

# Disaster context

Sanma Province has three main islands. Santo, the largest island and second most populated in Vanuatu, Aore island, and Malo which are both situated very close to the south side of Santo.

The following is the draft population data from the 2016 mini census:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Province** | **Area Council** | | **Sex** | | | | | |  | |  |  |
| **Male** | | **Female** | | **Not stated** | | **Total population** | | **HH** | **hh size** |
| Sanma | north west santo | 844 | | 853 | | 1 | | 1698 | | 338 | | 5.0 |
| Sanma | north santo | 2437 | | 2241 | | 20 | | 4698 | | 922 | | 5.1 |
| Sanma | west santo | 1529 | | 1521 | | 11 | | 3061 | | 635 | | 4.8 |
| Sanma | south santo | 4349 | | 4069 | | 6 | | 8424 | | 1,695 | | 5.0 |
| Sanma | east santo | 2313 | | 2220 | | 5 | | 4538 | | 915 | | 5.0 |
| Sanma | south east santo | 3209 | | 2996 | | 3 | | 6208 | | 1,276 | | 4.9 |
| Sanma | canal - fanafo | 2487 | | 2181 | | 7 | | 4675 | | 919 | | 5.1 |
| Sanma | luganville | 8264 | | 7876 | | 19 | | 16159 | | 3,022 | | 5.3 |
| Sanma | west malo | 1218 | | 1161 | | 18 | | 2397 | | 572 | | 4.2 |
| Sanma | east malo | 1027 | | 941 | | 3 | | 1971 | | 429 | | 4.6 |

The Provincial HQ is located in the Luganville area of Santo.

|  |  |  |
| --- | --- | --- |
| **Provincial Disaster Officer** | **Secretary General** | **Planning Officer** |
| Not appointed. | Acting SG  Joe Yadi  7718526 | Prosper Buletare  [pbuletare@vanuatu.gov.vu](mailto:pbuletare@vanuatu.gov.vu)  7754532 |

Santo is prone to large earthquakes. The Luganville precinct is developing fast with larger structures being build to accommodate tourism and commercial business. A large earthquake may effect these structures. Tsunami mapping indicates the Luganville area is in danger of a tsunami event.

Most of the logistics assets, commercial businesses and suppliers, fuel depot, schools etc, are set up along the waterfront on both sides of the main road. High storm surge and rising seas (cyclone, flooding tsunami) may affect the capacity of this infrastructure. As Santo was not directly impacted by TC Pam, it is difficult to ascertain how much protection Aore and Malo islands will provide against storm surge. Disaster plans should consider the logistical constraints that could be faced if the wharfs were not operational, and the schools and businesses could not be used for supplies or evacuation centres.

# Logistics context.

Santo is the second largest hub in Vanuatu and plays an important role in providing goods and services to the northern side of the country.

Luganville has commercial businesses, suppliers and logistical services. It has an international airport, and a large international wharf that can accommodate large vessels. There is a fuel depot, and routine domestic flights and inter-island shipping linking with Port Vila and the northern and eastern islands.

A Humanitarian logistical hub is being established on the hill in Luganville in the Sanma Provincial Government Headquarters. Red Cross has a small warehouse and office located in the area. NDMO is in the process of building a Provicial Disaster Office (PDO) , and a humanitarian disaster warehouse is being constructed next to it with the support of WFP. World Vision also has a small office in the area.

The precinct contains a large sports field that could act as a helipad and container storage site in times of emergency. The Chiefs nakamal is located in the same area and could potentially be used as a temporary evacuation centre for tsunamis or relief warehousing.

Overall, a small humanitarian response operation could be run from the Sanma Provincial headquarters area once fully established, or used as a secondary operations centre.

Figure : Santo Logistics Hub for Disaster coordination.

<helipad and container site

Provincial Government HQ>

<Red cross office and WH

<Chiefs nakamal

Proposed PDO and WH site>

WVI office>

International wharf

/

Hospital>

The following humanitarian partners are operating in the Province:

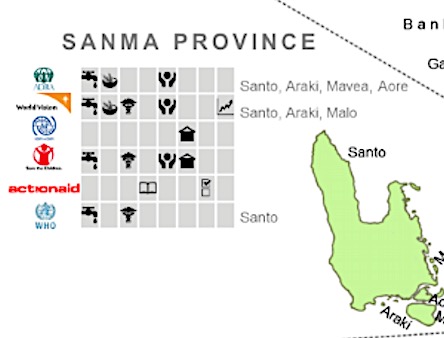


Image: Extract from VHT 3w’s October 2016.

