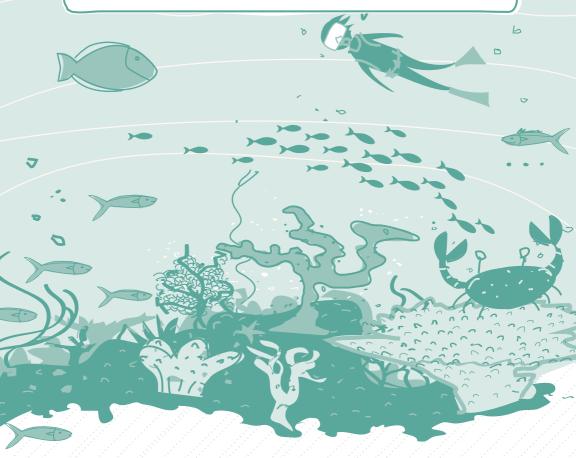
# **Tourism sector: Coral reef and biodiversity protection**



### Introduction

Maldives consists of 1,192 coral islands. The country is known or its rich-biodiversity associated with its reef-system. MALDIVIAN CORAL REEFS REPRESENTS 3.14% OF THE WORLD'S CORAL REEFS! The reefs include 250 different species of corals and 1100 species of reef fish.

25-35% of the tourists visit Maldives for snorkelling and diving. The financial resources brought about by snorkelling and diving can add up to a total of US\$ 1 million per year.

Government and non-government efforts to protect and conserve the biodiversity of these reefs are often associated with the establishment of Marine Protected Areas (MPAs).



## A) Coral reef protection

In Maldives coral reef protection includes:

- Reducing non-climatic influences on the coral reef habitats. This is referring to:
  - + Land use and coastal erosion
  - + Waste management
- · Increasing the number of MPAs
- Strengthening regulations:
- + Enforcing existing regulations for MPAs
- + Enforcing existing regulations for house reefs (coral reef between island & deep ocean)





#### Cost

A reef 13 hectares (32 acres) long has an estimated initial cost of US\$ 72, 027 to establish an improved management system.

Annual operational cost for such a management is at US\$ 101, 634.



### **Cost-benefits**

Marine Protected Areas (MPAs), with healthy reefs can have spill over effects, approximately 800m (2625 feet) from the reserves & improve fishing grounds near them.



### **Additional benefits**

Direct: Provide resources as food & building materials

**Indirect**: Provide regulatory and support services; improve fisheries, productivity, and shoreline protection by acting as break water, aesthetic, spiritual and cultural values.

# B Artificial coral reefs/ Coral reef restoration

Creating new, artificial coral reefs or restore existing, natural coral reefs to enhance the experience of tourists.





### Cost

US\$70 (2011 USD) per linear meter



### **Cost-benefits**

Provide coastal protection for beach erosion and against storm waves. Coral reefs can help deposit sand on the beach and increase the reef size over time.



### **Additional benefits:**

Tourists can adopt a reef ball or an artificial coral reef on resort islands in the Maldives. It can improve resort aesthetics by placing artificial coral reefs under restaurants, over water bungalows, or along piers. Also, artificial coral reefs can provide habitat for marine species and attract fish. The reefs can help educate guests about the importance of coral reefs.



### **Success story:**

Reef Recharge is a coral propagation and marine conservation project which began in 2011 as a joint effort by Taj Exotica Resort & Spa and Ocean Dive Maldives. Reef Recharge aims to increase coral coverage near the resort and encourage healthy coral growth on the local reefs through coral propagation. Coral fragments are attached to specially made frames and planted near the Ocean Pavilion. The collection of coral frames over time creates a healthy reef ecosystem. Already an increase in the fish and invertebrate diversity is observed on the site. Tourists can see the coral frame reefs during snorkelling and get involved by sponsoring a coral frame and build their own coral reef.



**THE TOURISM ADAPTATION PROJECT** The Maldives Tourism Adaptation Project (TAP) (2011 – 2015) was run by the Ministry of Tourism, in collaboration with the United Nations Development Program (UNDP) and funded by the Global Environmental Facility (GEF). The project supported the tourism sector in the Maldives to set up the required policy environment, regulatory guidance, technical skills and knowledge to ensure that climate change- related risks were systematically factored into day-to-day tourism operations.

This booklet is a collection of 6 booklets, which identifies potential areas for investment to strengthen climate resilience and adaptation in the tourism sector.

### **Tourism Adaptation Project (TAP)**

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