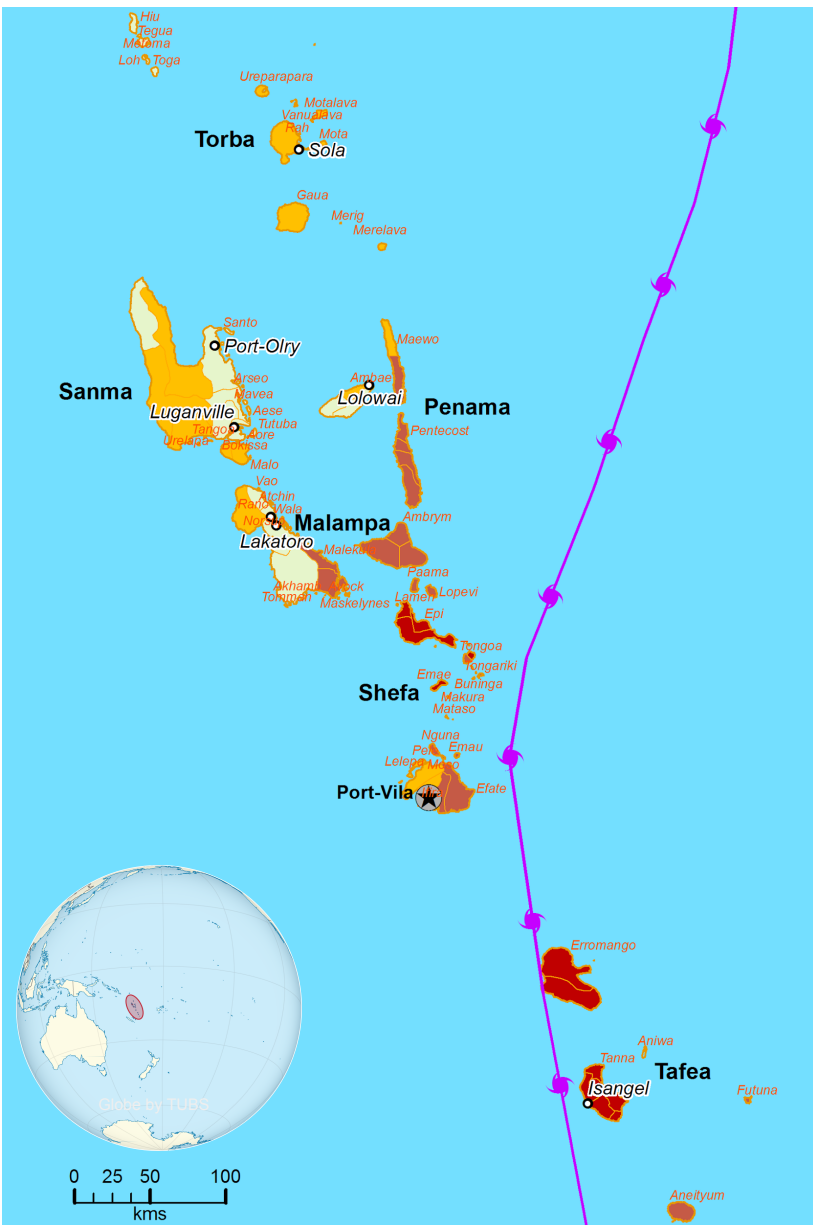


Geographic impact

Tropical Cyclone Pam made landfall on Friday the 13th of March near the islands of Vanuatu with sustained wind speeds of 270 km/h. Initial estimates of humanitarian impact suggest large devastation. Several other island nations, including Kiribati, New Caledonia, Solomon Islands, and Fiji have also been affected. Cyclone Pam is a category 5 cyclone and the second strongest to ever form in the Southern Pacific.

Source: GDACS



Profile of the affected population

35 600 households affected

171 000 people affected

20 100 poor individuals

Geographical profile

Tafea and Shefa provinces most severely impacted

Mountainous archipelago rugged with narrow coastal plains

Livelihood profile

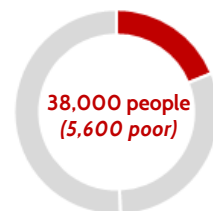
Agriculture the dominant livelihood (especially subsistence agriculture)

Coconut and cash crops are key crops

Fishing is a key livelihood in coastal areas

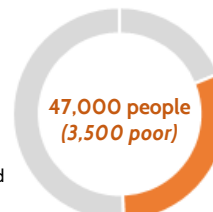
Priority 1 (Extremely high impact)

Households along the eastern parts of Shefa province and Tafea were directly on the path of Cyclone Pam. Resilience levels in these areas are lower with many people living in traditional housing and depending on subsistence farming. Most are assumed to have lost their house and livelihoods. Among the 38,000 people, 5,600 were identified as poor.