# Sea transport

The harbour in Luganville is one of the deepest in the Pacific at 22m depth. The large waterfront area has many commercial and private wharfs for international and domestic cargo ships, ferries, cruise vessels and commercial businesses.

Figure : International wharf -under upgrade (2016 image) and Simonsen domestic wharf,

Simonsen wharf

International wharf

## International Wharf

The port has one berth that is shared by cargo ships and cruise vessels. The Pacific petroleum company have their own port installation for unloading fuel tankers directly into their storage facilities.

The international wharf is government owned and has recently been expanded to accommodate large cruise vessels. Two cargo vessels can now berth at the same time or one large cruise vessel. A pilot is mandatory for ships over 60m. To arrange the pilot you must contact Port and Harbour in Santo who operate on Channel 16.

**Government of Vanuatu procedures for international vessels:**

Military ships must notify local High Commisions/Embassies first of arrival schedules and purpose of visit, who will then assist to liaise with the Government of Vanuatu.

All international ships arriving must contact Santo Ports and Harbour 72 hours in advance of arrival to arrange pilot, berthing and international clearance inspections. Information required includes:

* Arrival time,
* Registration
* Passengers and Cargo onboard
* Estimated time in country
* Contacts deatils.

Ports and Harbour can help facilitate arrangements with Customs, Immigration and Biosecurity if necessary. Ports and Harbour contacts: ph +678 36033. Harbour Master-Terry Ngwele: Ph +678 33790; +678 7783338/ 5728816 [tngwele@vanuatu.gov.vu](mailto:tngwele@vanuatu.gov.vu)

There is a Customs office on the wharf, and Ports and Harbour and Immigration offices are located close by.

**International Wharf Specifications:**

Wharf front: 239m across, 22 m ocean depth, draft 20m, apron 20m

Container storage: Capacity for 1000 TEU’s on the wharf. There are 18 connections for refrigerated containers (20 or 40ft). The wharf can handle 40 tonne per m3 loading of wharf.

Cargo Storage facilities:

* Construction of two new large purpose built copra warehouses has been completed on the wharf. These are often full awaiting shipment. (see following images)
* An existing 1000m2 cargo warehouse is also on the wharf for palletised and bagged cargo. This has been re-roofed as part of the upgrade.
* A large cruise ship terminal is being built in the wharf precinct area. In times of emergency this could potentially be used to store relief supplies.

**Stevedoring:**

The Northern Island Stevedoring Company Limited (NISCOL) manages the stevedoring and cargo handling on the wharf. Ph +678 36084; [niscol@vanuatu.com.vu](mailto:niscol@vanuatu.com.vu)

CEO -Phillip Ryan +678 36084; +678 7777121

Unload and handing equipment:

There are no cranes or gantry’s available. Ships arriving must be geared with their own crane at a capacity of 38 tonne minimum.

NISCOL has:

* two 16 tonne tined forklifts,
* two 3.5 tonne forklifts,
* two 38 tonne top loader trucks for container movements.

NISCOL advised it may be possible to hire a 70 tonne grove crane, owned by a Chinese company at Velit bay, if required.



Figure: Two copra warehouses with smaller cargo warehouse in distance.



Figure: Cruise ship terminal building under construction.

## Shipping ports

Temporary sheet until logistics maps completed.

|  |  |  |  |
| --- | --- | --- | --- |
| **Port Name** | **Coordinates** | **Capacity** | **Type** |
| **Santo** | | | |
| **Luganville area.** | | | |
| International wharf | Lat. 15\*30’55.14S  Long. 167\*11’13.03E | 750 tonne, 239m | Govt, wharf |
| Simonsen wharf | Lat. 15\*30’54.34S  Long. 167\*10’49.43E | <500 tonne | Govt, wharf |
| BP wharf | Lat. 15\*30’56.74S  Long. 167\*10’49.43E | <500 tonne | Private, wharf |
| Wong Sze Sing (WSS) wharf | Lat.15\*31’36.63S  Long.167\*09’21.68E | <500 tonne | Private, wharf |
| Melcoffe wharf |  |  | Private, wharf |
| Nicon Wharf | Lat.15\*31’30.99S  Long.167\*09’20.78E |  | Private, wharf, dry dock |
| Maritime college |  |  | Govt, wharf |
| **Big Bay** | | | |
| Malao |  | 15m anchorage | Banana boat offload |
| **North West Coast** | | | |
| Wunpuko |  | 10m anchorage 100m out from shore | Banana boat ofload |
| **Mid west Coast** | | | |
| Tasmate |  | Barge | anchorage |
| **South West Coast** | | | |
| Tasariki |  | 10m anchorage, 100m from shore | Landing craft. Road access by truck |
| **Malo** | | | |
| Parkley |  | Barge | anchorage |
| Aore island |  |  |  |
| Aore island resort |  | Dive boats and banana boats | Jetty |

## Inter-island vessels based in Santo

Awaiting Ports and Harbour Santo to provide Santo based ships, routes, contacts and rates.

