

EMERGENCY APPEAL

Tonga, Asia Pacific | Volcano and Tsunami



Aerial photo showing ash and tsunami impacts on the island of Nomuka, Ha'apai. Source: New Zealand Defense Force

Appeal No: MDRTO002	IFRC Secretariat Funding requirements: CHF 2,500,000 Federation-wide Funding requirements: TBC	
Glide No: VO-2022-000005-TON	People affected: Approx. 85,000 people (84 per cent of populations of Tongatapu, Ha'apai, 'Eua)	People to be assisted: Approx. 17,000 people (20 per cent of affected people)
DREF allocation: CHF 430,666	Appeal launched: 21/01/2022	Appeal ends: 21/01/2024

SITUATION OVERVIEW



The Hunga-Tonga-Hunga-Ha'apai volcano erupted approximately 60km from the capital of Nuku'alofa.

Source: Tonga Geological Services, Government of Tonga.

On 15 January 2022, at 17:20 local time, a violent eruption of historic proportion occurred at the Hunga Tonga Hunga Ha'api underwater volcano, 65km north of Nuku'alofa, the capital of the Kingdom of Tonga.

The eruption lasted approximately eight minutes and could be heard and felt 700km away in Fiji. The volcano released a cloud of ash billowing more than 20km high, and sonic waves from the eruption were registered as far away as Scotland in the United Kingdom. In an unprecedented event in modern history, the volcanic eruption quickly caused a Pacific-wide tsunami, swamping coastlines and causing casualties and damage in Japan, Chile, and North America. In Peru, two deaths were recorded as a result of the tsunami. While the volcano had been erupting intermittently since 20 December 2021, causing earlier ashfall and a tsunami warning on 14 January, the magnitude of the eruption of 15 January was entirely unexpected.

In the aftermath of the eruption and tsunami, external communication with Tonga was completely cut off. Power outages, land-based infrastructure damage, and the severing of the under-water, fibre-optic cable running to Fiji and Australia, meant telecommunications was totally

disabled. In addition, a thick ash cloud rendered satellite phones useless. For most of the population of Tonga, as of 21 January, these disruptions are ongoing, while for government and humanitarian agencies, the telecom blackout lasted several days. Current estimates put the re-establishment of regular communications at a month away. Humanitarian agencies across the region have been actively sharing information coming out of Tonga via two VSAT locations at the University of the South Pacific and the office of the Asian Development Bank. However, these issues have made accessing evolving data extremely difficult and hampered the response.

On 17 January, Surveillance flights carried out by the New Zealand Defence Force and the Australian Airforce identified the west coast of Tongatapu, the Ha'apai island group, and the west coast of 'Eua island group as areas most affected by the eruption and tsunami waves ([refer to map](#)). The flight recorded scenes comparable to a lunar landscape as ashfall and debris up to four cm thick blanketed the areas. Without exception, all Tongans have been impacted by the airborne ash, with a percentage suffering breathing difficulties as a result.

Initial assessment data from Tongatapu also indicates that five communities have been identified as suffering major damage to households, especially those in coastal areas. In these areas, 31 houses have been destroyed, 72 severely damaged, 46 moderately damaged, and 23 have sustained some minor damage. People in 'Ahau, 'Atata, 'Eueiki, Kanokupolu, and Patangata also risk being displaced due to the impact and exposure ([refer to map](#)). On 'Eua island, two houses have been destroyed, 45 severely damaged, and 28 sustained moderate damage¹. Regarding water, sanitation, and hygiene (WASH), initial data suggests that approximately 50,000 people are affected, and access to drinking water remains a critical priority. Most people currently rely on dwindling supplies of bottled water. Saltwater inundation and power outages have also severely impacted the ability of population centres to access useable groundwater.

¹ NEMO Situation Report #6

Ashfall and saltwater intrusion have also severely affected all agricultural sectors (crops, livestock, fisheries). Local agencies hold grave fears for ecosystem damage to coral reefs and other essential links in the health of fishery and tourism livelihoods. On the island of 'Eua, water and food stocks need urgent replenishment.



