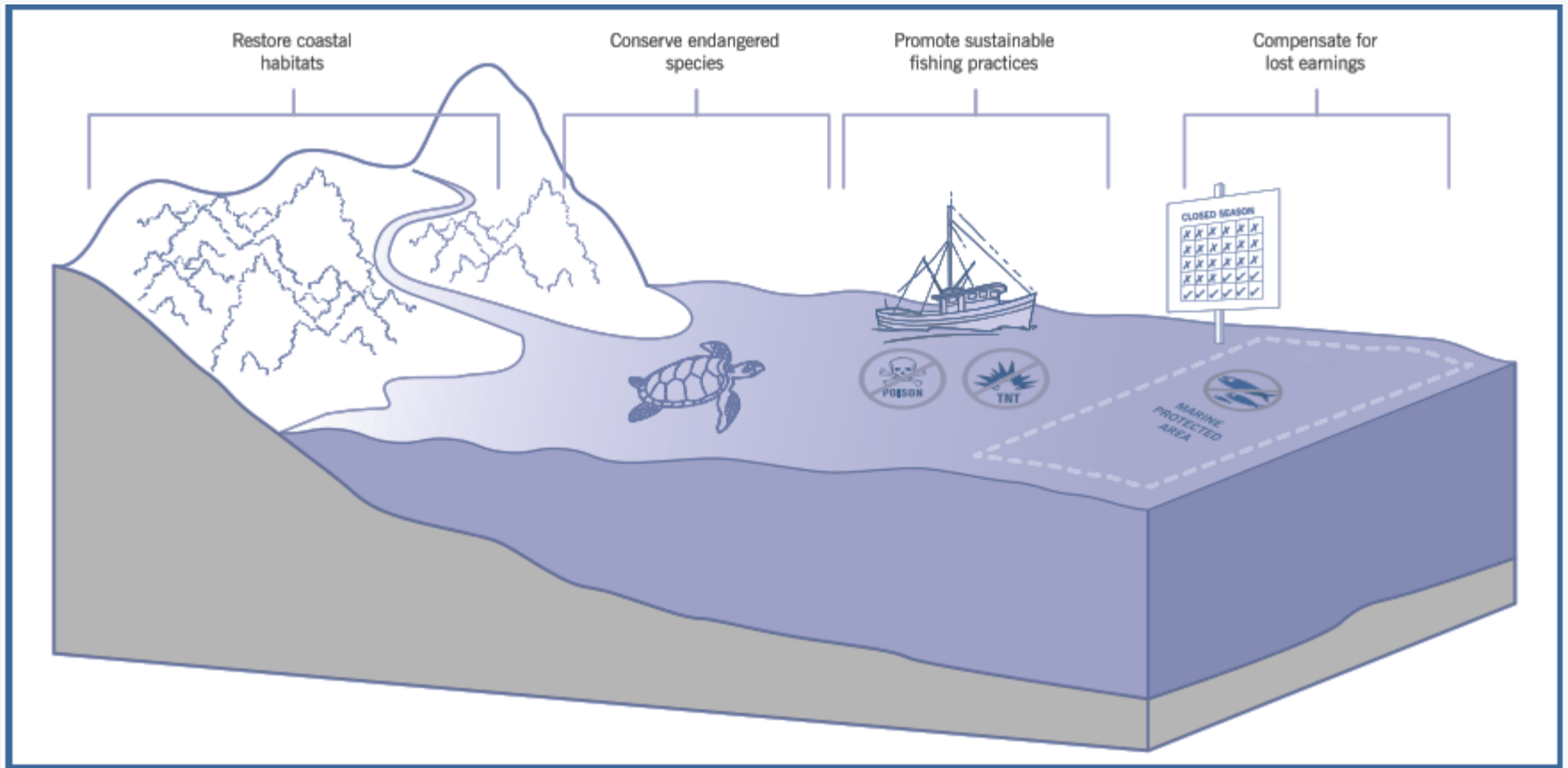
Benefits to MPAs from Tourism

- Revenue
 - entrance fee/ visitor user fees
 - private sector concession
 - donation
- Employment
- Political justification for MPA
- Environmental education
 - nature guide
 - visitor center
 - on-shore signage

PAYMENT FOR ECOSYSTEM SERVICES (PES)

