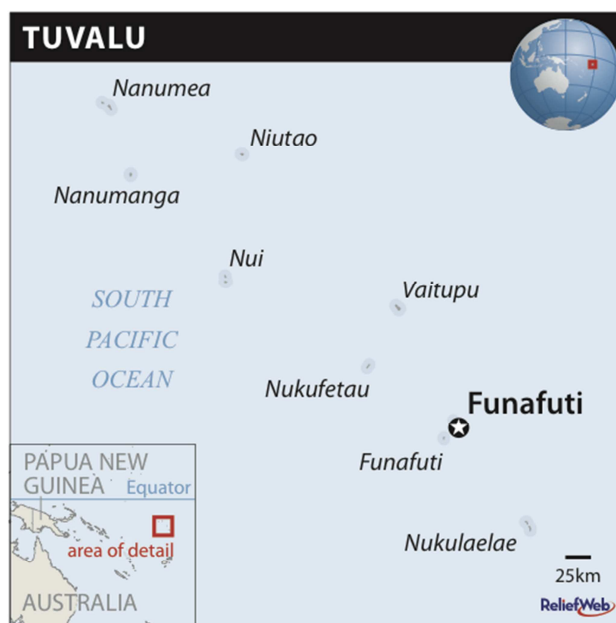




This report is produced by the OCHA Regional Office for the Pacific (ROP) in collaboration with the Government of Tuvalu and the Pacific Humanitarian Team. It covers the period from 22 to 30 March 2015. The next report will be issued on or around 1 April 2015.

Highlights

- The Government and humanitarian partners continue to deliver food, shelter, fuel, clothes, water treatment tablets, medical supplies, and other relief items to the affected islands.
- Rapid assessments have been carried out on the three northern islands (Nanumanga, Niutao, Nanumea) and the three central islands (Nui, Nukufetau, Vaitupu).
- Nui suffered the worst damage of the three central islands, with significant damage to crops and livestock.
- Nanumanga suffered the worst damage of the three northern islands, with 60-100 houses flooded and damage to the health facility.
- Ninety per cent of crops have been damaged in Nui and Nukufetau.
- All displaced people have returned to their homes in Nukufetau.
- Influenza cases reported in Nanumanga have now stabilized.
- The total amount of in-kind, cash and pledge donations to relief and recovery efforts is approximately US\$ 2.5 million.
- The general elections planned for 26 March have been postponed to 31 March 2015.



Map Sources: UNCS, Gov't of U.S.A.
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Map created Jun 2010 – www.reliefweb.int

Situation Overview

The Government-led emergency response to victims of Tropical Cyclone Pam is still ongoing in Tuvalu. The situation in the outer islands is normalising as most affected people have returned to their homes. The Government and humanitarian partners continue to deliver protein-rich food, shelter kits, fuel, generators, water treatment tablets, kitchen kits, clothes and medical supplies to the three central islands (Nui, Nukufetau, Vaitupu) and three northern islands (Nanumanga, Niutao, Nanumea). Construction materials and tools are also being provided to the affected communities. Teams from the Public Works Department (PWD) and Solid Waste Agency of Tuvalu (SWAT) have been deployed to assist with clean-up operations and the construction of temporary shelters. Eighty per cent of the affected areas have restored electricity, internet and telephone connections.

Rapid assessments have been carried out for the three northern islands of Nanumanga, Niutao and Nanumea. Water, medicine, shelter and food were identified as priority needs. Nanumanga suffered the worst storm damage, with 60-100 houses flooded and severe damage to the hospital. The harbour ramp in Nanumanga used to deliver relief supplies was also damaged. Nanumea and Niutao received minimal damage and life has generally returned to normal.

Although immediate relief needs have been met in the central islands, there is a need to better utilize the financial support pledged by the international community. An analysis of the use of the assistance provided thus far will be conducted, and a plan is being developed by the Government to determine the existing response gaps. Additional updates are also needed on the situation in the northern and southern islands.

The caretaker Prime Minister Enele Sosene Sopoaga hosted a lunch for external partners on 22 March and used the occasion to show the Government of Tuvalu's gratitude to the international community for the support provided

to Tuvalu. The rapid assessment teams also shared updates on the assessments carried out in the central and northern islands.

