Situation Overview

The **United Nations Satellite Centre (UNOSAT)** has released a preliminary assessment report and has analyzed five areas/islands. Hunga Tonga-Hunga Ha'apai; Nuku'alofa; Uoleva; Uiha and Nomuka. The Pleiades satellite image acquired on 16 January 2022 shows that the caldera of the Hunga Tonga-Hunga Ha'apai has collapsed and the island has lost a substantial percentage of its initial surface of 285ha. Damage can also be seen in Nuku'alofa, Uoleva, Nomuka and Uiha with mainly inundated areas and zones with ash deposits. The analysis can be viewed and downloaded at: https://www.unitar.org/maps/maps/map/3433.

The **European Union** activated its Emergency Management Service of the EU Earth Observations System *Copernicus* and initial results are available online under https://emergency.copernicus.eu/mapping/list-of-components/EMSR558 and under https://emergency.copernicus.eu/mapping/system/files/components/EMSR558_AOI02_GRA_PRODUCT_r1_RTP01_v1.p df

Yesterday, **Australia** and **New Zealand** carried out surveillance flights over Tonga. The pictures are currently being analyzed, will first be shared with the Tongan Government, and should then be available shortly.

The full extent of damage is yet to be fully quantified. The eruption broke the underwater communications cable, leaving most parts of Tonga without communication and internet access. A ship is underway from Papua New Guinea to fix the cable. It is feared that the rupture of this cable is close to the volcano, making it potentially dangerous to restore. Anticipating an extended period of communications challenges. Communication means within Tonga are gradually being restored. Tonga is also negotiating with broadband satellite operator *Kacific* to access a satellite internet connection.

An initial assessment from the Government of Tonga is that 100 houses were damaged and 50 destroyed in Tongatapu. No evacuation centres are open in Tongatapu, the people who were displaced (numbers not confirmed as of now) are staying with extended families. There are 89 people in evacuation centres in 'Eua. Information from outer islands is still very scarce. In Ha'apai and Vava'u islands, communication lines remain down and concerns exist regarding damage to low lying island in this group. Three deaths have been recorded so far.

Preliminary information from the Tongan Ministry of Agriculture indicates that the damage in the agricultural sector, and particularly of root crops, is less severe than initially feared.

Due to thick ash cover is thicker than anticipated (between 5 and 10 cm) and will need more time to be cleared away. Planned relief flights (from Australia and New Zealand, for the time being) are on stand-by. It is hoped the airport will be operational by 20 January 2022. New Zealand is bringing survey and diving teams to inspect changes to the seabed in shipping channels and ports. These teams will also assess wharf infrastructure to assure the future delivery of aid and support from the sea.

The Tongan Government has advised that further updated needs and requests for assistance will be available by the end of this week.

Humanitarian Needs and Response

A comprehensive overview of humanitarian needs is still not possible mainly due to the lack of functioning communication equipment and inaccessibility of some of the most affected areas. Urgent matters the Pacific Humanitarian Team and donors are working to address include re-establishing communication, immediate shelter needs and providing support for access to safe water.

OCHA and Pacific Humanitarian Team members are coordinating with partners to support Tonga's forthcoming request for assistance.

UNICEF is shipping First Response WASH & Dignity Kits, Recreation Kits, jerry cans, Buckets (a total of 3,050 units) with Australia's HMAS Adelaide, planned to leave for Tonga on 20 January.

The Emergency Communications and Telecommunications cluster is currently working to assist in re-establishing communication lines to ensure an efficient flow of communication.

Relief items (for details see also below) are currently prepared for shipment to Tonga. In-country stocks are being readied for distribution once humanitarian needs are identified by government and partners.

Partner Action

Australia is planning to have a relief flight (among the items are shelter, kitchen and hygiene kits) to Tonga in the coming days – conditions permitting. Besides relief items, there will also be support for connectivity to remote islands. In addition, *HMAS Adelaide* is being loaded with humanitarian supplies from DFAT and partner agencies including UNICEF to support the cleanup, improve connectivity and to enhance water and sanitation.

New Zealand has allocated a further NZD 500,000 in humanitarian assistance, taking funding total to NZD 1 million. It has a relief flight on standby as the Fua'amotu International Airport will not be cleared and approved for take-off and landing until 20 January. It has collapsible water containers, generators and hygiene kits for families on board. Two naval vessels, HMNZS Wellington and HMNZS Aotearoa are leaving for Tonga today. The first ship will carry Hydrographic Survey and Diving Teams as well as a helicopter; the second ship bulk water supplies and humanitarian and disaster relief stores, including a load of 250,000 litres of water and a desalination plant that can produce 70,000 litres per day. Furthermore, New Zealand is also facilitating communications between Tonga and *Kacific*.

For the **United States**, USAID has pledged USD 100,000 to support emergency efforts in Tonga. In the previous update, we reported that US air and navy assets might be available but were today advised that this is not foreseen for the time being.

Besides triggering the Emergency Management Service of the Earth Observation System *Copernicus*, the **European Union** has also opened the *EU Civil Protection Mechanism* for Tonga, so that member states can respond to the Humanitarian Assistance and Disaster Relief (HADR) needs in the country.