Tourism sector: Protecting tourist infrastructure

Introduction

Protecting our tourist infrastructures is important for the tourism industry. By adapting measures to protect the different types of infrastructure (accommodation, transport etc), from climate change and climate change related impacts, we can make our tourist infrastructures resilient to climate change. The tourism associate community identifies beach erosion, drought, rainfall induced flooding and storms as the main impacts of climate change to those communities.

Several adaptive measures are being practiced by the tourism operators. Safaris have back-up power and communication systems. Tourism Resorts use coastal protection mechanisms by using sea walls which is the most common form of adaptive measure. 60% of the tourist Tourism Resorts use beach replenishment while 20% of them practice beach revetment.

The emerging trend in tourist resort development is that, the modern designs are built with accommodation facilities such as water bungalows and some underwater facilities within the lagoons.

(A) Education and increasing community awareness

Providing information to the staff and other community members of the Tourism Resorts about alternative accommodation structures and other facilities to adapt to storm and sea water inundation to coastal infrastructures. Distribution of information booklets and leaflets relating to the topic. Conduction of seminars and workshops to increase awareness and community participation.
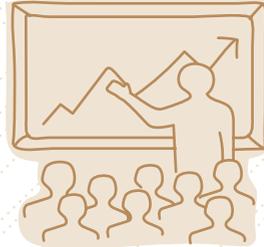
Cost
US$ 1400,000 (2010)

Cost-benefit
Increased awareness on risk management strategies and in climate related risks to infrastructure.

Additional benefits
Incorporation of climate risks management strategies at local and national policy levels.

(B) Weather proofing infrastructure

I. Climate Change management integrated insurance

Integrating insurance into a country-driven climate risk management approach for experts and officials experienced in weather risk insurance, disaster risk reduction, and adaptation. Also informing policy discussions on inclusive risk management approaches and supporting climate envoys in their short and long-term strategies to address loss and damage.

Cost
US$ 0.4 million (2000)

Cost-benefit
Identification of the most suitable risk management strategy and increase in climate risk awareness. Increase use of rick reduction measures such as early warning systems, better building codes and investment in infrastructure. Increase use of risk transfer instruments such as insurance. A comprehensive management of such tools leading to a reduction in costs and an increase in the benefits of using limited private and public funds.

Additional benefits

The design and implementation of inclusive country-driven climate risk management strategies and approaches require the international community to stand-in better understanding on combinations of tools and approaches, help replicate good practices across and between countries, and provide guidance on overcoming operational challenges (e.g., lack of technical expertise).

II. Infrastructure water proofing and protection

waterproofing coatingsApplying waterproofing materials to infrastructures below ground and above ground.

Cost

0.5 billion per year (2011)

Cost-benefit

Provides safety for infrastructure during storm surge and inundation.

Additional benefits

Reduced labour costs for renovating damaged infrastructure, following storm surge events and inundation.

C Elevated Structures

Tourism infrastructure built near the coastline is vulnerable to coastal inundation and erosion. Elevating inland infrastructure is one way to accommodate such changes in coastal areas. This is still a new adaptation measure for Maldivian Tourism Resorts, which is gaining acceptance.

Cost

US$ 15, 000 (housing for accommodation)
US$ 38,000 (other facilities, e.g. power house)

Cost-benefit

Provides safety for infrastructure during storm surge.

Additional benefits

Reduced labour costs for renovating damaged infrastructure, following storm surge events.

Success story

Holiday Inn Resort Kandooma have elevated beach villas along the high-impact coastline. In such structures the bedrooms are located on the second floor of the villa and the living area is located on the beach level. This layout minimizes damage to the beach house from coastal flooding events.

References

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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.

Ministry of Tourism

TOURISM ADAPTATION PROJECT
for a climate resilient future

UNDP
Empowered lives.
Resilient nations.

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