In **Nui**, weather monitoring equipment was inundated and some families lost household property. As of 26 March, ten families were still using the school as temporary shelter. The plan is to relocate these families to the community hall after teams from PWD and SWAT carry out repair work on the community hall and its surroundings. Some people are staying with host families. There is no standing water on Nui, however there is debris (sand, boulders, organic matter and coral) between 50 to 100 metres from the sea coast. Due to rough seas one of the boats carrying emergency supplies was unable to offload its cargo. As of 26 March, the island had food supplies for about two weeks. One-hundred per cent of vegetables, bananas, pulaka and taro (the main local source of carbohydrates) have been affected, with pulaka crops yellowing due to salinization. The total loss of livestock is still unknown, however some livestock (pigs) have been recovered. Fishing is restricted due to the lack of fuel and boats. Human bones and recently buried bodies brought to the surface by erosion of the cemetery due to storm waves have been collected and reburied. There is still the need for psychological counselling for the people that were traumatized by the scene of exhumed bodies.

In **Nukufetau**, all displaced people have returned to their homes. Large areas of the seawall have been damaged as a result of storms surges.

In **Vaitupu**, no major damage was reported and life on the island has returned to normal. Relief supplies including medicines have been distributed.

In **Nanumanga**, the health facility was damaged and 60-100 homes were flooded. The ramp at the harbour was also damaged and large boulders have blocked access for ships and boats to dock. Large amounts of sand have been deposited 100-200 metres inland from the sea coast and coral and organic debris are littering the environment. Water quality testing has not been conducted to assess water quality after the flooding of the island, however most tanks have adequate water. The Tuvalu Red Cross Society distributed water treatment tablets and advised the communities on how to utilise the tablets. Residual cases of influenza are still being reported.

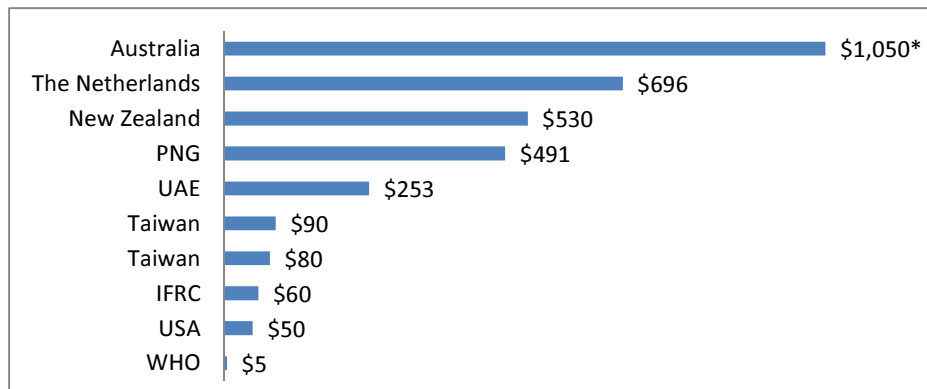
In **Nanumea**, electricity and communication (telephone and internet) have been re-established. About a dozen houses on the western coast of the island are at risk of inundation as the seawall has been damaged. Eleven graves were also damaged by strong storm waves. There are reports of increasing mosquito and fly breeding in the open water bodies on the island. The desalination system is not functioning and requires repairs.

In **Niutao**, one wall of the hospital was damaged however medical supplies were not damaged. Additional fuel is required for the generator providing electricity to the island.

In **Nukulaelae**, school has been suspended due to the ongoing influenza outbreak. Nearly 40% of the island population has been affected.

Funding

Total contributions to the emergency response have been tracked by the Ministry of Foreign Affairs. The total amount of in-kind, cash and pledge donations to relief and recovery efforts is approximately AUD\$ 3.3 million (US\$ 2.5 million).



*Thousand Australian Dollars

Humanitarian Response

The Government is leading response efforts across all clusters supported by humanitarian and bilateral partners.



Shelter

Needs:

- There are no immediate emergency shelter needs and temporary shelter needs are being dealt with (a team from PWD has been deployed to support repairing the community hall to accommodate the 10 families staying in the school).
- In Manutalake village (Nui) with 70 houses, 9 houses are reported to be completely destroyed while 10 are reported to be partially destroyed. The remaining 51 houses are flooded, with inundation across the entire village, 24 local kitchens have also been destroyed. Similarly in Alamoni (Nui) with 75 houses, 3 houses are reported to be completely destroyed, one is reported to be partially destroyed and 47 flooded. The remaining 24 houses were reported to be unaffected.
- Requests for blankets, mats/mattresses, cooking utensils, soap, flashlights, stoves and water containers.

Response:

- No immediate need for construction of shelters for the central islands, support to assist people to return to their dwellings proposed.
- Tuvalu Red Cross Society (TRCS) has dispatched 150 shelter kits, 20 bales of used clothing as well hygiene kits to Nui and Nukufetau based on initial assessments. Supplies of shelter kits have also been distributed to northern Islands.
- The TRCS is mobilizing additional clothing and will be distributing 20 more bales of clothing.
- Relief boats are currently en route to with additional supplies to the central and northern regions.
- UNICEF has supplied some medical supplies.
- The relief supplies donated by the government of New Zealand arrived in Funafuti on 22 March.
- Supplies of tarpaulins, chain saws, generators, tool kits, wheel barrows, shovels and spades, fuel pumps and food together with 1.3 tonne of medical supplies donated by the New Zealand Government arrived on Hercules C130 military aircraft.



