

August 13-14, 2018
Paris, FranceTrends in Green chem 2018, Volume: 4
DOI: 10.21767/2471-9889-C1-009

THE SOCIAL, CULTURAL AND FINANCIAL INSTRUMENTS FOR RESILIENCE AND ADAPTATION TO CLIMATE CHANGE IN CIUDAD DEL CARMEN, CAMPECHE, MEXICO

Joel F Audefroy and Bertha Nelly Cabrera Sanchez

Instituto Politecnico Nacional, ESIA-TEC, Mexico

The municipality of Carmen, Campeche, Mexico is highly vulnerable to weather events such as hurricanes, due to its geographical location. In 1988, Hurricane Gilberto (270 km/h), 1995 Hurricanes Opal (240 km/h) and Roxana (290 km/h), Isidore in 2002 (130 km / h), Stan 2005 (130 km/h) and Dean in 2007 (119-153 km/h), caused severe damage, however, those that have caused the most damage have been Opal and Roxana, leaving serious floods, damages to the oil sector and the fracture of five sections of the aqueduct that supplies drinking water to the population of Carmen. In addition, Roxana had great negative impacts, as there was a coastal retreat in certain sectors and an accumulation of sediments in others. Erosive processes damaged and destroyed the road infrastructure along 21 km and the area of high risk due to the action of the swell covered between 80 and 150 m from the coast. We start from the assumption that natural hazards are historically and socially constructed, which are associated with inadequate development models that increase exposure and social and physical vulnerabilities in coastal, riparian and non-buildable areas. In this paper, resilience is approached mainly from the historical, urban and architectural perspective to identify answers to the question How to mitigate the impacts in an adaptive and preventive way in the face of disaster risks associated with climate change? And it is considered as a hypothesis that the different institutional, social, cultural and financial resilience are a key element for the design of urban strategies in coastal areas subject to hydrometeorological events.

takatitakite@gmail.com