- Increasingly acknowledged as an alternative to failed regulatory mechanisms.
- Adding PES to existing regulatory schemes can make them more effective in protecting both environments and livelihoods.
- Benefits:
 - Compensating for lost earnings e.g. no-take zone Vs. fishing communities
 - Restoring habitats e.g. financial and in-kind benefits to communities for planting mangrove trees
 - Conserving endangered species e.g. payment for turtle nest adoption

WAYS PES CAN BE ADDED TO EXISTING REGULATORY SCHEMES

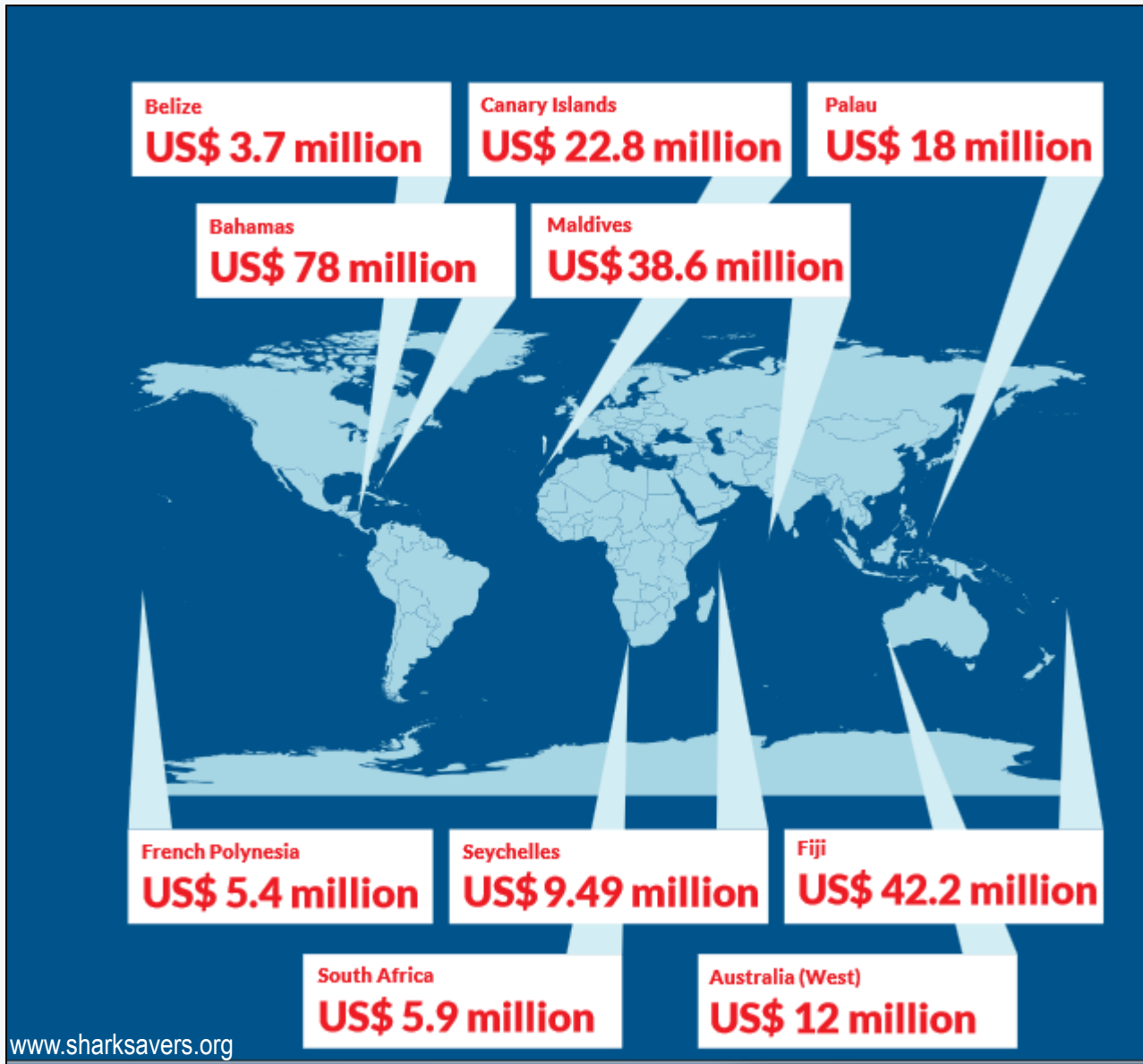


MALDIVES

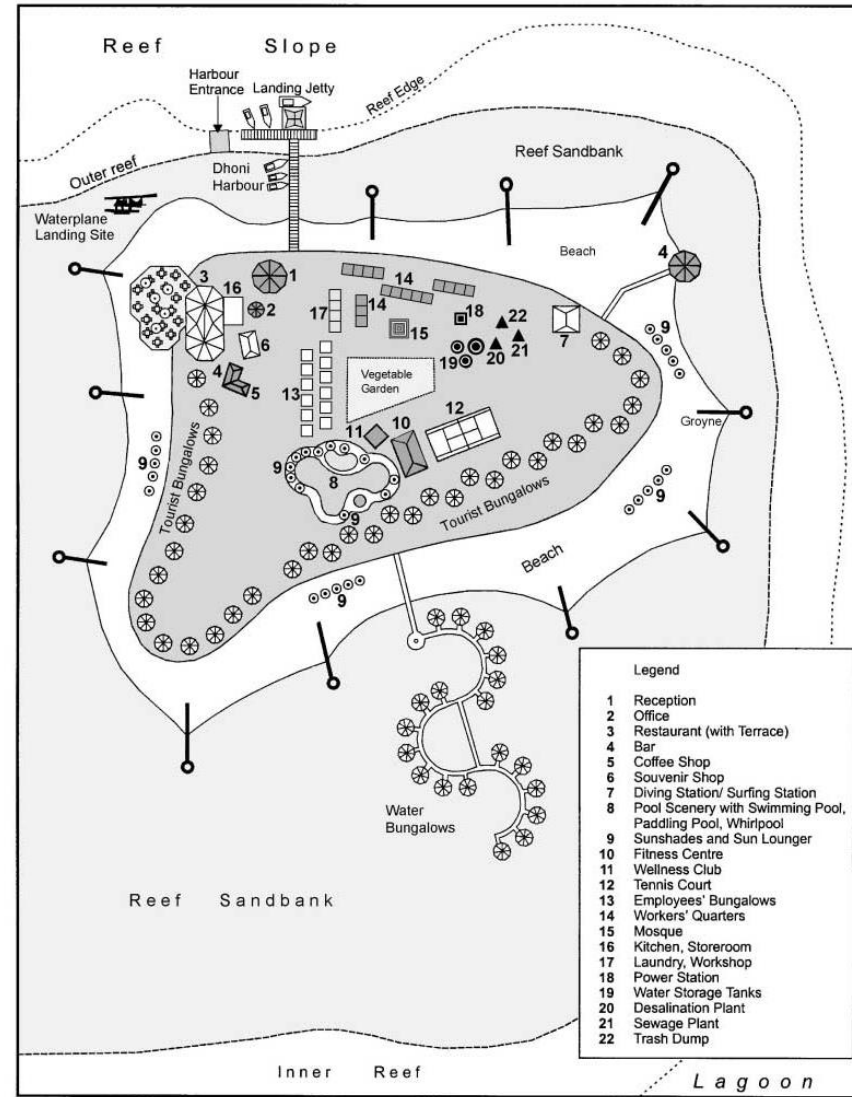
- Situated in the Indian Ocean, south-west of India
- Contain 1,190 small islands – only one-sixth are populated
- Tourism accounts for over 30% of GDP
- High standards of environmental care and local benefit-sharing
- The “tourism industry” is synonymous with “resort islands”
- Developed under “one island one hotel scheme”
- Attractions: coral reefs, wildlife (e.g. whale sharks, manta rays, turtles), lagoons, island vegetation, white sandy beaches
- Key issues: beach erosion, coral bleaching, solid waste and discharge, sedimentation



BENEFITS FROM SHARKS & RAYS VIEWING TOURISM



RESORT ISLANDS AND HOUSE REEF CONCEPTS



PROTECTING ICONIC SPECIES AND CORAL REEFS

- The first MPA established in 1993
- Currently 33 MPAs, in which only diving and bait fishing are allowed



- Whale Sharks Sanctuaries: Ari Atoll (Maamigili MPA) and Baa Atoll (Hanifaru MPA and Angafaru MPA) → banning sharks and rays fishing - illegal to capture, keep or harm
- Designated for the explicit **purpose of tourism**, aiming to provide an **alternative income** for locals which encourage them to **move away from harmful fishing practices** and at the same time **preserve the whale sharks habitats**

CODES OF CONDUCT

For tour operators

- Vessels: reduce their speed, looking out for animals, no vessel traffic directly above the aggregation site, drop off guests at a safe distance upstream and pick up guests downstream from the aggregation site
- On-board: pre-encounter briefing
- In-water: distance from the animals

For divers

MANTA RAY: **M**ake a quiet entry; **A**dhere to minimum distance; **N**ever chase; **N**o **T**ouching; **A**lert and calm; **R**est and remain still; **A**void obstructing; **E**njoy your experience!

