### Disaster Risk Management





# Tourist safety and security in times of disaster

Jasmin Garraway, Director of Sustainable Tourism, Association of Caribbean States

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cross the economies of the Greater Caribbean, the importance of tourism for generating income, creating and sustaining jobs, encouraging foreign investment and facilitating trade opportunities cannot be denied. In fact, today, tourism stands as the primary source of foreign exchange revenue in half of the countries in Central America. The vulnerability of tourism to risk, crisis and disaster has long been evident. Historical records show that the tourism industry has been affected by a range of disasters each with different disaster triggers, whether they be Natural, Biological, Man-made, or Technological in origin. Over the past decade several of these events have left an indelible mark on the minds of industry practitioners the world over. In the Indian Ocean tsunami of 2004 the overall death toll surpassed 280,000 and the number of tourist causalities was estimated at more than 3,500. Such was the scale of devastation, that the event was referred to as "the greatest catastrophe ever recorded in the history of world tourism" because it caused the biggest loss of life in terms of the number of tourists as well as those working in the tourism industry.

Other memorable disasters were: Hurricane Katrina in New Orleans in 2005 which left more than 80 per cent of New Orleans underwater and destroyed that state's biggest source of revenue – tourism which in 2004 attracted more than 10 million visitors and created 80,000 tourism-related jobs. The Foot and Mouth disease in England in 2001 which reduced travel flows in the United Kingdom, Europe and Asia. The Severe Acute Respiratory Syndrome (SARS) epidemic of 2003 which severely affected tourism to Southeast Asia, Europe and China; and The Bird Flu epidemic in 2003, 2004 and 2005, which also affected Asia and Europe.

The Bali bombings in October 2002 resulted in a substantial decrease in international arrivals, a drastic reduction in new holiday bookings and a cessation of international airline services to Indonesia. Events like these, as well as the increasing levels of crime in tourist destinations, threaten the safety of tourists, host communities and tourism employees.

As these examples have shown, no region on the globe is safe or immune from the risk of the occurrence of some type of disaster. For example all the countries of the Greater Caribbean are to some extent vulnerable to the impact of geological and hydro-meterological hazards. There are several facts about the location of the territories of the Greater Caribbean that make their vulnerability to certain natural hazards inevitable. The Caribbean lies in the North Atlantic Ocean, one of the six main tropical areas of the Earth where hurricanes may develop from June to December every year. Several of the islands of the Eastern Caribbean are volcanic in origin. The only known submarine volcano in the region - Kick 'em Jenny - which is located 9km north of mainland Grenada, also poses a threat to the island of Grenada and to the rest of the Eastern Caribbean should a major under-water volcanic eruption occur. In addition, the Tectonic Setting of the Caribbean is such that many Greater Caribbean countries lie close to tectonic plate boundaries and thus face the threat of earthquakes. In fact, the level of seismicity in most of the Caribbean is considered to be moderate to severe.

Over the past three decades the predominant style of tourism in the region has been based almost exclusively on the attraction of the climate and of beaches. As host destinations, the Greater Caribbean has made an economic commitment to satisfying international demand by providing a coastal tourism product. However, the coastal zone is seen to be in the direct and immediate area of risk for the following reasons:

• Hurricanes and tropical storms make landfall with all their force in this area and wind force is likely to be most destructive on the coast;

• Shear wind force acting on coastal waters throws up sea water on coastal land producing storm surge and conditions ripe for severe coastal erosion that threatens the stability of coastal buildings and other structures;

• The coastal zone is the most low lying area in



Caribbean SIDS and as a result is prone to coastal flooding due to runoff from mountains; and

• Tsunami impact is greatest closest to the shore as the coastal zone is the first zone of impact.

Yet, despite information on the numerous risks associated with building on the edge of the water, tourism plant continues to be built in the hazardprone area of the Caribbean coast. For example, in one island territory, about 90 per cent of accommodation facilities including hotels, villas and condominiums are located on the coastline. The World Bank estimates that generally the typical tourism development in the Greater Caribbean region is located on the coast and is sited within 800 metres from the high water mark.

With respect to disasters, the focus of the region and the tourism industry has traditionally been on the hurricane hazard, since the impact of tropical storms and hurricanes has been significant. In 1998 the impact of Hurricane George on the Caribbean tourism sector has been well documented. In Antigua, six hotels were closed while in Barbuda two hotels suffered extensive damage. 15 per cent of the 5,800 rooms in the Dominican Republic were damaged. In St Kitts, 500-600 rooms were closed for one month; while in Nevis one hotel was closed for two months.