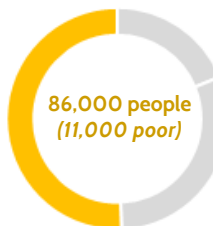
Priority 2 (High impact and low or moderate resilience)

Households immediately in the vicinity of the typhoon track were highly impacted. Severe wind damage is likely in these areas, with potential effects on subsistence livelihoods. Among the 47,000 people in this zone 3,500 were identified as poor.



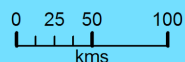
Priority 3 (Moderate impact and low resilience or high impact with high resilience)

Households located further west of the path of the cyclone escaped very high impact. These islands may have experienced damage due to strong winds. It includes the main city Port Vila. Among the 86,000 people impacted, 11,000 were identified as poor.



Lower priority (Less impact and/or higher resilience)

In these areas the number of people living in traditional housing is less and/or they are relatively less dependent on subsistence farming. Alternatively the impact of the cyclone may have been less severe.





Resilience profile

Resilience: Vanuatu is prone to natural disasters which create local devastation and loss of livelihoods. The localised nature and significant scale of these disasters means that they tend to overwhelm the local coping capacity and mutual assistance capabilities of extended families and relatives living on other islands..

Urban areas tend to be poorer than rural ones. The worst affected islands, Tanna and Eromango, have relatively high poverty levels (10-33%). In the other two most affected islands, Aneityum and Efate, poverty ranges between 3 and 10%, except in Port Vila city, where rates are much higher (18%) (Census 2009).

People in urban areas are mostly dependent on wage or salaried income. In rural areas, own home production and household enterprise are the main income sources. Despite lower poverty in rural area, the rural subsistence type of livelihoods are more likely to be impacted.

Housing conditions are precarious. About 65% of households in Tafea province live in houses with walls and roofs made of traditional material. This contrasts with about 2% of households in Port Villa (Census 2009).

Social assistance programs: There are four main social assistance programs in the Republic of Vanuatu. The existing social assistance programmes include Home Island Passage Allowance, scholarship allowance, family assistance support program, and disaster assistance.

While there is no public sector cash social assistance, there are some elements of direct service provision to broader population groups which replace some of the needs for specific social assistance

When disasters strike, the government usually seeks external aid when resources are needed, since there is no permanent government fund to assist those affected by disaster. For the duration of the emergency, assistance such as food, clean water, clothing, blankets, temporary shelter, and transport, may be provided to disaster victims.



Livelihood profile

Livelihoods: The major livelihood activities in the affected areas are related to agriculture - predominantly coconut, roots and tubers, cocoa, and fruits and vegetables. Copra, the dry meat of coconut, is by far the most significant agricultural export.

Agriculture: Over 80% of the population in Vanuatu is engaged in agriculture, both for subsistence and cash crops, such as coconuts and kava. Coconut plantations - the key agricultural commodity in the country - are likely to have been severely damaged. Given the heavy reliance of communities on coconuts and coconut products, impact on livelihoods is likely to be long-lasting.

Fisheries: Fishing may have been disrupted due to severe winds resulting in loss of fishing boats and other assets.

Daily labour: Demand for daily labour (for debris removal, etc.) is likely to be high in the immediate aftermath of the cyclone.

Cyclone season: Normally during November-April.



Food consumption

Typical diet: There is a large disparity between urban and rural diets. Rural populations rely mostly on self-grown root crops such as yam, manioc and taro, starchy fruits such as plantain, breadfruit and banana, fresh fish, and coconut products. Two thirds of their food is from own production. Dried breadfruit is particularly important as a survival food after cyclones, when other crop plants have been destroyed. Most food is boiled or grilled. Food is rarely fried and vegetable oil is rarely used.

Urban populations, on the other hand, buy most of their food and have a less traditional diet, with imported items such as rice, instant noodles, oils/ fats and canned fish being commonly consumed.

Nutrition: Obesity, cardiovascular diseases and diabetes are significant problems, particularly amongst urban populations. One quarter of infants receive complimentary food before the age of 6 months, Malaria represents a public health concern especially during and after the rainy season.

Assistance food basket: See Page 4 for potential options.



