

# LIVING UNDER THE VOLCANO IN PAPUA



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September 19, 1994 - An eruption of volcanoes on the opposite side of the harbor entrance devastated the town of Rabaul, the former capital of East New Britain Island in Papua New Guinea. Thanks to an early warning, very few people died. Rabaul's town and harbor are craters made after massive explosions of gas, ash, rocks and lava took place about 1400 years ago.



In 1994, the town had to be evacuated because volcanoes Tavurvur, Vulcan and Rabalankaia erupted. Over 30,000 people left the town itself and a further 50,000 from the surrounding area.

Only four people lost their lives from the ash falls. One other was killed by a lightning strike south of Vulcan. This is a remarkably low death toll bearing in mind the potential for a much higher number had an evacuation not taken place in time. When the volcanoes erupted in 1937, 500 people died.

The rains have soaked up the thick ash that has fallen on houses, and the weight has collapsed an estimated 80% of the buildings.



There is one hotel under the volcano... The "Rabaul hotel" still welcomes tourists. After being severely damaged by fire in 1984 the hotel was rebuilt and reopened in 2005.

All the rooms have a volcano view though you can't see much since the wind blows the ashes towards the hotel. It is an incredible experience. Once in the nice clean room, you feel like you're in a submarine!

Living in and around Rabaul is safe as the volcanoes are quite predictable and are constantly monitored for the precursors of activity.



Though few lives were lost, there were a lot of expensive damages. Many buildings have been destroyed by the 1994 eruption... Some apartments are now only visited by horses.



Here stands the former airport, under 3 meters of ash. Rabaul Airport was completely destroyed in the 1994 eruption. The airport was in the direct path of the falling ash. Nobody knows why they built it at the foot of the volcano, since there has been a history of eruptions.



Some people still live in the volcano area as they do not have enough money to leave their homes. All day long, they have to protect themselves from ashes and winds. My camera did not resist the acid dusts and the sensor had to be changed when I returned to France.



Mr Jewakauckesa was a deputy mayor of Rabaul. His wife passed away and his son has gone to study in town. Now, he lives under the volcano ashes alone in his little house. He has stopped buying cars since after 2 years, they do not work anymore.





Even if the area is a tourist attraction, the danger must not be forgotten. Acute exposure to the ash can cause asthma or chronic bronchitis, so most of the people wear a protective mask when they need to cross the volcano's area.



Ben's father guards an abandoned hotel from looters. He enjoys it here. It's basically a giant playground for children, without cars and full of dust to roll around in!



Most of the homes have been destroyed, but in recent years, the Tolai tribe people have started to come back again and try their best to rebuild in the quieter parts of the old town.



The Vulcanological Observatory (known locally as *Haus Guria* or “the earthquake house”) keeps the volcanoes and the magma body underlying them under close observation.

How strong was this earthquake ?

INTENSITY (Modified Mercalli scale for PNG)							
	2	3	4	5	6	7	8
Was it felt?	No, or hardly	Yes, indoors Not outdoors	Yes, by all indoors and some outdoors Awakened some Excited a few people Duration of motion could be estimated	Yes, rather strongly by most Awakened most Alarmed some Direction of motion could be estimated	Yes, strongly by all (except in driving) Awakened all Frightened some Caused excitement Some ran outdoors	Yes, strongly by all even in driving Awakened all Frightened most Caused general alarm Many ran outdoor Was difficult to stand	Yes, very strongly by all Awakened all Alarm approached panic Most ran outdoor Some people fell over
Sounds heard?	No	No, or faint rattle of windows	Yes, windows/doors & crockery rattled Building creaked	Yes, from buildings and objects  (Rumbling sounds)	Yes, from buildings and objects Small bells rang (Roaring sounds)	Yes, from buildings and all sorts Church bells rang (Explosion sounds)	Frightening noises of all sorts
Observations?	Nothing special	Hanging objects swang a bit	Hanging objects swang Liquid in jugs was disturbed	Unstable objects moved  Water sloshed inside tanks Tree swayed  (Animals frightened)	Objects fell down (eg. in stores) Furnitures moved Water sloshed out of tanks Trees were shaken  Animals frightened	Chaos in household and stores Furnitures fell over Water bursted out of tanks Trees shaken strongly Branches/coconuts fell Dogs barked	Chaos in household Panic in stores Buildings swayed violently  Trees swayed strongly Branches/coconuts fell Animals scared
Any damage?	No	No	No	Some household damage (dishes) No building damage	Various household breakage Few village houses damaged Cracks in weak masonry Old tanks leaked	Objects and furnitures were damaged Old village houses collapsed House stilts cracked Brick walls cracked Many tanks bursted	Almost total household breakage Much losses in stores Village houses collapsed Stilts broken and houses shifted Most tanks damaged
Others?	Nothing special	Nothing special	Nothing special	(Minor landslides)	Occasional landslides in steep, wet areas	Landslides Ground subsidence Surface of lakes/rivers was disturbed Water became muddy	Extensive landslides Cracks in ground Roads/bridges damaged Occasional tsunami Rivers became muddy

Earthquake activity at Rabaul caldera increased in 1971 and continued for 23 years before the volcano erupted in 1994.



The volcano is also a good opportunity for locals to gain revenue. The Megapode birds live and nest at the base of Mount Tavorvur. They dig holes into the ash and bury their eggs 2 meters down until they reach the ground underneath, where the temperature is perfect.



The Megapode egg serves as a primary source of food and income in Rabaul. Each day, men travel to the nesting grounds to gather the eggs.



Each individual egg is priced at 2 Kina (just under 1 USD), so it is a good business...





As in most other towns in Papua New Guinea, Rabaul saw some fighting in WWII. Wrecks lay among coral reefs and on land. They are all covered in ash.



A wrecked American plane has become a giant playground for the local kids!



THIS  
WAY  
UP

Seventy years after the war, you still can see rusted Japanese barges. The barges survived American bombing by being hauled from the sea into tunnels carved in the rock around Rabaul's harbor. Now these tunnels serve as a shelter in case of eruption!



This place used to be Mango Avenue, a busy street lined with trees.



Strong traditions still live in Rabaul. The Baining dancers wear giant masks that are never shown during the day. Without any shoes on, they jump into the fire and kick up the ashes. The dancers represent spirits who live around the island.



When they jump into the fire, the ashes and cinders they kick up make a sort of volcano-like eruption.



"Bride price" is a traditional that is incorporated into the Tolai tribe in the Rabaul area. Local government have capped the payment from the groom's family to the bride's family at between 400 and 600 fathoms (pram) of tambu (shell money) and insist that only this traditional money should be used in the marriage. Thousands of shells are needed to make this currency.



Tubuan dance with Duk Duk giant masks, Rabaul, East New Britain, Papua New Guinea - They are gathering for an initiation into the secret men's society in Rabaul. The Tubuan Society survived on the island, and today Tubuans are called upon to officiate on all sorts of occasions.





A few kilometers from the dry volcanic area, there is a huge contrast with the food sold: sweet potatoes (kaukau), plantains, mountains of greens in vast variety are all ubiquitous in the Rabaul market.



Since the last big eruption was in 1994, scientists expect the next one in 2050.

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