### Vanuatu Volcano Monitoring System

### WHY DOES VANUATU HAVE MANY VOLCA-NOES?

Vanuatu lies on a very active tectonic plate boundary. This is an area where there are many earthquakes and volcanoes.

The Vanuatu archipelago has 16 volcanoes. Many of the villages are located near volcanoes and therefore it is important to know about volcanoes and the dangers that are posed by them. Knowledge can save lives.



### WHAT DO I DO IF I SUSPECT THAT A VOL-CANO'S ACITIVITY HAS INCREASED ?

Take note of any strange observations or signs in the shape of the volcano, the noise coming from the volcano, ground shaking, and the time that you saw or heard these signs. Report them immediately to your local authorities who will affirm these signs and contact the Geo-hazards Division on 24686 or 22392.



### HOW DO WE MONITOR THE ACTIVITY OF THE VOLCANOES?

The Geo-hazards Division from the Vanuatu Meteorology and Geo-hazards Department is responsible for the monitoring of Vanuatu's volcanoes. In some of the volcanoes of Vanuatu, there are stations for monitoring the activity of the volcano. The sensors in these stations, record the ground tremors caused by the earthquake and these signals are analysed in the main observatory in Port Vila and Volcano Alert bulletins are prepared and issued accordingly.



It is very important that we understand the importance of these expensive monitoring equipment so that we, community members, can be responsible in assisting the authorities give out accurate information and warnings about disasters which can save our lives and our families' lives.

### WHAT IS THE VOLCANO ALERT SYSTEM USED IN VANUATU?

The Vanuatu Volcano Alert Level (VVAL) is a system graded from 0-5. Each level represents a specific range of hazards for the exposed populations and infrastructure.

## Vanuatu Volcanic Alert Level System

Title	Level of Alert	Description Area, Distance
Very Large Eruption	5	Danger beyond caldera, on entire and sourrounding islands and also chance of flank eruption
Moderate Eruption	4	Danger on volcanic cone, caldera and all island, possibility of very large eruption and also chance of flank eruption
Minor Eruption	3	Danger on volcanic cone, within caldera and other specific area, possibility of moderate eruption and also chance of flank eruption
Major Unrest	2	Danger around the crater rim and specific area, notable/large unrest, considerable possibility of eruption and also chance of flank eruption
Signs of Volcanic Unrest	1	Notable signs unrest Possible danger near eruptive vents
Normal	0	No signs of change in the activity Limited danger
An eruption may occur at any level and levels may not move in		

An eruption may occur at any level and levels may not move in sequence as activity can change rapidly



This system applies to all Vanantiv volcances. The Volcanic Aler Lovel is set by the National Geohazards Observatory within Vanantu Metocrology and Geohazards Department based on the level of volcanic act For more information, see www.geohazards.gov.vu cor enail at vww.geohazards.gov. or call at 24686 for alert levels and current volcanic activity. Version 2.0. 2014.



How can I tell if the rain is acid rain? You can know it is "acid rain" if it irritates

What to do **BEFORE** an acid rain fall:

Make sure that you have in the house essential items like:

Water and food

the eye or tastes sour.

- Extra firewood
- Medication and eye protection
- Radio and extra batteries

#### What to do **DURING** acid rainfall

- Do not panic
- Stay indoors
- If you are outdoors, seek shelter (e.g. car or building)
- Cover water tank or well
- Wear eye protection if you are outdoors
- Keep children indoors and discourage playing in acid rain.
- If warning is given on acid rain, stop working and go home.



# ACID RAIN AND VOLCANIC GAS

### What to do AFTER an acid rainfall:

- Let the authorities test the water before drinking it.
- Wear eye protection and always take shelter during rainfalls



• You may eat fruits and vegetables from the garden, but wash them thoroughly first.

What to do if you live in an area that experiences volcanic gases:

- Make sure you have a gas masks or a wet cloth ready at all times for protection over your mouth and nose
- Move away from the area if you have breathing or respiratory illnesses
- Make sure that you have access to a radio or updated information about the volcano near you.



For more information, please contact the Geohazards Division within the Vanuatu Meteorology and Geohazards Department at <u>geohazards@meteo.gov.vu</u> and 24686 or consult the website www.vmgd.gov.vu

What to do DURING a volcanic gas emission:

- Do not stay within the areas that are declared **out of bounds** by the authorities
- Listen to the radio always for any updates
- Make sure children, pregnant women and those suffering from respiratory illnesses are indoors.

### What to do AFTER a volcanic gas emission:

- Move away from the direction of the wind
- Expect acid rain to follow and prepare accordingly
- Always wear protective clothing
- Make sure children and pregnant women are indoors and safe away from volcanic gases
- Always wear a gas mask or a protective covering over your mouth and nose .

