



REVISED EMERGENCY APPEAL

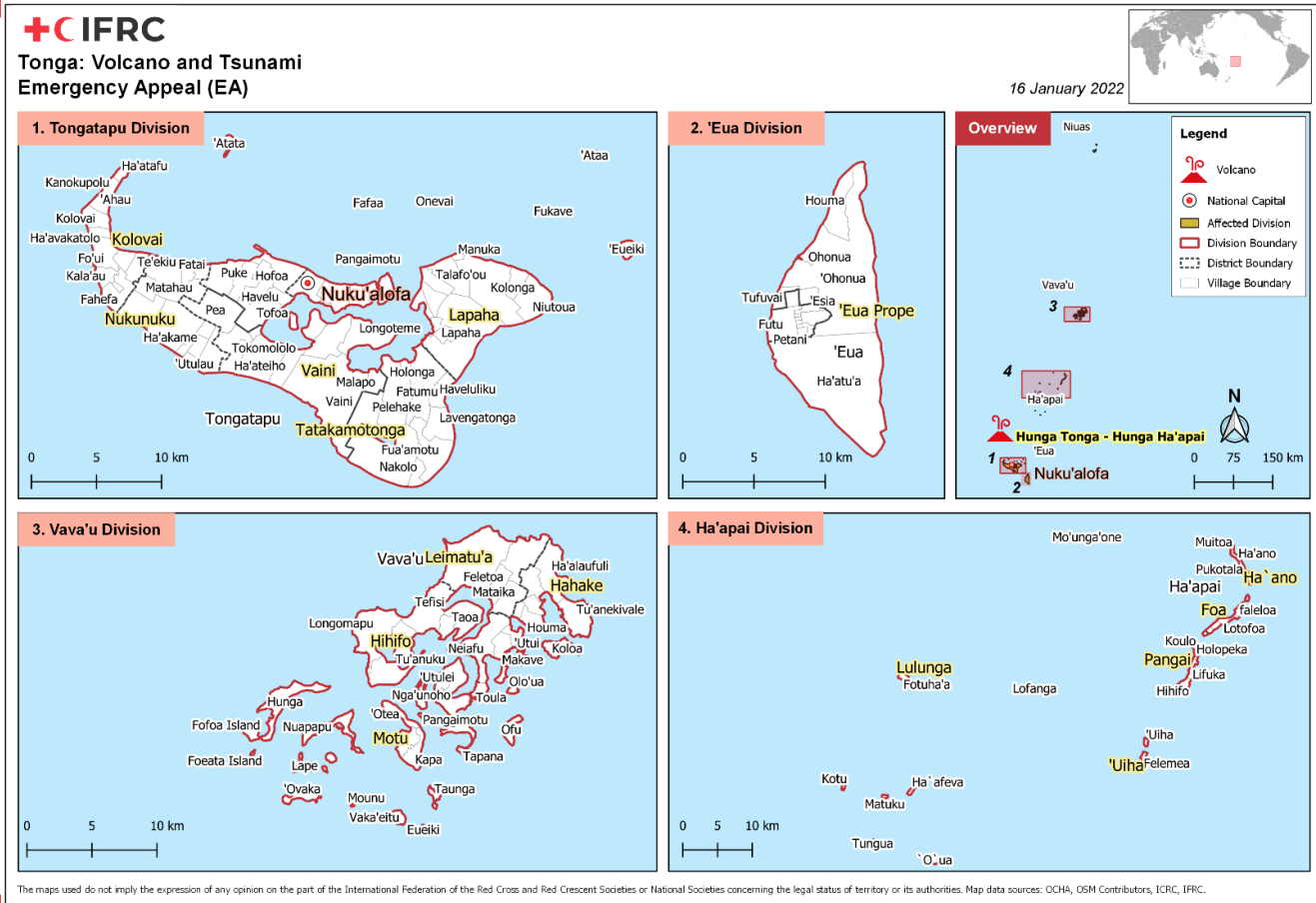
TONGA, ASIA PACIFIC | VOLCANO AND TSUNAMI



Impact of volcanic ash and the tsunami on Tongatapu. *Photo: Tonga Red Cross Society*