Water, Sanitation and Hygiene (WASH)

Needs:

- Septic tanks damaged due to inundation are in need to be repaired.
- Debris in the affected islands needs to be collected and properly disposed of to prevent health and environmental hazards.
- Some water cisterns/tanks have been destroyed and require replacement.
- In the medium term, it is important that the water treatment and public health messaging is continued and rain water harvesting systems restored ahead of the coming dry season.
- There is need to provide water testing kits (colilert water testing kits, salinity water testing kits and growth media).
- The shredder in Nui Island is broken down.

Response:

- A PWD team has been deployed to repair the damaged septic tanks.
- The Solid Waste Agency of Tuvalu (SWAT) will support debris clearance.
- Red Cross distributed water purification tablets and provided advice to communities on how to utilize the tablets.
- Rapid assessment teams to carry out basic water quality tests, salinity of water and some presence/absence testing of coliform and E coli.
- Additional water containers were received through the Tuvalu Red Cross Society.
- Additional aid support including WASH items and medicines arrived on the NZ Defence Force flight.
- Two environmental health experts mobilised by Fiji National University and DFAT arrived on 24 March and will be deployed to the outer islands to support clean-up operations and conducting environmental impact assessment.

- A midwife, 2 medical officers, trauma counsellor, intensive care nurse, public health officer and pharmacist supported by DFAT and Fiji National University and the World Health Organization arrived on 26 March 2015.
- UNDP has mobilized resources to deploy a Debris Management Advisor who will travel in the second week of April.
- UNDP has provided shredders in each of the islands that are currently being used to shred organic waste and efforts are being made to replace/repair the shredder in Nui Island.
- UNICEF in collaboration with SPC and Red Cross is facilitating information dissemination for the Ministry of Public Health to advise communities on measures to protect their health.
- WHO also provided IEC materials for public health messaging, and 300 emergency water testing kits for water quality monitoring in affected communities.



Health & Nutrition

Needs:

- Currently there is no electricity in the hospital in Nui.
- The Ministry of Health requested additional supplies of the following items: Albendazole (27 Bottles) and DEC (27 Bottles) for deworming exercise.
- School has been suspended on Nukulaelae Island due to threats of spreading of the influenza outbreak.
- There is need to support clean operations to reduce the amount of debris around homes to reduce mosquito breeding.
- Meeting the need for psychosocial counselling is still outstanding.
- Southern-most islands have not received any medical supplies to date.

Response:

- UNICEF has procured an assortment of medical and non-medical supplies that have been delivered to the central and northern islands.
- Additional supplies of re-hydration supplies have been received and there is now adequate stocks of rehydration solutions.
- The Tuvalu Red Cross Society (TRCS) with support from the Samoa and Fiji Red Cross Societies distributed hygiene kits, water containers, mosquito nets, mosquito coils and kitchen sets.
- DFAT in collaboration with Fiji National University (FNU) has mobilized 4 health staff (2 Environmental Health Specialist, Midwife and Clinical Coordinator) from Fiji National University who arrived on 24 March 2015 and will be deployed to the outer islands and one will be attached to the main hospital in Funafuti.
- World Health Organization has deployed technical officer on neglected tropical diseases (NTD) and (2) Environmental Health experts.
- WHO has provided some chemicals for vector control, targeting marshy and swampy areas if necessary.
- Continuous monitoring of the influenza outbreak is ongoing and additional medicines to be delivered to Nukulaelae Island over the weekend.



Food Security & Livelihoods

Needs:

- There have been requests for high protein food as food stocks are low and gardens have been badly impacted and fishing compromised due to lack of fuel and or boats.
- Negotiations are underway to allow fishing within conservation areas and traditional no take areas.
- Salinity and pH of island soils has been compromised by sea water and debris inundation. This is likely to impact crop production in the short to medium term but will improve with ongoing seasonal rainfall which is anticipated to be above average in the short to medium term.
- There is only one functioning boat in Nui, thus limiting fishing.

90%

Crops damaged in Nui and Nukufetau islands

Response:

- The Tuvalu Government and its partners have distributed protein-rich tin foods and limited rice stocks to the islands.
- The Tuvalu Disaster Committee has provided rice, sugar, flour, biscuits, 6,000 litre of petrol, cooking gas and gas cookers.

