



TC Harold Relief Response West Coast Santo, Vanuatu

Tropical Cyclone Harold and the West Coast of Espiritu Santo

On Monday 6 April 2020, Tropical Cyclone Harold ('TC Harold') cut a devastating path through Vanuatu. TC Harold was the second category 5 cyclone to hit the country in five years. It left behind a barren landscape, destroying infrastructure and gardens in the northern islands of Santo, Pentecost, Malo, Ambrym and Malekula.

TC Harold came at an already challenging time in Vanuatu, as it was forming its new government and handling the usual challenges of climate change, volcano ash, and development. COVID-19 added international closures and an internal state of emergency, which has made aid organisation a logistical and systemic challenge.

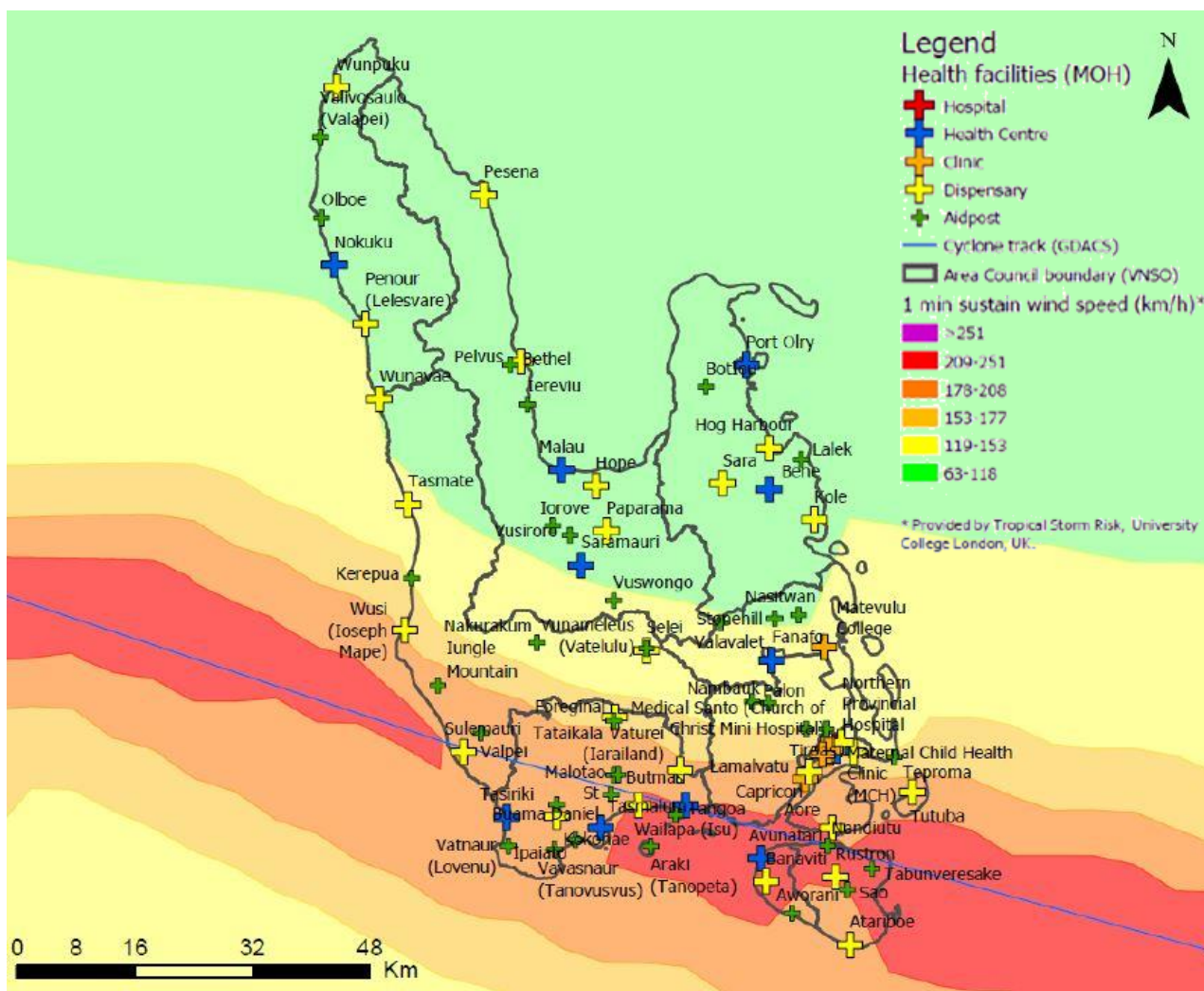
Santo was the first island to be hit by TC Harold, with wind gusts as high as 235 km/h. The majority of Santo's 40 000 inhabitants live in the south-eastern coastal stretch of the 100km-long island, near the main centre of Luganville, where emergency relief supplies were deployed almost immediately.