Logistics, Infrastructure & Markets

Air airport: There are 26 domestic airstrips and three airports able to accommodate international flights (in Tafea, Luganville and Port Vila). Not all islands have airports. The airfield at Port Vila, the main international airport, has been badly damaged but military and commercial flights have already begun to arrive.

Land and sea transport: Maritime transport is the main means of inter-island freight transport. Not all islands have wharfs or landing sites. Road access is generally good in Vanuatu, with ¾ of the population living less than 10 minutes from a main road.

Communications: Limited mobile communication is back up in Port Vila, but not in islands from Tafea province. Preliminary estimates suggest 80% of power lines are down in Port Vila and will not be fully restored for several weeks. The National Disaster Management Office (NDMO), located in Port Vila, has sustained damage to its HF radio, and is unable to communicate to emergency services or to send community announcements.

Market Capacity & Constraints: Reliance on markets varies widely between urban and rural households: rural households only buy one third of their food, compared to 80% for urban ones. Of the food items bought on markets, some are produced locally and the rest are imported, mostly from Australia (35% of imports) and Fiji (30%). Market constraints are likely to include transport and storage constraints, stock loss, poor food quality, high buying price, lack of demand, lack of credit, and irregular supply.



Impact of previous cyclones

Lusi (March 2014): Category 2. Affected livelihoods of 20,000 people. Food security risk for a total of 4,867 households were identified in Penama, Malampa, Torba, Senma and Shefa Provinces.

Vania (January 2011): Category 1. Affected 32,000 people, mostly in Tafea Province. Damaged 70-100% of manioc and banana plants, which took 6 months to recover. Food assistance was provided by NDMO for up to 3 months.

Uma (February 1987): Category 4. Caused damages of USD 80 million. 48,000 people were affected. Death toll tallied at 48. Most affected islands were the same as for cyclone Pam: Efate (including Port Vila), Tana and Eromango.

? ASSUMPTIONS & METHOD

Geographic impact: Measured by using the GDACS wind speed buffers (>120 km/hr and >90 km/hr). An additional buffer of 50 km on both sides of the cyclone track was created to delineate an area of extreme high impact. This created three areas of 'assumed geographic impact': extremely high, high and moderate.

Resilience: Based on housing quality and type of livelihoods. It was assumed that traditional housing and livelihoods depending on own home production were most impacted. As such, the average of the percentage of houses built up from traditional wall material (woven bamboo) and houses with thatched roofing (natangura leaf) was combined with the share of households depending on own home production to define an 'assumed resilience level' for each administrative area: high, moderate and low. Thresholds used for traditional housing were > 50% (of households), 25-50%, <25% and for dependence on own home production, >75%, 50-75% and <50%.

Priority areas for food assistance: Overlaying the assumed level of geographic impact with the resilience level created three priority areas for food assistance:

		Geographic Impact		
		Extremely High	High	Moderate
Resilience	Low	Priority 1	Priority 2	Priority 3
	Moderate	Priority 1	Priority 2	
	High	Priority 2	Priority 3	

People affected: includes all people in priority 1 -3 areas. In other areas people may also have been impacted but these were not counted in the overall number. The number of poor are the share of population below the consumption based national poverty line, HIES 2010 and the 2009 Census.

Verification: assumptions are verified through incoming field assessments. Results will be immediately updated through subsequent versions of this report.

REFERENCES & LINKS

→ Vanuatu National Statistics Office: www.vnso.gov.vu and <http://www.vnso.gov.vu/index.php/census-and-surveys/censuses>

Site includes copies of Demographic and Health Survey 2013, Household Income and expenditure Survey 2010, Population Census 2009, Social Economic Atlas and Hardship and Poverty Report.

→ Vanuatu Meteorological Services: www.meteo.gov.vu/
 → Joint Typhoon Warning Centre: www.usno.navy.mil/JTWC/

TRAVELLERS' INFORMATION

The weather is hot and humid, with minimum and maximum temperatures between 23 to 35 degrees Celsius. Showers are forecasted for the next 10 days.

All potential WFP personnel deploying to Vanuatu need to ensure that they are fully self-sufficient and have pre-arranged accommodation, transport (including from airport) and communications (including internet access and satellite phone) in place.

NDMO cannot support incoming humanitarian personnel.

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VERSIONING INFORMATION

Version 0 - Released 15 March 2015

Version 1 - Released 17 March 2015

Includes updated information from initial aerial assessments by Department of Geology, Mines and Water Resource (DGMWR), SHEFA Provincial Council and Vanuatu Broadcasting and Television Corporation (VBTC).