Appeal No: MDRTO002	IFRC Secretariat Funding requirements: CHF 4,000,000	
DREF allocation: CHF 430,666 (has been repaid)	Federation-wide Funding requirements: CHF 4,400,000	
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)
Appeal Revision # 1 Date: 05/04/2022	Appeal launched: 21/01/2022	Appeal ends: 21/01/2024

SITUATION OVERVIEW



On 15 January 2022, at 17:20 local time, the undersea *Hunga-Tonga Hunga-Ha'apai* volcano, 65 kilometres north of Tongan capital, Nuku'alofa, erupted with a violence of historic proportions. The eruption lasted approximately eight minutes and could be heard and felt 700km away in Fiji. It released a cloud of ash billowing more than 20 kilometres high. The force of the 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 on 15 January was entirely unexpected.

External communication with Tonga was completely cut. Power outages, damage to land-based infrastructure, and severing an undersea fibre-optic cable running to Fiji and Australia meant that telecommunications were totally disabled. A domestic undersea cable was also severely damaged, and a thick ash cloud rendered satellite phones inoperable. This telecommunications blackout lasted several days, affecting the work of government and humanitarian agencies. The international undersea cable was repaired by 22 February 2022 but as of 21 March the domestic undersea cable is still not expected to be repaired in the near future.

On 17 January 2022, 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 the areas most affected by the eruption and tsunami waves. The flight recorded scenes comparable to a lunar landscape, as ashfall and debris up to four centimetres thick blanketed these areas. The airborne ash impacted the whole population in these areas, with a certain percentage suffering breathing difficulties.

The Tongan government reported three direct fatalities and one subsequent death from the eruption. This relatively small number partly reflects Tonga's preparedness for disaster events. Previous disaster events have

included cyclones, earthquakes, and tsunamis, and there are a handful of active volcanos. Government messaging has raised awareness of the steps to be taken in the event of a tsunami, and the Tonga Red Cross Society (TRCS) has also co-led disaster preparedness activities with the Tongan government in numerous communities.

Ashfall has had significant impacts on shelter, and many homes in coastal areas have also been inundated with seawater. Some small islands in the Ha'apai group were completely flooded, and residents had to wait on high ground to be rescued.

It was initially estimated that some hundreds of households had suffered significant damage. In March, the Tongan National Emergency Management Office (NEMO) released the Initial Damage Assessments (IDA) report in conjunction with the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change, and Communications (MEIDECC) and the National Computer Emergency Response Team (CERT). The report states that 284 households ("HH") shelters have been severely damaged or completely destroyed, while 182 have suffered minor or moderate damage.

Island	District	HHs with Minor Damage	HHs with Moderate Damage	HHs with Severe Damage	HHs Completely Destroyed	Total HH's Damaged or Destroyed
Ha'apai	Lifuka	7	3	2	5	17
	Lulunga	6	13	8	18	45
	Otumu'omu'a	11	6	5	55	77
	Uiha	4	0	0	0	4
Total Ha'apai		28	22	15	78	143
Tongatapu	Kolofo'ou	3	25	26	6	60
	Kolomotu'a	21	24	24	11	80
	Kolovai	7	15	41	41	104
	Lapaha	17	9	5	3	34
Total Tongatapu		48	73	96	61	278
'Eua	'Ohonua	5	6	6	28	45
Total 'Eua		5	6	6	28	45
Grand Total		81	101	117	167	466

Damages from the disaster based on the IDA report by the Tonga Government.

The impacts of flooding caused by the tsunami have been exacerbated by subsequent heavy rainfall over an extended period. There have also been earthquakes around Tonga since the eruption, including at least two over 6.0 on the Richter scale. However, there were no reports of significant damage from these.

Following the eruption, people were evacuated from several islands, including Mango, Fafa, Pangaimotu and Makaha, and others were relocated due to damage to their homes. As of 15 January, over 3,000 people were staying in evacuation centres, and this number fell to 2,390 people by 31 January. While many have returned home or are staying with family and friends, some evacuation centres remain operational.

An update on the number of people still in evacuation centres is currently unavailable. People staying in these centres receive support for essential needs, including food and hygiene, while King and Government are currently working with evacuated communities on plans for more permanent re-location and the re-building of community infrastructure on Crown land. It is unclear what Crown resources have been set aside for re-location and re-building or how more in-depth community consultations will occur as plans develop.

