

A recent initiative could have a major influence on how Pacific Island countries deal with natural disasters. Pacific Disaster Risk Assessment is an ambitious 20-month-long project that has included the Pacific island countries of Fiji, the Cook Islands, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, Niue, Nauru, the Federated States of Micronesia, Marshall Islands, Palau, Kiribati and Timor Leste.

It also involved a team of 15 researchers who began last February to gather information on the precise number of natural disasters that have taken place in each of the participating countries, based on records collected since 1830.

Earthquakes, tropical cyclones, tsunami, severe local storms, floods, storm surges, and landslides, totaling 448 natural disasters, all feature in the inventory. The research team also used the countries' most recent census figures, key for estimating human casualties and displacement.

According to Mr Michael Bonte-Grapentin who presented the Pacific Disaster Risk Assessment database to scientists at the SOPAC/STAR (Science, Technology and Resources Network) in Nadi, there is a need for governments to better understand the dangers each faces from disasters, and to prioritise investments to reduce the potential risks to their country.

For example, according to the data, Papua New Guinea has had more earthquakes (71) than cyclones (5). So the first priority would be to protect the country from earthquakes rather than cyclones.

"Amongst the data we have collected from within the countries is information about 340,000 buildings, and those features that contribute to their vulnerability to disaster. These include the

Major initiative to reduce risks in Pacific

Written by Administrator Monday, 25 October 2010 07:56 - Last Updated Tuesday, 03 May 2011 17:03

construction type of the building, the materials used and the building site — is it, for example, prone to flooding or storm surges? Governments can use this information to predetermine the cost of potential damage should a natural disaster strike."

In addition to collecting data on buildings, the researchers (with trained staff from participating countries) collated existing data on infrastructure, such as roads and utilities and major cash crops.

"We need to be sure that what we have collected is being used," said Mr. Bonte- Grapentin. "Having data on buildings, industries, roads, bridges, wharfs and airports, gives governments the opportunity to identify areas that have received the greatest damage from a disaster in the past, and are vulnerable in the future. This makes it possible to invest in disaster risk reduction by, for example, strengthening buildings to resist earthquakes, or building schools on higher ground."

The collection of data, the database, will form the basis for the development of country-specific disaster risk models that will help governments in planning to minimise risks. The first models are expected to be available in March of next year.

The initiative is the combined contribution of SOPAC, the World Bank, and the Asian Development Bank. SOPAC provides assistance to 19 island countries throughout the region through applied geoscience and technology.