# Air Transport

Airports Vanuatu Limited is responsible for managing the Pekoa Airport.

<http://www.airports.vu/about.html>

|  |  |  |  |
| --- | --- | --- | --- |
| **Airport Name** | **Coordinates** | **Capacity** | **Runway Type** |
| **Santo** | | | |
| Pekoa International | **Lat** S 15 30 20 76  **Long** E 167 13 16 89 | Daily flights  C130 or boeing 737 can land on load restrictions C17 not advisable as it is difficult to turn around. | Asphalt  2000m x 30m; |

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**Procedures for International emergency assistance landings**

For an aircraft intending to stay and operate in Vanuatu one month or more, registration is required from Civil Aviation Authority of Vanuatu:

Civil Aviation Department, Ministry of Infrastructure and Public Works Utilities

Tel.: +678 22819

Fax: +678 23783

Email: [civav@vanuatu.com.vu](mailto:civav@vanuatu.com.vu)

Website: [www.airports.vu](http://www.airports.vu/)

For emergency medivacs aircraft arriving, 24 hrs notification must be provided to AVL for landing approval.

For aircraft coming to assist with disasters, 72 hours notice of arrival is required for flight approval to AVL. The absolute minimum is 24 hours. This military aircraft, maritime patrol aircraft, cargo planes delivering relief supplies, and VIP dignitaries.

Flight approval requests forms, processes and charges can be found on AVL the AVL website. <http://www.airports.vu>

Operator aircraft requesting non scheduled landing approvals can be sent to the following email addresses at the AVL Flight Approval Office.

* [ats@airports.vu](mailto:ats@airports.vu)
* [gmops@airports.vu](mailto:gmops@airports.vu)
* [pascal.alick@airports.vu](mailto:pascal.alick@airports.vu)

The Flight Approval Office will require the following information:

* aircraft type/registration
* aircraft call sign
* aircraft operator
* departure aerodrome
* estimated time of departure and date
* estimated time of arrival and date
* onward flight route from Vila, departure and date
* purpose of flight: tourism/business, private, tech stop etc