Regarding water, sanitation, and hygiene (WASH), initial data suggested that approximately 50,000 people have been affected, and access to drinking water remains a critical priority. Many household water tanks have been damaged by ashfall and debris. At the same time, saltwater inundation and power outages in some areas have also severely impacted the ability of population centres to access useable groundwater.

Families have felt the loss of livelihoods, including damage to crops, and whole economic sectors reflect this. NEMO has also found that 200 boats, including fishing boats, have been destroyed or severely damaged.



Tonga Red Cross Society has hired nine portaloos, which have been used in two affected communities on Tongatapu. Photo: TRCS

The World Bank's Disaster - Resilience Analytics and Solutions (D-RAS) and Global Facility for Disaster Risk Reduction (GFDRR) have estimated direct damage following the *Hunga-Tonga-Hunga-Ha'apai* (HTHH) volcano and tsunami to be USD 90.4 million (CHF 83.7 million). In Tonga, where nearly 80 per cent of households are involved in their own food production in kitchen gardens, extensive damage to above-soil crops and saltwater inundation will affect the ability of some households to grow their own food. The Tongan government and other agencies in the country have been providing food support to affected households. Red Cross consultations with community members evacuated from outer islands have revealed significant livelihood impacts, with community members discussing potential long-term livelihood opportunities if they are relocated. Fisherfolk may also need to re-train or seek livelihood opportunities suited to new locations.

The medical needs and impact on health systems on the outer islands are still largely unknown as well. The Ministry of Health has set up a field hospital on Nomuka, where a previous health centre was washed away by the tsunami. All of the affected population have likely been affected psychologically. The combined impact of the volcano, tsunami, and subsequent challenges in contacting family and friends, along with damage to personal property and the subsequent outbreak of COVID-19, have contributed to a need for psychosocial support.

Standing water from the tsunami could also contribute to an increased risk of infectious diseases. The Ministry of Health has sprayed in affected communities to reduce the incidence of dengue fever.

Red Cross has raised concerns over the increase in plastic waste within communities from bottled water. Increased waste and the environmental impact of standing water and ashfall initially increased vermin. Community awareness campaigns are now urging households to ensure water is not pooling in plastic bottles and containers to reduce the chance of vectorborne disease.

On 18 January, the Prime Minister declared a state of emergency effective from 16 January, then extended to 10 April. Both the government and TRCS subsequently requested international assistance.

COVID-19

The eruption and tsunami response in Tonga has now been complicated by an outbreak of COVID-19 in the country. Two cases of the Omicron variant were detected during routine testing of port workers on 2 February. As of 4 April, there had been 7,127 confirmed COVID-19 cases, with nine deaths. As of 24 March, the Ministry of Health reported that over 98 per cent of Tonga's eligible population had received at least one dose of the COVID-19 vaccine, 90 per cent had received two doses, and 47 per cent had received booster shots.

Following the identification of the first COVID-19 cases, the Tongan government implemented control measures on Tongatapu and Vava'u, including a rolling lockdown, a curfew, school and business closures, and restrictions on events and gatherings. Some have subsequently been eased, and tertiary institutions have reopened. Students in forms 6 and 7 were expected to return to school on 16 March. However, following an increase in case numbers, on 18 March, a second lockdown was announced from 20 to 26 March. This lockdown was extended for another week until 2 April. A less stringent lockdown was then put in place for the week of 2 to 9 April.

These COVID-19 restrictions impact relief efforts, although NEMO, TRCS and others are committed to continuing relief activities. TRCS has been granted an order in the National COVID-19 Lockdown Restrictions Directions, issued on 2 February, enabling it to carry out critical response activities. However, operations have been largely suspended during the lockdown to minimize risk. Additionally, several TRCS staff have been identified as primary contacts of COVID-positive individuals and are in home isolation, unable to actively participate in response activities.