Before and after images of Lifuka village, Ha'apai Division, showing damage to buildings and structures. Source: United Nations Institute for Training and Research

As soon as it was safe after the eruption, the Tongan Government sent a naval ship on a reconnaissance mission to outer islands in the Ha'api group, accompanied by Red Cross volunteers with essential supplies such as tents, drinking water and hygiene kits. The round trip to the islands usually takes a week from Tongatapu. The assessment team found devastating scenes of destruction, with all infrastructure and housing on three out of four islands completely destroyed. Fifty houses are destroyed in these areas, and drinking water is incredibly scarce. Households from smaller Islands are being evacuated to the larger Island of Namuka, which suffered less damage. While only three deaths have been officially recorded in Tonga, authorities anticipate this number could rise as better contact is established with the low-lying atolls.

On 18 January, the Prime Minister of Tonga declared a state of emergency effective from 16 January and international assistance was requested.

Tonga Red Cross Society (TRCS) has been instrumental in the fast-acting Tongan emergency coordination system. Local inter-cluster coordination groups immediately activated in the aftermath of the eruption and tsunami. Without communication or support from the international humanitarian system, TRCS and other local actors immediately evacuated the community to higher ground, established evacuation centres, gathered assessment teams, and began distributing essential non-food items and clean water provisions. The pre-positioned stocks TRCS had on hand have been essential for the hundreds of Tongans rendered homeless by tsunami inundation.

While efforts are focused on confirming damage, fixing communications, and launching the response, there remains a high possibility of further eruptions.



TRCS staff and volunteers preparing for distribution of water containers and other relief items. Photo: TRCS

Therefore, imminent preparedness actions are required to mitigate risks, and in-country capacities are strengthened to deal with potential successive eruptions, tsunami waves, and ashfall.

It is critical to note that this emergency is unfolding within the complex context of the global pandemic – a disaster that Tonga has, to date, been strategic enough to avoid due to a low-risk tolerance for exposure and some of the most stringent entry procedures in the world. Deliveries of aid to date have been achieved in a "contactless" process, and all aid items will be quarantined for disinfecting before distribution. It is as yet unknown if the Government of Tonga will allow any humanitarian personnel to enter the response.

TARGETING




The current estimates state that approximately **85,000 people (14,166 households²)** have been affected³, which accounts for 84 per cent of the total population of Tonga⁴. The west coast of Tongatapu has suffered the worst damage. Based on the satellite images, it is estimated that 25 per cent of Tongatapu have been the most affected, and **14,891 people/2,482 households** require support. The outer islands closest to the volcano have suffered the worst damage. The islands of Ha'apai (5,419 people/903 households) suffered massive destruction, including Fonoi, Mango, and Tungua, Nomuka had 50 per cent destruction, and information from the other outer islands is still pending. Based on this, it is estimated that 75 per cent of the Ha'apai islands and 'Eua or **7,742 people /1,290 households**, have been the worst damaged ([refer to map](#)). In total, **22,723 people/3,772 households** are in the highest need of assistance.

From this, TRCS will support at least **approximately 17,000 people/2,833 households** with water provision, focusing on the affected areas and most vulnerable households of Tongatapu and the outer islands. Around 11,500 people/1,916 households in Tongatapu, Ha'apai, 'Eua, and Ongo Niua will be supported in WASH, health, emergency shelter, essential household items, basic needs, livelihoods, and protection, gender and inclusion (PGI).

The most vulnerable people will be targeted, including those with disabilities, the elderly, single-headed households, and young mothers. The main island has families living in informal settlements along the coastline, occupied by individuals from the other islands who came to work but have no home. There will likely be significant damage to the settlements of these internal migrants. Assessments will also identify any internally displaced people that have become stranded on the main island with no support or ability to return home, and consideration will be given to the needs of this group.