More recently, in 2004 Hurricane Ivan caused 50 per

cent of Grenada's physical tourism assets to be destroyed, resulting in a sharp reduction in Grenada's overall hotel room stock as well as a decline in almost every area of tourist activity on the island. There were reduced arrivals from all major source markets except Germany and an attendant decline in visitor expenditure for a four month period from approximately EC\$177 million to EC\$104 million. The total impact of Hurricane Ivan on the sector was estimated at EC\$264.3 million.

In 2005, Wilma which was the strongest Atlantic storm ever recorded, wrecked Cancún and other beach resorts, washed away whole beaches, killed 7 people and caused US\$2.6 billion in damages. Wilma made several landfalls, with the most destructive effects felt in the Yucatan Peninsula of Mexico, Cuba and the US state of Florida. The popular Mexican resort towns of Playa del Carmen, Cozumel and Cancun all suffered significant damage.

The passage of Hurricane Dean in August, which became the first major hurricane and first category 5 hurricane of the 2007 Atlantic hurricane season, saw thousands of tourists leave the 'Mayan Riviera' and head for makeshift shelters on Mexico's Yucatan peninsula. In Quintana Roo's Costa Maya region, where Dean made landfall as a category 5 storm, a state of emergency was declared and involved the evacuation of some 80,000 tourists.

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## Lessons on improving the management of natural disaster risk through fiscal and budget planning

Fiscal planning for natural disasters faces several important challenges. Natural hazards are becoming more frequent and severe in the Caribbean and disaster losses are growing by 20 per cent per annum – far in excess of the growth rates of GNP. But existing planning and budgeting processes are inadequate for preparing for natural disasters or coping with the economic and fiscal upheavals that ensue from them. Much of government disaster risk liabilities are contingent and implicit and therefore not well accounted for. In addition, political incentives act against pro-active disaster risk management (DRM) and humans' psychological make up hampers a rational assessment of probabilities and risks.

But the challenges can be managed by several best practices. First, use a broad framework for DRM (including risk evaluation; mitigation and prevention; financial risk transfer; emergency preparedness and response; rehabilitation and reconstruction) and take a pro-active stance on risk reduction and management. Second, clarify roles and responsibilities among the wide variety of actors involved and clearly identify who assumes what parts of the risk. Third, change the conceptual approach and use a probable approach to appropriately represent natural disaster risk. Fourth, improve the incorporation of risk into budget, limit the government's fiscal risk, and insure government against disaster risk. Fifth, strengthen financial risk management through temporal and spatial risk spreading instruments. And sixth, overcome political economy problems by improving information, carrying out rigorous risk evaluations, and awareness campaigns. *Dora Currea, General Manager, Caribbean Country Division, Inter-American Development Bank.* 



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Hurricane Katrina left 80 per cent of New Orleans underwater and destroyed Louisiana's biggest source of revenue: tourism Hurricane Felix followed in quick succession and slammed into Nicaragua's Miskito coast as a Category 5 storm, while Hurricane Henriette made a direct hit on the Cabos resorts of Mexico's Baja California peninsula and sent 13 ft waves crashing unto the shore. Amazingly, twin Atlantic and Pacific hurricanes had made landfall on the same day. This was unprecedented as there was no such occurrence in the recorded history dating back to 1949. Of note also is that Hurricane Dean had struck Mexico further up the Caribbean coast, then also unprecedented was the fact that two Category 5 hurricanes had made landfall in the same year.

This is what has happened in the last decades, and the region can expect to face more of the same in the future. While these occurrences are beyond our control, good tourism planning practice ought to recognise at the least, that there are different types of tourists that visit the region, and the needs of each group must be met in the event of a disaster. For example, tourists on organised tours must be treated differently to independent travellers, simply because accommodation arrangements and tourist activities tend to be different.

Other considerations are that the seasonal nature of Caribbean tourism dictates that in the peak season tourists tend to be spatially concentrated on the narrow coastal zone where there is high potential for disasters. The location of most important tourism developments visited by international tourists lie in the path or location of natural phenomena with a high potential for disaster. In addition, due to the small size of Caribbean islands and the narrow physical nature of the coastal zone, tourists will not have many options for evacuation upon receipt of warning of impending disaster. Of foremost concern



also is the high occupancy density of hotels, and the need, unlike other businesses, to cater for both employee and visitor safety. The above builds a compelling case for integrating safety concerns as a central part of the appraisal process of any coastal tourism project.

It is necessary to determine from past experience what are the optimal approaches to managing a crisis arising out of the passage of a familiar natural event such as a hurricane or earthquake as well as unfamiliar events such as tsunamis.