TRCS has been instrumental in the Tongan emergency coordination system, and local inter-cluster coordination groups immediately activated after the eruption. In the absence of communication with, or support from, the international humanitarian system, TRCS and other local actors immediately evacuated communities to higher ground, established evacuation centres, gathered assessment teams, and began distributing essential non-food items and clean water. Pre-positioned stocks that TRCS had on hand have been essential for the hundreds of Tongans rendered homeless. Despite its headquarters being damaged and severe coordination constraints with the loss of communications, TRCS has provided extensive support to NEMO on water and food distribution. The table below shows the distribution of essential household items by 10 March and donations from Fiji, local businesses, and other sources.

Division/ Village	Immediate needs: household items (HHI)									
	Shelter tarps	Tents	Shelter toolkits	Kitchen sets	Blankets	Solar lamps	Hygiene kits	Buckets	Water containers	Mosquito Net
Tongatapu	220	71	57	203	604	163	157	26	36	4
Ha'apai (including evacuees on Tongatapu)	11	-	7	18	32	206	54	11	23	3
'Eua				40			40			
TOTAL	231	71	64	261	636	369	251	37	59	7


Distribution of essential household items by TRCS.

Early in the response, TRCS hired nine portable toilets for use in two affected communities on Tongatapu, and as of 21 March, six remained in place and are being serviced every two days.

With support from the International Committee of the Red Cross (ICRC), TRCS commenced Restoring Family Links (RFL) services on 20 January. By 26 January, 150 Tongan households had made "safe and well" calls to family overseas using TRCS satellite phones. In addition, enquiries were received from 42 international family members seeking news of Tongan relatives. RFL was temporarily suspended when lockdown commenced on 2 February. While the need for RFL has now eased on Tongatapu, the ongoing challenges in communication with other island groups mean that TRCS will continue to provide RFL as needed.

TRCS has also supported the Ministry of Health with the dissemination of COVID-19 prevention messaging, including the distribution of information-education-communication (IEC) materials and key messaging in businesses and government offices.



 In the immediate aftermath of the eruption and tsunami, Tonga Red Cross staff and volunteers mobilized to provide shelter, WASH and other support to affected communities in Tongatapu. Photo: TRCS

EMERGENCY APPEAL REVISION

In the aftermath of this unprecedented volcanic explosion, which triggered shockwaves felt as far away as Europe and a Pacific-wide Tsunami causing fatalities in Peru, the Tonga response has received extensive and generous support. This support includes cash pledges, Rapid Response support, relief items and assistance to mobilize additional resources, leading to a revision of the original appeal from CHF 2.5 million to CHF 4 million.

TRCS recognizes the need to apply adaptive principles to meet shifting needs and grasp opportunities to be innovative and strategic in building community, organizational and coordination resilience as Tonga recovers from this crisis. Since the response began, TRCS has shared several lessons, and generous support to this emergency appeal will enable them to apply these lessons in the coming years.

The first of these lessons is that **preparedness saved lives**; well-trained staff and volunteers were able to establish an immediate and coordinated action plan, and pre-positioned stock ensured a fast response, meeting the immediate needs of the affected population. TRCS recognizes that in future events, decentralization of pre-positioned stock, community-based stock holdings, well-trained volunteers and localized operation centres will enable fast action and a scaled-up, locally-led response across all territories. Revision of the appeal will allow the targeting of key vulnerable communities to develop response and recovery infrastructure, train additional Red Cross response volunteers, and develop community response plans.

The second lesson is that **environmental sustainability ("Green Response") principles must be applied** to build back more sustainably and avoid any unintended consequences for the environment due to the rapid response. Revision of the appeal will allow each response intervention to be carefully assessed and planned to minimize environmental impact and grasp opportunities to ensure a sustainable recovery, conscious of the climate crisis and the likelihood of more frequent and increasingly damaging future hazards.

The third lesson is that **the arrival of COVID-19 brings the need to mainstream pandemic preparedness and response** within community recovery. Revision of the appeal will ensure that response risk management can consider risks to the community and TRCS staff and volunteers, while addressing multiple risk communication

needs. When the original Emergency Appeal was launched, there were no active cases of COVID-19 in Tonga, but since the outbreak, the Ministry of Health has been leading the response. COVID-19 prevention and response measures are now an integral part of the response and will need further incorporation into community recovery and resilience.