LESSONS LEARNED FROM KOH PHI PHI & MALDIVES

To sustainably manage tourism, these key factors are required:

- Capacity development
- Consideration of a complex range of sub-national, national, and transnational relationships
- Regulatory frameworks
- Community involvement, trust, acceptance, and support
- PES: compensating for loss earnings, protecting and restoring habitats, conserving endangered species
- Sustainable financing: entrance fees, fund raising, private-sector partnerships
- Coordination between multi-sectoral and multi-faceted agencies
- Collaboration of all stakeholders

REFERENCES

- Barker & Roberts, 2004 Barker, N. H. L., & Roberts, C. M. (2004). Scuba diver behaviour and the management of diving impacts on coral reefs. *Biological Conservation*, 120(4), 481-489.
- Buckley, R. (2003). 'Environmental inputs and outputs in ecotourism: Geotourism with a positive triple bottom line?' *Journal of Ecotourism* 2(1):76-82.
- Burke, L., Reytar, K., Spalding, M., & Perry, A. (2011). *Reefs at Risk Revisited*. Washington, DC, USA: World Resources Institute.
- Cope, R. (2003). The international diving market. *Travel and Tourism analyst*, 6, 1-39.
- Daldeniz, B., & Hampton, M. P. (2012). Dive Tourism and Local Communities: Active Participation or Subject to Impacts? Case Studies from Malaysia. *International journal of tourism research*.
- Dearden, P., Bennett, M., & Rollins, R. (2007). Perceptions of diving impacts and implications for reef conservation. *Coastal Management*, 35(2-3), 305-317.
- Dodds, R. (2010). Koh Phi Phi: Moving Towards or Away from Sustainability? *Asia Pacific Journal of Tourism Research*. Special Issue: Island Destinations: A Natural Laboratory for Tourism. 15 (3): 251-265
- Graci, S., & Dodds, R. (2010). *Sustainable tourism in island destinations*. London, England: Earthscan.
- Hall, C. M. (2001). Trends in ocean and coastal tourism: the end of the last frontier? *Ocean & Coastal Management*, 44, 601-618.
- Hawkins, J. P., Roberts, C. M., Kooistra, D., Buchan, K., & White, S. (2005). Sustainability of scuba diving tourism on coral reefs of Saba. *Coastal Management*, 33(4), 373-387.
- Kokkranikal, J., McLellan, R., & Baum, T. (2003). Island tourism and sustainability: A case study of the Lakshadweep Islands *Journal of Sustainable Tourism* 11(5), 426-447.
- Polunin NVC (2002) Marine protected areas, fish and fisheries. In: Hart PJB, Reynolds JC (eds) *Handbook of Fish and Fisheries*, Volume II, Blackwell, Oxford. pp: 293-318
- Pomeroy, R. (2003). 'Capacity building and community involvement in marine protected area implementation.' In: R.L. Creswell (ed.) *Proceedings of the 54th Annual Gulf and Caribbean Fisheries Institute*, pp. 689-693. Fort Pierce, FL: Gulf and Caribbean Fisheries Institute.
- Thia-Eng, 2006Thia-Eng, C. (2006). The dynamics of integrated coastal management: Practical applications in the sustainable coastal development in East Asia. Quezon City, Philippines: PAMSEA (GEF/UNDP/IMO).
- Wilkinson, C. (1996). Global change and coral reefs: impacts on reefs, economies and human cultures. *Global Change Biology* 2(1996), 547-558.
- Worachananant, S., Carter, R., Hockings, M., & Reopanichkul, P. (2008). Managing the impacts of scuba divers on Thailand's coral reefs. *Journal of Sustainable Tourism*, 16(6), 645-663
- Zakai, D., & Chadwick-Furman, N. E. (2002). Impacts of intensive recreational diving on reef corals at Eilat, northern Red Sea. *Biological Conservation*, 105(2002), 179-187.

Thank you for your attention