The response to isolated communities in the West Coast was somewhat different. TC Harold made a direct hit on the West Coast, and it is estimated that the eye of the storm passed directly over Kerewai I and II, an area encompassing 13 villages and residential stations. Assessment teams reported an extremely high level of structural damage.

The total population of the West Coast Area Council is 2592 people within 528 households. Inhabitants are spread across 25 primary villages and residential stations, living along the coast and inland locations up in the hills. Access to inland villages is extremely difficult, often involving several hours hiking.



Map of Santo, and West Coast Santo communities extending from Kerevinopu (alt. Kerevinumbu) in the south to Vasalea (above). TC Harold caused full destruction or substantial damage to over 700 structures in the West Coast.



Population statistics for communities in West Coast Santo – 2 592 people within 528 households

Village	Population	Households	Village	Population	Households
Kerevinopu	82	15	TovoTovo	91	21
Lalaola	110	24	Sulimauro	60	14
Sakele	28	6	Tialona	36	9
Toromauri	74	18	Pelopvu	63	14
Jaranavusvus	125	21	Tanakovo	190	36
Voji	74	17	Valapei	169	36
Pesale	11	3	Pataiolmatap	15	4
Navai	27	4	Patuie	19	3
Pareo	125	19	Salalope/Lovuha	110	20
Sauriki	376	90	Linduri	80	17
Wusi	145	28	Kerepua	135	21
Elia	209	34	Tasmate	152	36
Vasalea	86	18			

Limited Infrastructure

A combination of topographical and climactic influences has limited the development of infrastructure on West Coast Santo. The only road access from Luganville is an approximately 3-hour drive to Tasiriki on an unpaved track prone to flooding. From Tasiriki, access to West Coast Santo villages is by local 'banana' boat, or on foot via bush tracks.

There are seven primary schools (five of which are government-run) and three health facilities. All educational institutions including kindergartens are reported to have been destroyed or damaged to the point of being inoperable. The three largest schools sustained extensive damage to classrooms, staff houses, offices and dormitories.

Housing stock is primarily constructed from locally sourced building materials – bamboo walls, natangura thatched roofs and bush rope for connections. There are very few concrete block houses.

Damage to Flora

The damage to primary forests as a result of Cyclone Harold is high, with recovery of several species expected to last a long time. Across the entire West Coast, approximately 13 000 natangura palm trees are reported to be totally destroyed. A further 7000 palms suffered partial loss. It is reported that almost 100% of the population on West Coast Santo rely on the forest as a source of building materials.

Communities in West Coast Santo with the highest priority shelter needs

Community	Population	Number of Households	Percentage of sleeping houses destroyed
TovoTovo	91	21	81%
Lalaola	110	24	97%
Kerewai I stations - Sulimauro, Sakele, Tialona, Toromauro & Pelopvu	261	61	98%
Kerewai II stations – Jaranavusvus, Tanakovo, Voji, Valapei, Pesale, Pataiolmatap, Navai & Patuie	630	124	Approx.95%
Pareo & stations – Salalope/Lovuha	235	39	96%
Sauriki	376	90	100%

Shortage and lack of access to tarpaulins

The slowness of the response has meant very few tarpaulins made their way to the West Coast. The few that have, appear to be private donations or personal purchases. There is, however, a paucity of official information about the whereabouts and numbers of tarpaulins in-country. The latest official information is that there will be no tarpaulins for distribution to the West Coast until at least June.



Distribution of Emergency Relief Supplies

Through the combined generosity of various supporters, the people on West Coast Santo have benefitted from much-needed food, hygiene and shelter supplies in the immediate aftermath of the cyclone. Contributors included all Butterfly Trust donors, YachtAid Global ('YAG'), the Vanuatu Business Resilience Council, Human Capacity Development International, Vanuatu Climate Action Network, the LDS Church, the Catholic Mission with Caritas NZ, Mamma's Laef Vanuatu, Big Heart Island Vanuatu, ADRA, Edenhope Foundation plus many other organisations and individuals based in Port Vila and Santo. Supplies were procured and delivered by two local vessels, the MV Ratua of Ratua Island Resort and Spa, and MV Sheerwater, operated by the Vanuatu Maritime College ('VMC').

To support the local economy as much as possible, emergency supplies were purchased directly from Luganville in Santo. The cost of a final trip on the MV Sheerwater was funded by other local agencies who were distributing seedlings and local produce at some stops along the same route. Additionally, the Trust was able to source some shelter and WASH supplies from pre-positioned stock in Port Vila. Along with purchased items, shelter kits and other items were combined and transported together.