The fourth lesson is that **both Tonga and TRCS must grasp the opportunity to build back better**. For Tongan communities, the revised appeal will enable community recovery infrastructure that serves the diverse needs of marginalized people to ensure their safety and inclusion. For TRCS, it will ensure National Society Development and sustainability through enhanced response infrastructure that can cope with the shocks that have made this response so uniquely challenging. TRCS and the IFRC country cluster delegation for the Pacific (CCD) are working closely on TRCS response and recovery resourcing to ensure that the right mix of technical support is available across the life of the response both on the ground, within TRCS and the CCD. TRCS is keen that its scale-up is well planned and sequenced, and that support for the response does not overwhelm the National Society or its coordination partners. Revision of the appeal will also ensure that the Pacific CCD can support TRCS to sustain its diverse auxiliary functions across its territories, while the long-term response is implemented in targeted communities.

On finalization of the current pledge interest, it is anticipated that an increased emergency appeal of 4 million Swiss francs will be fully funded. Accordingly, no further funding is currently sought for the appeal.

After the initial two-year appeal period, it is anticipated that IFRC and TRCS will continue to work together on recovery activities. These will be incorporated into ongoing National Society and IFRC country plans and will reflect synergies with the National Society's strategic goals and the goals and challenges in IFRC's Strategy 2030.

TARGETING

Early estimates stated that approximately **85,000 people in 14,166 households**¹ have been affected², 84 per cent of the total population of Tonga³. It was estimated that 14,891 people in 2,482 households on Tongatapu (25 per cent of the population) were affected. In the Ha'apai island group, which represents 5,419 people from 903 households, the islands of Fonoifua, Mango, and Tungua, Nomuka suffered severe damage. It was estimated that 75 per cent of the Ha'apai islands and 'Eua, or 7,742 people from 1,290 households, were the most significantly impacted. In total, **22,633 people from 3,772 households** were identified as being in greatest need of assistance.

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

¹ Average household size is 5.7 people, therefore response planning uses 6 people per household in calculations.

² Government of Tonga Situation Report #6.

³ 100,209 people according to the 2021 census, and 16,702 households.

This activity will focus on the most vulnerable, including those with disabilities, senior citizens, single-parent households, young mothers, and the internally displaced. And given that there has already been an aid to the most severely affected households, government and humanitarian agencies will coordinate to reduce duplication of effort for those most affected.

However, the revised Emergency Appeal amount is not currently expected to increase the number of people reached beyond the original 17,000. Rather, it will make it possible to broaden the support and adopt community-based approaches that strengthen the National Society.



Tonga Red Cross staff and volunteers sharing COVID-19 prevention messaging in businesses, government offices and other locations. Photo: TRCS

PLANNED OPERATIONS

Through this Emergency Appeal, IFRC aims to continue support to TRCS in responding to the volcano and tsunami while aiming to meet the immediate, early, and long-term recovery needs of the most vulnerable 17,000 people (2,833 households). The TRCS response supported by IFRC will focus on the following sectors:



- Health and Care, including WASH**
Mental Health and Psychosocial Support/Community Health
- Integrated Assistance**
Shelter, Livelihoods and Multi-purpose Cash
- Protection and Prevention**
Protection, Gender and Inclusion (PGI), Community Engagement and Accountability, Environmental Sustainability, Disaster Risk Reduction

ENABLING APPROACHES

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



- Coordination and Partnerships**
- Shelter Cluster Coordination**



☒ **Secretariat Services**



☒ **National Society Strengthening**

The Operational Strategy provides further details on the Federation-wide approach, including contributing Red Cross and Red Crescent National Societies' response activities and the Federation-wide funding requirement. It is expected that the Operational Strategy previously released on 4 February 2022 will be updated in the coming weeks to reflect the increased funding.

RED CROSS RED CRESCENT PRESENCE IN COUNTRY

Tonga Red Cross Society (TRCS)

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. TRCS is represented on the National Emergency Management Committee (NEMC), the leading coordinating body for disasters in Tonga.


The National Society has always had a prominent leadership role in the Pacific. Its experience and skills are highly respected among fellow National Societies in the region, having previously led the Regional Red Cross PGI Network. It now has a keen interest in developing its digital capabilities.