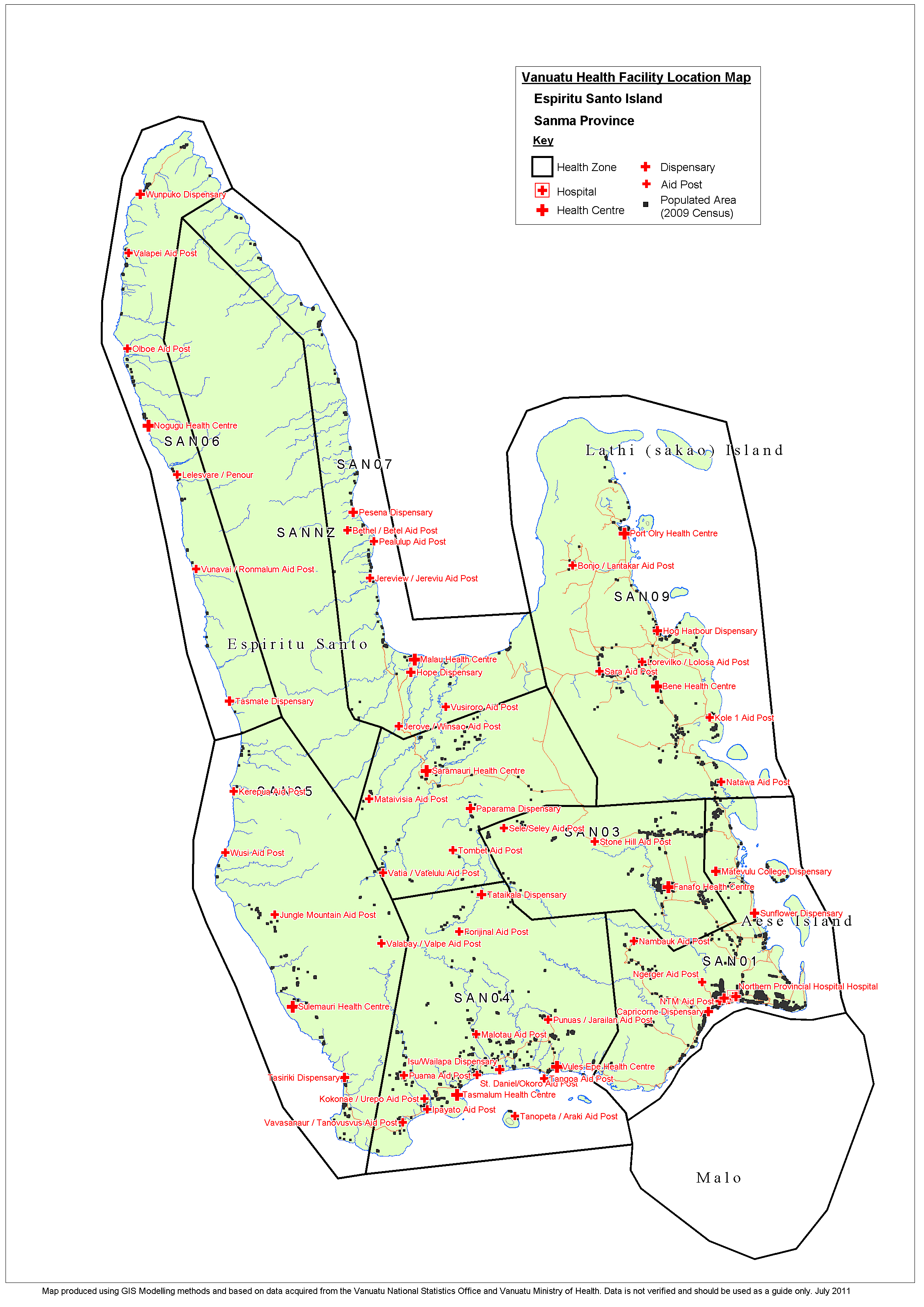
It is advisable to arrange a ground handling agent to be responsible for organising and coordinating aircraft arrival and departure times, apron marshalling, organising Customs Immigration, and Biosecurity, and payment of fees. There are two ground handling services in Vanuatu:

* Air Vanuatu Operations Ltd [pcarcasses@airvanuatu.vu](mailto:pcarcasses@airvanuatu.vu)
* Vanuatu Terminal Services [rwane@vts.vu](mailto:rwane@vts.vu)

**Fuel Service Charges**AVL provides storage for airlines to put in fuel drums. 44 gallon drums of AVGAS, JET A1. Prior arrangement must be made with the fuel company to order fuel. PPC has reserves for AV only. Request must be made in advance for any other aircraft at the airport. e.g. C17 must make a request a week in advance of fuel needs

# Road Transport

Information provided by Santo Public Works Department.



