CASE STUDY

Project to support the Mauritius component of the Indian Ocean Tsunami Warning and Mitigation system (IOTWS)

Renganaden VIRASAMI
Mauritius Meteorological Services
Mauritius

Project to support the Mauritius component of the Indian Ocean Tsunami Warning and Mitigation system (IOTWS)

Sector	Public sector-emergency management
Sub-sector	Mitigation of the risk posed by multi hazard disasters including Tsunami
Case study name	Strengthening National Capacities for multi hazard including Tsunami early Warning and Response system in the Indian Ocean.

Project to support the Mauritius component of the Indian Ocean Tsunami Warning and Mitigation system (IOTWS)

Case Study Description	Following the catastrophic Tsunami disaster of 26 December 2004, the Prime Minister`s Office, Republic of Mauritius took immediate action to establish a National Tsunami Early Warning System under the chairmanship of the Secretary to Cabinet. A plan of action in line with the recommendation of President Bill Clinton initiative for Tsunami mitigation/ preparedness, warning and hazard assessment including an implementation planning and a budget was formulated.
Location	Republic of Mauritius (including outer islands of Rodrigues, St Brandon and Agalega)
Tools Employed	Risk mitigation.. (After the event of 26 December 2004, there was an urgency to develop such a project)
Description of Application	The Mauritius Meteorological Services (MMS) has been assigned the responsibility for issuing Tsunami warning advisories and bulletins under an administration order of the Government of the Republic of Mauritius. The MMS carried out a survey of the data, information and scientific equipment available and its future needs, necessary to set up a timely and efficient multi hazard including Tsunami Early Warning System to protect people`s lives and property, Government property, the economy and food security.

Project to support the Mauritius component of the Indian Ocean Tsunami Warning and Mitigation system (IOTWS)

Outcomes of Application	The Tsunami Early Warning centre is responsible for receiving, analysing, preparing, issuing and disseminating Tsunami warnings to the public and other related agencies through electronic and written media. National preparedness ensured through sensitization and drills It is also responsible to maintain equipment and monitor as well as disseminate generated data in real time to world Tsunami data centres and others through satellite medium.
Cost / Benefits	The economic impact of natural disasters is showing a marked upward trend over the last several decades. About 90% of economic impacts of disasters in the last 10 years have been the result of weather, climate and ocean, related hazards. Although natural hazards may not be avoided completely, early warnings together with timely prevention and mitigation measures, can considerably reduce loss of life and socio-economic damage.

Project to support the Mauritius component of the Indian Ocean Tsunami Warning and Mitigation system (IOTWS)

Characteristics of the Case Study:

Consultation Mechanisms	Experts from IOC of UNESCO ,Pacific Tsunami Warning Center
Structural Interface	Prime Minister`s Office/ Mauritius Meteorological Services and other stakeholders like Police, Min. of Environment, Min. Of Fisheries
Delivery Mechanism	E-mails, fax, telephone
Feedback Mechanism	Meetings were held at the MMS together to take note of the progress.
Review Mechanism	The project reports were then transmitted to the PMO and the chairperson, the Secretary to Cabinet and Head of Civil Services
Other?	

Project to support the Mauritius component of the Indian Ocean Tsunami Warning and Mitigation system (IOTWS)

Project Logistics

Resources used	The MMS developed a programme to monitor the ocean to acquire the crucial time required information that underpins the forecast and warning of the Tsunami Hazards. Using related data and information the MMS decide to enhance its ocean observing network by proposing two tide gauge stations at St. Brandon and Agalega islands and deploy two wave rider buoys off the lagoons of Mauritius and Rodrigues.
Data requirements	Earthquakes and tsunami physics Topographical and bathymetric data for the Republic of Mauritius together for inundation map Dynamical model outputs for travel time Simulations using historical data
Economic expertise required	Modelling for understanding and as a decision making tool Disaster mitigation for public and other stakeholders Project cost formulations Study of economic impacts

Project to support the Mauritius component of the Indian Ocean Tsunami Warning and Mitigation system (IOTWS)

Project Logistics

Lessons Learned	Regular sensitization with publicity materials but have to start with school and then moved upwards
Best Practice Advice	Be prepared at all time Warning centre to be fully equipped
Possible Future Advances	This project is a corner stone for disaster mitigation targeted specifically at tsunami. However it provide a base line for other projects especially with the IPCC fourth assessment report that extreme weather events could result in more severe and more frequent natural hazards in the future. Deep sea buoys
Comments	The project is still on going .
URL	
Other	

Project to support the Mauritius component of the Indian Ocean Tsunami Warning and Mitigation system (IOTWS)