- A consignment of rice was received on the New Zealand C130 military plane and has been distributed to the outer islands.
- Taiwan government has confirmed food aid support of 50-100 metric tonnes of rice.
- Two ships with food supplies will arrive in Funafuti with food stocks to replenish existing supplies.
- The government is proposing that there is a minimum of 2 weeks food supply in each of the islands until the affected communities are able to resume fishing and other livelihoods activities to support household food security.
- Food security situation in the 3 northern islands and 2 southern islands has not been assessed.
- Government has approached fishing trawlers to supply fresh fish and some 3 tonnes of fish has been pledged.
- The Korean Fishing Trawler has pledged to provide 5 metric tonnes of while the other fishing companies have pledged 3 tonnes.
- Communities are being advised to harvest the damage root crops in affected pulaka pits before their quality is affected from the inundated salty water.
- The Tuvalu Auckland community has pledge to supply 6 containers of non-perishable food.

Gaps & Constraints:

- Household food security has been seriously been disrupted by the saltwater inundation. Breadfruit trees, pulaka plants (swamp taro), taro, bananas, vegetable gardens were affected by saltwater inundation and are yellowing. Root crops are hardest hit and may not recover. There is inadequate manure or peat to use as growing media. There is thus need for communities to be supported to replant root crops and vegetables.



Education

Needs:

- In Nui the primary school is being used as an evacuation centre and learning programs have been suspended. The extent, however to which other schools have been affected is still unclear particularly in the northern island group.
- There have been reports that sanitation facilities at schools have been damaged or overwhelmed during the height of the evacuation period.
- The primary school toilets in Nui are not functioning and school opening has been postponed.
- Sanitation facilities in schools used as evacuation centres were inadequate and were overwhelmed.

Responses

- The Ministry of Education Youth and Sports (MEYS) is working closely with UNICEF to conduct a detailed assessment on the impact of the cyclone on schools.
- The School Supervisory Unit from MEYS will commence outer islands visits/assessments in the week beginning 23 March.
- An assessment on the schools used as evacuation centre is being conducted to determine their capacity to accommodate displaced people.
- UNICEF will provide school supplies and student backpacks for children on the affected islands.

Gaps & Constraints:

- There is currently no information on the impact of education for the schools in the northern and southern islands.



Early recovery

Needs:

- Ministry of Natural Resources (agriculture department) is looking to support the re-establishment of crops.
- There plans to establish nurseries on each island but there is inadequate peat moss and or manure as well as polythene.
- Pulaka pits (traditional root crop production areas) in some areas have been inundated, and will require reestablishment.
- The fishing sector experienced losses due to damage of refrigeration facilities and there is likely need for support in replacing the damaged cooling facilities.

- World Bank is conducted a desk rapid 'loss and damage assessment' to estimate housing, agriculture and infrastructure losses (sea walls, roads, sanitation facilities). The estimated loss is currently at 4.5 million US dollars (7.5 per cent of GDP).

Responses:

- The Department of Agriculture has been advised to draw up a proposal for recovery of household food production.
- The Tuvalu Government is proposing to send a public works team to assist families to return to their homes, repair community halls used as shelters, and to help in the clean-up of flood debris in Nui Islands.
- The consignment of tools, generators and recovery equipment donated by the government of New Zealand have been delivered and are currently being distributed to the outer islands.
- Communities are making their efforts to rebuild their lives and the situation is gradually normalizing.
- There is need for the government and its partners to scale up early recovery in supporting communities to rebuild disrupted livelihoods and damage infrastructure.
- DFAT and MFAT have committed funds to support disaster recovery efforts in support of the agriculture and fisheries sectors. Maritime safety, fishing boats and fishing equipment are some of the components.

General Coordination

- The National Disaster Committee (NDC) is meeting regularly to coordinate response efforts.
- The Tropical Cyclone Pam Foreign Relations Sub-committee (of the NDC) is meeting daily at 3:00 pm with partners that are actively helping coordinate the response and conduct assessments.
- Samoa provided a patrol boat that is being used to transport assessment teams and deliver relief supplies. The boat will leave Tuvalu by end of end of March 2015.
- There has been a move to establish two working groups modelled around the cluster system to provide for more focused discussion around sector specific issues. These working groups have yet to meet.
- UNDP is mobilizing resources to support debris management and is in discussion with SWAT to support clean-up operations.
- The World Bank is ready to finance the recycling of hazardous waste (batteries and asbestos) up to US\$ 286,000 and has asked the Government to explore this opportunity.
- There is ongoing need to manage staged deployments to Tuvalu to ensure that international support meets ongoing government response needs, and that incoming support does not overwhelm local capacity and facilities.

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