PLANNED OPERATIONS

Through this Emergency Appeal, the International Federation of Red Cross and Red Crescent Societies (IFRC) aims to support TRCS in responding to the Tonga volcano and tsunami. The operation aims to meet the immediate, early and long-term recovery needs of the most vulnerable 17,000 people. The IFRC response will focus on the following sectors:

- | | |
|---|--|
|  | <input type="checkbox"/> Health & Care including Water, Sanitation and Hygiene (WASH)
(Mental Health and Psychosocial Support / Community Health) |
|  | <input type="checkbox"/> Integrated Assistance
(Shelter, Livelihoods and Multi-purpose Cash) |
|  | <input type="checkbox"/> Protection and Prevention
(Protection, Gender and Inclusion (PGI), Disaster Risk Reduction) |

² Average household size is 5.7 people/HH, therefore response planning uses 6 people per household in calculations

³ Government of Tonga Situation Report #6

⁴ 100,209 people according to the 2021 census, and 16,702 households

Enabling approaches

The sectors outlined above will be supported and enhanced by the following enabling approaches:



Community Engagement and Accountability (CEA)



Coordination and partnerships



Shelter Cluster coordination



Secretariat services



National Society Strengthening

The planned response reflects the current situation and is based on the information available through the Tonga government National Emergency Management Office (NEMO) Situation Reports #1-6, the Pacific Humanitarian Team updates, OCHA Flash updates #1-6, and satellite phone calls between IFRC and TRCS. Details of the operation will be complemented through the Operational Strategy to be released in the upcoming days. The Operational Strategy will provide further details on the Federation Wide approach, including contributing Red Cross and Red Crescent National Societies' response activities and the Federation-wide funding requirement.



RED CROSS RED CRESCENT PRESENCE IN COUNTRY

Tonga Red Cross Society

TRCS was established as an auxiliary to the government by an Act of Parliament in 1981. It coordinates with multiple government departments, particularly the National Emergency Management Office and the Tonga Meteorological Service, under the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (MEIDECC), and the Ministry of Health. The government's national disaster plan recognizes TRCS as a provider of relief and assistance in emergency and recovery. The TRCS is represented on the National Emergency Management Committee (NEMC), the leading coordinating body for disasters in Tonga.

While the National Society is small, it has always had a prominent leadership role within the Pacific. Its experience and skills are highly respected amongst fellow National Societies in the region. The National Society has previously led the Regional Red Cross Protection, Gender, and Inclusion Network and has a keen interest in developing its digital capabilities.

The TRCS is headquartered on the island of Tongatapu, and there are branches on Ha'apai islands, 'Eua and Vava'u. The headquarters is low-lying and has been flooded by the tsunami. All infrastructure is covered in heavy

	
Core areas of operation	
	
Number of staff:	10
Number of volunteers:	80
TRCS presence across the country	80%

ash, and clean-up may reveal further damage to critical emergency operations equipment and infrastructure. The Vava'u branch was minimally impacted, though the effects for other branches are still unknown. Following the eruption, communication with TRCS was not possible for the first 72 hours. Although regular satellite phone calls and then mobile phone connections have been re-established as communication infrastructure is restored, there are risks that further eruptions could again wipe out communication and disrupt coordination efforts.

Community volunteers currently support needs assessments, water and relief distributions, and first aid where required. They have also initiated Restoring Family Links (RFL) services to connect Tongans with their loved ones worldwide. Three hundred free satellite phone calls were provided to Tongan families on 21 January, the first day of RFL operations.

IFRC Membership Coordination



Australian Red Cross staff preparing relief supplies for dispatch to Tonga on the Australian naval vessel, HMAS Adelaide. Photo: Australian Red Cross

Based in Suva, Fiji, the IFRC Pacific Country Cluster Delegation (CCD) provides regional support to 11 Pacific Island National Societies, including TRCS. The IFRC provides support in disaster risk management, resilience, disaster response law, community-based climate risk reduction, shelter, health, PGI, support services in National Society Development, Planning Monitoring Evaluation and Reporting (PMER), finance, and logistics. The IFRC also facilitates networking amongst the Pacific National Societies and supports capacity building initiatives such as the Pacific Emergency Responder Capacity Initiative and Preparedness for Effective Response to improve the National Societies readiness to respond.

