



# Local Risk Management in the Yum Balam Protected Area

The Yum Balam Wild Flora and Fauna Protected Area is located within the Atlantic Hurricane Belt and it's vulnerable to very strong winds, tropical storms and heavy rains. It is also located in an area of high fire incidence with 989 fires recorded to date. The 2005 Atlantic Hurricane Season was the most active hurricane in recorded history with two category 5 hurricanes (Emily and Wilma). These hurricanes destroyed thousands of trees in the protected area and became a serious fire menace, especially during the dry season (April-May).

In 2006 a fire emergency affected 50,000 hectares and revealed the necessity of creating a Forest Fire Prevention and Combat Program. As a result, the National Commission of Natural Protected Areas (CONANP) developed a forest fire prevention program surrounding the reserve. To support the work of the CONANP, the Small Grants Programme in Mexico, has supported 40 projects for a total of approximately US\$873,504 in the protected area and its surroundings benefiting approximately 2500 families from 8 communities.

To date, the government and community efforts to manage the risk of forest fires has proven successful and there have not been any significant fires in the Yum Balam reserve, and its surroundings. Even though there is no official information about the carbon *stock maintained* on the site, based on the impact of a fire that started after Hurricane Gilbert in 1999, the reserve is avoiding the emission of approximately 54.98 tons of CO2 by hectare.



## LOCAL RISK MANAGEMENT PROGRAMME

In 2002, after the impact of the hurricane Isidore in the Yucatán Peninsula, the Small Grants Programme in Mexico with the support of the Bureau for Crisis Prevention and Recovery of the United Nations Development Programme started the Local Risk Management Program. The Program aims to mitigate climate change by decreasing the possibilities of forest fires after hurricanes; and increasing the resilience of communities to climate change by including risk management considerations in the project design.

## ABOUT THE RESERVE

The Yum Balam reserve is located in the north area of Quintana Roo Maya and represents the effort of the Mayan people -with the support of the civil society, the academia and the government- to conserve their natural and cultural heritage. The reserve was officially declared a Flora and Fauna Protected Area on June 5, 1994 and its surface of 154,052 hectares is home to a variety of ecosystems including sub-deciduous tropical forest, sub-evergreen tropical forest, flooded forests, mangroves, lagoons, wetlands, coastal waters and marine environments.



Yum Balam flora has at least 414 species, of which 96.5% are native and represent 18% of the flora in the Yucatan Peninsula. In terms of fauna, Yum Balam is home to 580 marine fish species and 23 freshwater fish species; 340 bird species; 22 wild mammals including three that are endangered or in danger of extinction; 14 amphibian species; 67 reptile species; 168 insect species; 186 arthropod species; 18 lepidopteron species and six dipteran species.

The reserve is inhabited by about 15,000 people, mainly Mayan indigenous people, and includes numerous Mayan archeological ruins.