TRCS is headquartered on the island of Tongatapu, and there are branches on Ha'apai islands, 'Eua and Vava'u. The low-lying headquarters was flooded following the tsunami and subsequent heavy rainfall. After the eruption, communication with TRCS was not possible for the first 72 hours, and all communication occurred by satellite phone, until mobile phone connections were re-established. International communications have been greatly enhanced by restoring the international undersea telecommunications cable.

Community volunteers have supported needs assessments and water and relief distributions, and they have also provided RFL services to connect Tongans with loved ones worldwide.


IFRC Membership Coordination


Based in Suva, Fiji, the IFRC Pacific CCD provides regional support to 11 Pacific Island National Societies, including TRCS. The IFRC CCD supports 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 CCD also facilitates networking among the Pacific National Societies and supports capacity building initiatives such as the Pacific Emergency Responder Capacity Initiative and Preparedness for Effective Response to improve National Societies' readiness to respond.



TONGA RED CROSS SOCIETY

Core areas of operation





Number of staff:	15
Number of volunteers:	80
TRCS presence across the country	80%

For this operation, IFRC has supported TRCS in response planning and reporting, communications, coordination with partners, WASH, logistics, media coverage and communications to the public. Since the eruption, IFRC also has met with partners to coordinate interest in providing funding, relief items, and/or Surge assistance. The support enables TRCS to implement relief activities, initiate early, long-term recovery, and ensure that TRCS is prepared to quickly and effectively respond to any future crises quickly and effectively.

In the immediate aftermath of the eruption, Australia Red Cross and New Zealand Red Cross sent emergency relief supplies to Tonga Red Cross, with the Australia and New Zealand Defence forces providing transport. The Red Cross Society of China has also pledged USD 400,000 (CHF 369,852/EUR 358,380) bilaterally to support the Tonga Red Cross.

Movement Coordination

ICRC also maintains a regional delegation in Suva. It supports National Societies to implement RFL, ensuring Safer Access, promote international humanitarian law (IHL) and raise humanitarian issues with governments, security forces, academic circles, the media and civil society. ICRC provides ongoing support for TRCS communications activities. In addition, ICRC has supported TRCS with its RFL services during the Tonga volcano and tsunami response.

External Engagement

The Tongan government is leading the emergency response, and NEMO coordinates efforts and has activated the national and district Emergency Operations Centres. TRCS coordinates closely with NEMO and participates in the NEMC, which the Tongan Prime Minister currently chairs. TRCS volunteers have mobilized at NEMO's request and have supported joint damage assessments according to its mandated role. NEMO has also made radio announcements encouraging communities at risk to cooperate with TRCS volunteers and NEMO itself.

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

Contact information

For further information, specifically related to this operation please contact:

In the Tonga Red Cross Society

- Sione Taumoefolau, Secretary General, email: sg@tongaredcross.to
- Marika Moala, Disaster Manager, email: dmo@tongaredcross.to

In the IFRC Country Cluster Delegation, Suva

- Katie Greenwood, Head of the Country Cluster Delegation, email: katie.greenwood@ifrc.org
- Soneel Ram, Communications Manager, email: soneel.ram@ifrc.org

In IFRC Regional Office for Asia Pacific, Kuala Lumpur

- Alexander Matheou, Regional Director, email: alexander.matheou@ifrc.org
- Joy Singhal, Head of Disaster, Climate and Crisis, email: joy.singhal@ifrc.org
- Nusrat Hassan, Operations Coordinator, email: OpsCoord.Pacific@ifrc.org
- Siokkun Jang, Logistics Manager, Regional Logistics Unit, email: siokkun.jang@ifrc.org
- Antony Balmain, Regional Communications Manager, email: antony.balmain@ifrc.org

In IFRC Geneva

- Christina Duschl, Senior Officer, Operations Coordination, email: christina.duschl@ifrc.org
- Karla Morizzo, Senior DREF Officer, email: karla.morizzo@ifrc.org
- Eszter Matyeka, Senior Officer, DREF, email: eszter.matyeka@ifrc.org

For IFRC Resource Mobilization and Pledges support

- Alice Ho, Partnership in Emergencies Coordinator, email: partnershipsEA.AP@ifrc.org

For Performance and Accountability support (planning, monitoring, evaluation, and reporting enquiries)

- Fadzli Saari, PMER and Quality Assurance Manager a.i, email: fadzli.saari@ifrc.org

Reference



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