For this operation, the IFRC has supported TRCS in response planning, communications, coordination with partners, media coverage and communications to the public. While bi-lateral relationships and funding have enabled the procurement of pre-positioned stocks, logistics capability in Pacific Island National Societies remains a critical need, with

IFRC facilitating and supporting arrangements around logistics training and stock clearance and management.

National Societies in the Pacific, the IFRC, and partner National Societies have been in regular communication and on high alert since the major eruption on 15 January 2022. The IFRC has met with partners, and there has been broad interest in providing funding, stocks, and/or surge support. The support will enable TRCS to implement relief activities, pilot cash and voucher assistance, initiate early and long-term recovery and ensure TRCS is prepared to respond to a future crisis quickly and effectively.

Direct support has been provided to date by the Australian Red Cross and New Zealand Red Cross. Partner coordination is underway on alignment and contributions across several response areas.

Contributions have also been made or discussed with the Cross Red Cross Society of China, Singapore Red Cross, Danish Red Cross, French Red Cross from New Caledonia and Japanese Red Cross.

Movement Coordination

The International Committee of the Red Cross (ICRC) also maintains a regional delegation in Suva. It supports National Societies to implement RFL, ensure Safer Access, promote international humanitarian law (IHL) and raise humanitarian issues with governments, security forces, academic circles, the media and civil society. Coordination with ICRC has been happening daily to support TRCS in setting up the necessary communications to establish RFL.

External Engagement

The Tongan government is leading the emergency response. The NEMO coordinates efforts and has activated the national and district Emergency Operations Centres. TRCS coordinates closely with the NEMO and participates in the NEMC, which the Tongan Prime Minister currently chairs. The TRCS volunteers are mobilizing at NEMO's request and have supported joint damage assessments according to its mandated role. The NEMO has made radio announcements encouraging communities at risk to cooperate with TRCS volunteers and NEMO. The operation of the TRCS is closely aligned with all efforts of the Tongan government and humanitarian stakeholders to ensure no duplication and gaps in the response.

