

# Vulnerability Index as a screening tool for assessing risks and building resilience in Mauritius

By:

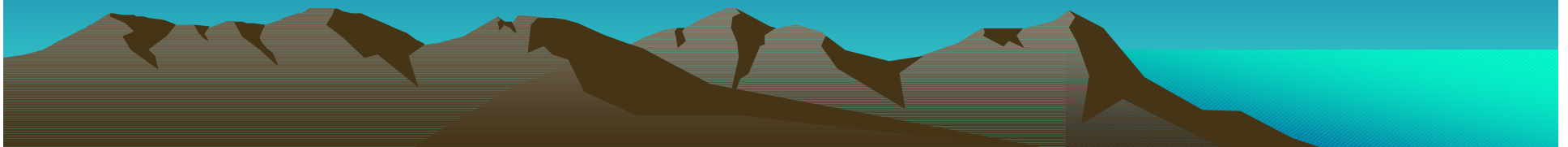
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# Vulnerability index

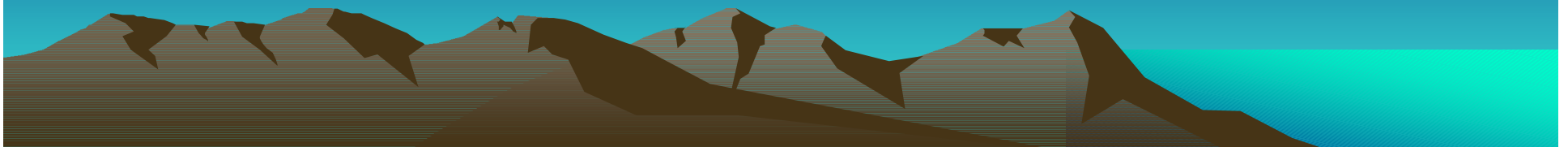
<b>Slightly Vulnerable</b> White	<b>Moderately Vulnerable</b> Green	<b>Vulnerable</b> Blue	<b>Considerably Vulnerable</b> Yellow	<b>Highly Vulnerable</b> Red
0-79	80- 158	159- 237	238- 316	317-395



# General Characteristic

## Main drivers of Vulnerability in Mauritius

- Geographic Location-Tropical
- Tininess
- Isolation
- Developing state
- Limited resources



# Development of Vulnerability Index



# Questionnaire

- Questionnaire I – Assessing the individual within the immediate environment. Family income, average parental age, average children age, general health of the family etc

Maximum scores = 250

- Questionnaire II – Assessing whole community village in relation to bio-geophysical and socio-economic impacts - access roads, land and land uses, public supplies and facilities, water drainage and also existing possibilities of flooding, landslides, mudflows, and health hazards under different scenarios.

Maximum scores = 145

Total Maximum scores = 395

# Volunteers

Some 20-30  
volunteers were  
recruited from the  
village to carry out  
the VA exercise



# Methodology

- *Use existing infrastructure and local setting*
- *Involve the community in data collection*
- *Use very simple methods to collect data that is understandable by the coastal community*
- *Use data collection techniques under different scenarios through mapping, questioning, field visits and surveys*
- *Use a method to trigger preparedness and build resilience among the coastal community*



### Example -Village services

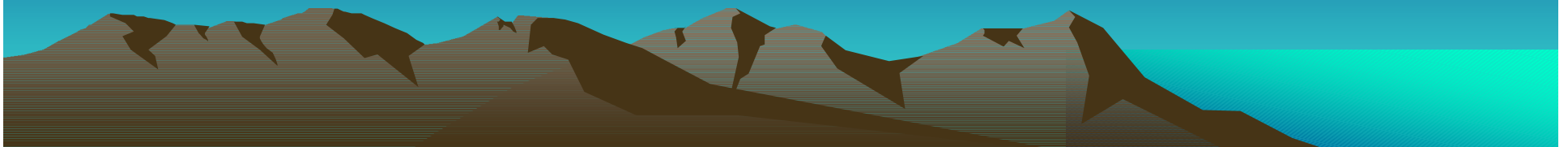
All the available services were rated such as the **Police, National Coast Guard and Fire Service**. Scores were given to availability, intervention time and capacity to intervene. **Information:** Concerning Authority, Community, Visits, records on past experiences.

Score	0	1	2	3	4	5
Police Available	yes					no
Intervention time	$\leq 30$ Min.					$\geq 1$ Hrs
Capacity for intervention	High					Low



# Interpretation & Use of Data

- Use in questionnaire I & II
- Scaling of information to give a vulnerability index- using coloured stickers
- Compare data with other locations
- Preparation of Adaptation Strategic Plan for the village- including short, medium and long term mitigation, adaptation and preparedness measures



# Conclusion

- Results can be used in documenting governmental arrangements and responses to environmental changes, in terms of coastal planning and management.
- The measurable index can also be used to improve the Initial National Communication plan.( UNFCCC in April 1999), for the preparation of the National Adaptation Programme of Action.
- Public information
- Vulnerability assessment is an ongoing process.



Thank you