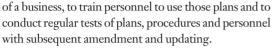
Several valuable lessons were learnt from the management, or lack thereof, during the Great Hanshin Earthquake in Japan in 1995, and the Indian Ocean Tsunami in 2004. The four key guiding principles that emerged from the earthquake were: The need for each employee to act for guest safety soon after the emergency event. Second was the importance of having a unified information flow. Third was the need to shift downwards the decision making power to the front lines in emergencies, and lastly the importance of maintaining a good relationship with the local community so that there is rapid cooperation during disasters.

The tourism industry must be prepared to assist itself and it is generally thought that there are two fundamental roles for tourism in the management of disaster risk.

Firstly, as a partner with government and community agencies in the development of multi-agency, coordinated disaster management plans, systems, procedures and processes which include the needs of tourism.

This often necessitates an alliance between government and the tourism sector. Following a model recommended by the World Tourism Organisation, the APEC economies have adopted the recommendation to form a National Tourism Council for each APEC economy that draws together key government departments, agencies and external stakeholders as well as the establishment of a National Safety and Security Committee as an operational arm of the Council. Fiji presents a good global model of such an alliance in the form of the Tourism Alliance Group (TAG). There are also notable examples worthy of emulation in ACS Member States, which have developed a tourism sector hurricane plan as an annex to the national hurricane plan, and where Tourism Organisations will team up with Disaster management agencies, to jointly coordinate the management of disasters in the tourism context.

The tourism sector can also play a key role as a partner in developing plans and procedures appropriate to a destination and to the specific roles and responsibilities



It is recognised that the tourism industry is only one part, albeit a very important part, of the communities of the Greater Caribbean. It is to be expected that different levels of the tourism industry should have different responsibilities and will have to liaise at different levels of the disaster management system in carrying out these two fundamental roles.

There can be no doubt that tourism is a valuable industry that is worth protecting. In achieving the goal of protecting tourists and tourism employees the region is also preserving the sustainability of its tourism industry.

## Inter-American Development Bank's Disaster Risk Management Resources for Association of Caribbean States Countries

#### Range of IDB Support

Association of Caribbean States (ACS) member countries that are also borrowing members of the Inter-American Development Bank (IDB) have access to support for the entire spectrum of disaster risk management activities through the Bank's standard instruments – loans, technical assistance grants and studies/technical work. Those ACS countries that are not IDB borrowing members have access to IDB resources through the Caribbean Development Bank. The funding is carried out following the principles laid out in the 2007 Disaster Risk Management Policy – both in disaster prevention and mitigation (ex-ante actions) and disaster response (ex-post activities).

In the area of ex-ante disaster funding, the Bank provides support for the countries to manage risks by reducing vulnerability, and by preventing and mitigating disasters. In ex-post financing the Bank's resources may be used both for immediate response and reconstruction. Disaster financing can be a component in a larger development programme, such as for housing or watershed management, or may be presented as a freestanding project.

With financing from the Bank's Regional Public Goods Programme, the Caribbean is just initiating a Bank-financed programme that aims to reduce vulnerability to natural hazards and promote sustainability for the Caribbean tourism sector.

#### Specialised Instruments

The Bank also has several specialised instruments for disaster risk management that countries may access. The Disaster Prevention Facility (rapid preparation loan for up to US\$5 million (mn)) provides financing for programmes of risk identification and reduction as well as disaster preparedness and recovery planning. A municipal risk management programme in the Dominican Republic and a flood early warning programme in Haiti are two recent examples of programmes with this Bank financing.

In 2006, the Bank established two new sources of grant resources – the Disaster Prevention Fund (initial capitalisation of US\$10 mn) and the Multi Donor Disaster Prevention Fund (initial capitalisation of US\$8 mn) – which both provide up to US\$1 mn per project for strategic activities. In addition of financing country-specific projects, resources are also available to developing shared regional approaches to supporting disaster risk management. Natural hazard management in urban costal areas of Jamaica, evaluation of seismic risk in several cities in Mexico and mainstreaming of disaster risk management in the countries of the Organisation of Eastern Caribbean States are examples of projects in the pipeline for possible financing with resources of the Funds.

For post-disaster response, countries may access the Immediate Response Facility (up to US\$20 mn loan for immediate response needs; rapid approval), Emergency Technical Cooperation grants (up to US\$200,000) which is the Bank's only instrument for humanitarian assistance, or reconstruction loans. Special procurement procedures are available for emergency situations that speed procurement for recovery goods, services and investments.

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