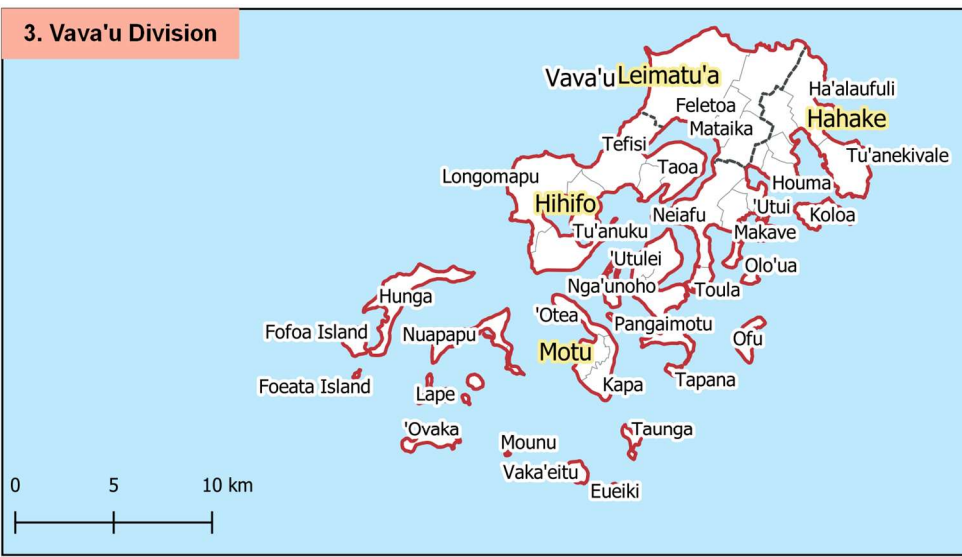
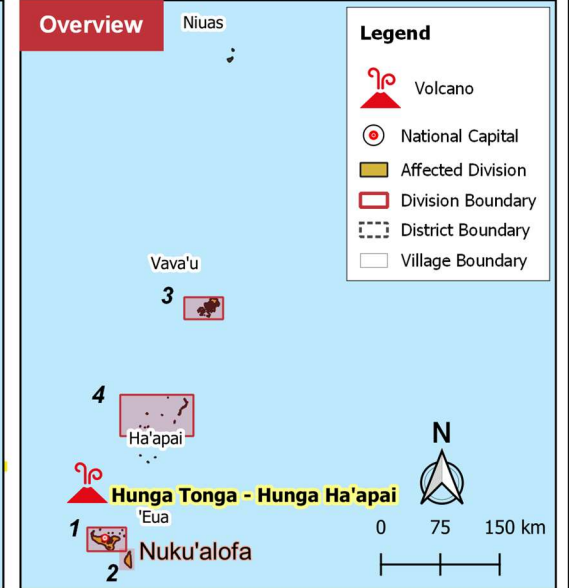
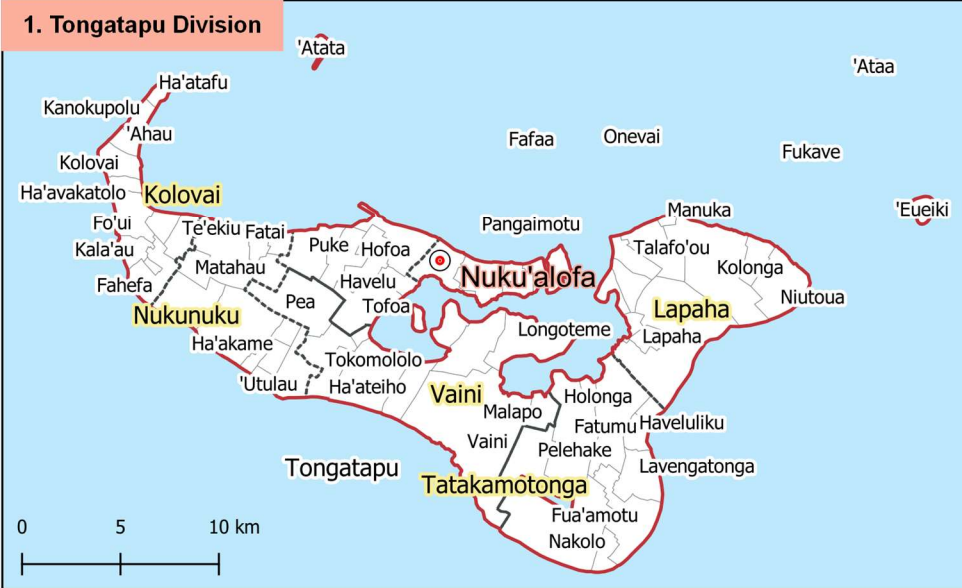
All coordination activities are led by a government ministry and co-led by a humanitarian agency. The IFRC is recognized as co-lead of the Emergency Shelter and Non-Food Item Cluster with the government lead agency of NEMO. IFRC role as co-lead will be covered through this Emergency Appeal.

Since the eruption, the IFRC has also had an engagement with several volcanologists and researchers in the scientific community, including behavioural scientists. A number of these scientists and their institutions, along with humanitarian research groups, have expressed significant interest in working with the IFRC and TRCS on research projects to enhance understanding of disaster risk and disaster risk communications for effective community resilience.



Tonga: Volcano and Tsunami Emergency Appeal (EA)

16 January 2022



The maps used do not imply the expression of any opinion on the part of the International Federation of the Red Cross and Red Crescent Societies or National Societies concerning the legal status of territory or its authorities. Map data sources: OCHA, OSM Contributors, ICRC, IFRC.

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Reference



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