

**Progress Report
on**

Coastal Geological Mapping of Savai'i Island, Samoa

**Submitted by
Ministry of Natural Resources, Environment and
Meteorology**

**for
Cabinet Development Committee**

1. Purpose of Submission

The purpose of this submission is to provide CDC members with an update on the “Coastal Geological Mapping of Savaii Island” project.

The project objective is to develop long-term coastal management strategies and plans against the coastal disasters and for the protection of livelihood through bilateral and multilateral cooperation in the science and technology.

2. Executing Agency

The Executing Agency for this project is the Ministry of Science and Technology (MOST), Republic of Korea.

3. Implementing Agency

The Implementing Agency for this project is the Korean Institute of Geoscience and Mineral Resources (KIGAM).

The Cooperating Agencies are :

- (1) Meteorology Division of the Ministry of Natural Resources & Meteorology
- (2) South Pacific Applied Geoscience Commission (SOPAC)

4. Background on Project

The coastal geological mapping around Savai'i island, task WS 1999.009, SOPAC, was initiated by the request of Samoa, as a part of SOPAC-KIGAM program. By the request of the representative of Samoa Mr. Lameko Talia at the 2003 SOPAC Annual Session, KIGAM decided to continue the coastal geological mapping on Savai'i island and performed the reconnaissance field survey in 2004.

Samoa has expressed its concerns over the frequent occurrence of severe cyclones (Cyclone Ofa 1990, Cyclone Val 1991 and Cyclone Heta 2004) to KIGAM through the South Pacific Applied Geoscience Commission (SOPAC) and the need to address the impacts of these cyclones on our coastal areas. These impacts have resulted in the disruption of lifeline resources like food and drinking water, depletion of natural resources like coral reefs, sand and gravel etc. and the devastation to assets, infrastructure and properties and many other issues impacting our daily lives. To effectively manage our small and vulnerable coastal resources from such natural disasters there is a great need to properly and specifically identify the coastal morphological and geological features. This type of work can be done with the availability of the 1999 1:5,000 aerial orthophotos, 1:50,000 topographical map and the IKONOS satellite imagery on Savai'i island.

5. Funding Sources and Conditions

The total cost of this project is US\$200,000, which is fully funded by the United Nation Development Program (UNDP).

The KIGAM provides training both in the field and in the laboratory for transferring the knowledge on the coastal geological mapping.

The Government of Samoa provides in-kind support through the operational coordination to carry out the field survey and get all required data including the personnel for field survey

The SOPAC provides operational coordination and in-kind support to carry out the field survey and get all the required data.

This is a two-and-a-half year project, which began in April 2005 and will finish in December 2007.

6. Current Financial and Implementation Status

The project now completes 50% of its implementation status with the training coming up at the end of August 2006 in KIGAM, Korea including a symposium to present and discuss relevant issues, present findings and progress.

A brief implementation summary is provided below:

(a) Geological and geomorphological Mapping component;
2005

Classification of coastal geological features around the island.

Offshore mapping for the northern part of the lagoon located at the eastern coast of island.

Mapping for the coast of Savai'i North East (1:50,000 topographic map).

2006

Offshore mapping for the southern part of the lagoon located at the eastern coast of island.

Mapping for the coast of Savai'i South East (1:50,000 topographic map).

2007

Mapping for the coast of Savai'i North West and Savai'i South West (1:50,000 topographic map).

Publication of coastal geological map series around Savai'i island.

(b) Capacity Building Component;

2005 Basic training course

2006 Advanced training course

2007 Practice course

Development of training manual on coastal geological mapping

Organization of annual training for Samoan researchers

2005-2007

Yearly annual symposium on the annual results with key stakeholders.

7. Outstanding Issues

This project is providing expert advice and equipment for the facilitation of the new geology laboratory at the Meteorology Office at Vaitele. It is intended that the old abandoned Public Works laboratory at Vaitele be transferred and combined with the new geology laboratory at Vaitele for more efficient geological work in the future.

8. Statement of Support

This project is viewed as an important project to build Samoa's national capacity to deal with the coastal issues. The project has been well integrated into the other functions of the MNREM especially the geology section, as well other government agencies and the public sector.

9. Possible Implications of Project

This project will build capacity in Samoa to deal with the coastal issues as well as improving the the geological data base of Samoa. The project will help to initiate our one and only geology laboratory which will deal with mapping, identification and analysis of soil, rock, sand and aggregate deposits of Samoa.

This project will be asked to consider continuing to include Upolu, Manono and Apolima islands as well.

10. Summary of Issues

This report is intended to provide an update on this project to CDC members. This project is going well and there are no major issues to report.

11. Recommendations for Consideration

It is recommended that CDC:

Accept this report as an update on the Coastal Geological Mapping of Savaii Island project; and Support the continued implementation of this project by the Ministry of Natural Resources, Environment and Meteorology.

12. Signature of Executing Agency



Tu'u'u Dr. Ieti Taule'alo
CEO, Ministry of Natural Resources, Environment & Meteorology

13. Date: **11 August 2006**