

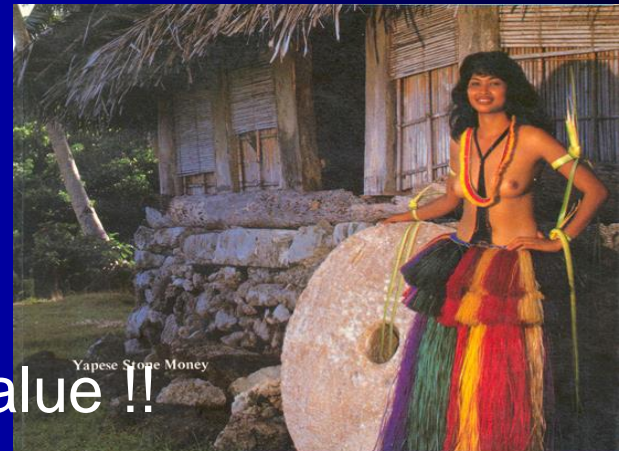
The Neglected Georesources: Their past, current and future value to sustainable socioeconomic development in the Pacific Islands"

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Stones have value !!



Stones do have Value in the Pacific

- **Georesources, put crudely “Stones” do have value in the Pacific and it all depends on their origin, mineralogy and chemistry.**

If it is not coral limestone as “Rai” in Yap it may be andesite or basalt for the “Lovo” in Fiji.



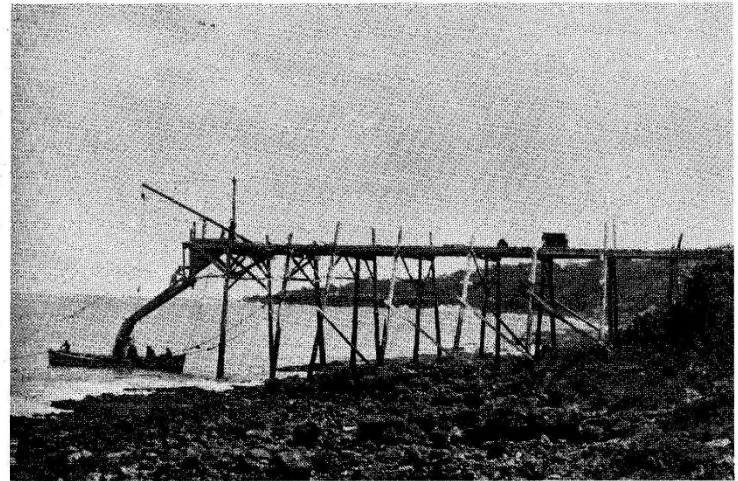
National Needs....Lack of Capacity

- Support for countries to develop and implement geoscience input to National Sustainable Development Strategies
- Establish national pilot/demonstration projects
- Facilitate and support establishment of open source National Resource Information Systems developed using high resolution satellite and air photo imagery and seabed mapping
- Facilitate establishment of real time monitoring
- Develop new partnerships to deliver at the village and community level



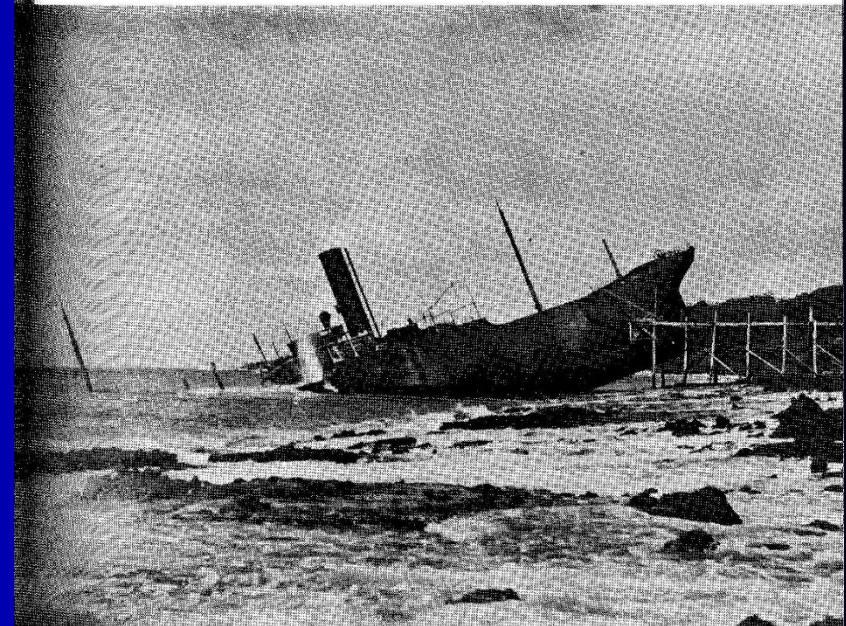
First Discoveries in the Region

- Gold in Fiji, 1868
- Gold in PNG, 1878
- Nickel in New Caledonia, 1864
- Phosphate on Ocean Island, 1900 and Nauru, 1907
- Hydrocarbons in PNG, 1911
- Export v Local Use
- Sand and Gravel
- Mineral Water



The loading jetty at Ooma

s.s. *Inger*, wrecked in 1906



Sand and Gravel

•The labelling of sand and gravel as a “low value, high volume” resource must be reviewed as it is evident that the export of sand and gravel and value added products such as concrete blocks is now taking place in increasing instances and volumes in the region.



Past, Present and Future

- The sustainable future use of georesources in the region given traditional/cultural historic and current uses and future resource availability and demand.



Are We Doing Better... or Not

- The environmental issues versus development demand and resource location, quarries, river beds, beaches, reef flats and lagoon dredging. Inevitably... is there a vulnerability issue here in regard to climate change and sealevel rise.??



Current and Future

- Importance of sand and gravel to island economies given the expected growth in demand to support development and limited legislative and regulatory capacity.



Urgent Need for Capacity Building

- Particularly education at the technical level to ensure the future development of the sand and gravel sector and georesources generally are well managed.

Certificate in Geology, Mining and Quarrying for Fiji

Quarter	Units					
First	Earth, its origin and structure	Computer Use and Applications	Fundamentals of Ethics	Occupational Health and Safety 1	Technical Communication	Preliminary Mathematics
Second	Earth Materials 1	Basic Surveying	Legislation	Engineering for Quarrying	Engineering Communication and Practice **	Basic Science
Third	Earth Materials 2	Map Making and GIS	Occupational Health and Safety 2 **	Environment and Social Aspects	Mineral Resources	Earth Surface Processes
Fourth	Field Study	Land Management	Project Planning	Quarrying Technology and Equipment	Mineral Economics	Entrepreneurship