MV Ratua and MV Sheerwater during a transfer of stock and drop-off along West Coast Santo



Recording the receipt of rice during the distribution on 23 and 24 May

Cyclone relief distributions took place on 21 April, 25 April, 11 and 12 May, 23 and 24 May, and 9 June

Items distributed

- 15 030kg of Rice
- 3 000 cakes of Laundry Soap
- 210 cartons of Tinned Fish
- 1 200 Lighters
- 860kg of Nails
- 122 Solar Lights
- 810 Buckets with lids & taps, 140 x 20 litre jerry cans
- 866kg vacuum-packed Island Kakae
- 900 water bottles with filters and replacement filters
- 5000 packs of breakfast crackers
- 56 Hygiene Kits and 66 WASH Kits
- 9 080 cakes of Bathing Soap
- 1 800 packs of Sanitary Pads plus 184 packs of Mamma's Laef washable pads
- 430 Shelter Tool Kits
- 111 Kitchen Kits
- 430 Cotton Blankets
- 20 large bags of Clothes & Linen
- 44 cartons of assorted food rations for vulnerable community members
- 3 440 jars of peanut butter
- 30 Water Filtration Kits



Emergency supplies for West Coast Santo began the journey at various locations in Port Vila and Santo – HQ of the Vanuatu Climate Action Network (VCAN, above left), Vanuatu Maritime College (VMC, above right), Catholic Mission Warehouse in Port Vila (below left) and Vancorp Constructions (below right). The team from Vancorp below.



Sorting and loading at Melcoffee Wharf, Luganville (above) and MV Sheerwater leaving for the West Coast (below)



Rice relief – 24 May 2020



Fine Foods Ltd. vacuum-packed 'laplap' (above)



Various drop-off points along the West Coast communities



On the ground, the Trust was in regular contact with local personnel consisting of members of the Community Disaster Climate Change Committee (CDCCC) led by Dr Chris Bartlett, a climate change expert, as well as volunteers from locally based NGOs, Santo Sunset Environmental Network and Edenhope Foundation. This enabled smooth operation and successful delivery and receipt of goods.

Additional supplies were procured through a number of local and international agencies collaborating – Caritas and the Catholic Mission, Vanuatu Climate Action Network (VCAN) and the Public Works Department.

The Sanma Provincial EOC and National Disaster Management Office (NDMO) were kept up to date throughout the planning and implementing stages.



Following the completion of the rice distribution on 24 May, MV Sheerwater transported kava and peanuts harvested by a number of the communities in West Coast Santo to sell in the markets in Luganville. This will also help boost local capacity to encourage self-sufficiency in the long term. This return transport also helped send 30 secondary school students, whose schools have been severely damaged, to attend alternative schools in Luganville.

Coconut Thatch Weaving Workshop – 11 to 16 May

The primary impetus for this training was to partially resolve the urgent need for shelter in West Coast Santo given the shortage and lack of access to tarpaulins mentioned above. In addition, the people of West Coast Santo recognise the value of a more robust, longer term and environmentally sustainable solution to the use of tarpaulins.

In the wider context, the knowledge and lessons gained from this experience should inform future opportunities of traditional knowledge revival and exchange in the disaster risk resilience context.

Multi-partner and stakeholder operation

This week-long activity was a collaboration between a number of individuals and organisations with the endorsement of the Shelter Cluster, Sanma PEOC and NDMO. YAG provided the funding that enabled eight women and one man to conduct practical workshops in 11 communities on the West Coast.



Enhancing local resilience and sharing traditional coconut thatch weaving skills with trainees from West Coast Santo. Standing (left to right): Chief Nakou who organised these weavers from the Tannese Community in Luganville, Martha Elud, Margreth Bong, Janet Tally, Kathleen Telma, Christin Naupa, Kenneth Naupa & Maui Harry. In front (left to right): Yvette Nocklam & Kathleen Katipa.

These weavers have a minimum of 10 years' experience in coconut thatch weaving. Many of the women have at least 20 years' experience.

On the ground, six members of West Coast Santo's Emergency Operation Centre team accompanied the weavers who were spread among different communities to maximise reach into various villages.

The figures

Community	Number of 2m-thatch pieces woven	Number of structures roofed	People trained	
			Male	Female
Kerevinopu/Lalaola/TovoTovo	40	Ongoing	3	22
Sulemauri	46	Partly completed roof	20	28
Tanakovu/Voji	32	Ongoing	24	16
Jaranavusvus	28	Ongoing	7	7
Valapei	34	Ongoing	8	16
Pareo/Salalope	200	Ongoing	10	21
Sauriki	180	1 small storage house completed	50	34
Linduri	180	1 small community hall completed	3	12
Wusi	276	1 small community kitchen completed	30	39
Kerepua	256	1 small kitchen completed, Toilet to complete	15	32

Elia	98	1 small community kitchen completed	20	30
Tasmate	115	1 community kitchen completed	8	42
Vasalea	136	1 tool shed completed	15	40
TOTAL	1 621	7	213	339

Since the workshop was completed, coconut thatch weaving has continued. The people from West Coast Santo have also expressed their interest in reviving traditional resilience and coping strategies as the impact of climate change affects all sectors including shelter, food and livelihoods.



A team of 12 women and three men from Linduri community rebuilt a small community meeting hall by the end of the workshop. Up to 60 pieces of 2m-length thatch were prepared for this structure.