# Evacuation Centres

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ZCA | Phone | School | Head Teacher | Community name | Phone |
| Number | Number |
|  | | Pesenna | Ronnie M.Thérèse | Pesenna | 59 71 293 |
|  | | Saint Jacques | Imbert Lolia | Puelsope | 5345072 |
| JAMES WILLIAM | | Tolomako | Imbert Rebecca | Tolomako | 5627990 |
|  | | Vusiroro | Ailine Tavuet | Vusiroro | 7742203 |
| ZONE 1 & Zone 2 | | Mataloi | Erick Letlet | Mataloi | 7106909 |
|  | | Piamatsina | Ella Kavick | Piamatsina | 5447030 |
|  | | Malores | Sirovulu Thierry | Malores | 54 00 959 |
| 53 98 332 | | Vunakariakara | Emely Boukone | Vunakariakara | 5974352 |
|  | | Sainte Anne | Pounenarai Francisco | Port Olry | 56 60 167 |
|  | | Lorethiakarkar | Rite Emerick | Lorethiakarkar | 56 91 312 |
|  | | Saint Augustin | Augustino Bulememe | Fanafo | 5373949 |
| MARCEL BOMWEL | | Fanafo | Chalet Jean Pierre | Fanafo | 54 50 241 |
|  | | Vilvil | Apikel Jack | Fanafo | 33800 |
|  | | Butmas | Rapouel Oswel | Butmas | 56 94 131 |
| ZONE 2 & ZONE 3 | | Luganville Est | Marie Vianney Bong | Santo East | 37 188/5957981/7742311 |
| 5396427 | | Sainte Thérèse | Théora Elga | Saint Therese | 5343737 |
|  | | Saint Joseph Rowok | Robert Tubaga | Solway | 7731005 |
|  | | Kaméwa Francophone | Imbert Adèle | Kamewa | 36 821/7727405 |
|  | | Saint Michel | Abton Terong | Saint Michel | 33800 |
|  | | Nandiutu | Dormant | Nandiutu |  |
|  | | Naviaru | Marie Tambroco | Naviaru | 7740670 |
|  | | Najarawelu | Julie Walla | Jingnontana |  |
|  | | Ambakura | Tsen Nicole | Ambakura | 5607929 |
|  | |  |  |  |  |
|  |  | Tasmalum | Voyate Yvette | Tasmalum |  |
|  |  | Namorou | Pierre Louis Tari | Namorou |  |
|  |  | Okoro | Fabiola Bubunba | Okoro |  |
| MARIE TAVOUSMOLI | 59 79 117 | Ipayato | Vincent Tiroles | Ipayato | 5361294 |
|  |  | Marua | Ruruely Noel | Marua |  |
| ZONE 4 |  | Puama/Porema | Valivu Victor | Puama/Porema |  |
|  |  | Tcharanavusvus | Judah Voyamerei | Tcharanavusvus |  |
|  |  | Mataipevu | Tavulantui Sylviane | Mataipevu |  |
|  |  | Valapey | Hilaire Huremoli | Valapey |  |
|  |  | Ebenezer French | Serah Mele | Ebenezer | 53 63 523 |
|  |  |  |  |  |  |
|  |  | Pialuplup | Willie Navis | Pialulup | 5953687 |
|  |  | Malau | Robinson Philip | Malau | 5348228 |
| GEORGES JOSIAH | 53 69 496 | De Quiros | Mackenzie Turan | Matantas | 5374854 |
|  |  | Jordan valley | Jean Paul Daniel | Paparama | No gat |
| ZONE 5 |  | Lemesi Lape | Ketsy Malon | lape |  |
|  |  | Saint Paul – Navele | D.Langrere Manuel | Nawelala | 59 58 044/5552450 |
|  |  | Zion | Micah Aki | Zion | No gat |
|  |  | Vusvongo | Nelson Tosul | Vusfongo | No gat |
|  |  | Winsau | Kelly Mathias | Winsau | 59 56 785 |
|  |  | Antioch | Ismael John | Papaone | No gat |
|  |  | Hog Habour | Pakoa Kalo Thul | Hog Habour | 59 74 235 |
|  |  | Sara | Johnny Yoan | Sara | 5359497 |
|  |  | Lorovulko | Rex Toa | Lorevulko | 5552435 |
| HARKUK VOCOR | 56 74 144 | Lathie | Lolo Yerta Diedre | Lathie | 59 71 033 |
|  |  | Natawa | Paul Rebina Bakeo | Natawa | 77 30 352 |
| ZONE 6 |  | Iethvekar | Anna Joe Fred | Kole | 56 34 499 |
|  |  | Balon | John Harry | Balon | 5675802 |
|  |  | Sakau | Patrick Rav Tosul | Sakau |  |
|  |  | Dambulu | Celina Enrel Jack | Mavea | 59 63 856 |
|  |  | Mwast | Dialo Waback | Stone Hill |  |
|  |  | Tovotovo | Graham Moli | Tovotovo | 5450382 |
|  |  | Saint Barnabas | Towia Frezer | Turtle bay | 54 69 054 |
|  |  | Sarakata | Susan W. Balesa | Sarakata | 77 58 842 |
|  |  | Vunanbulu | Ireen Ansel Willy | Teporma | 5472584 |
|  |  | Luganville Adventist | Lesly Joseph | Sarakata SDA | 71 02 962 |
| JOPLINE TAMBE | 59 07 909 | Santo East | Evelyne Tugu | Santo East | 77 62 512 |
|  |  | Dombulu | Aiden Molley | Tutuba | 56 24 360 |
| ZONE 7 | 77 43 473 | Kamewa Anglophone | Willie Michael | Kamewa | 7740566 |
|  |  | Tiasia | Sophie Jimmy | Mavunlef | 56 34 463 |
|  |  | Vovlei | Andrew vuti | Nambahuk | 71 07 319 |
|  |  | Banban | Kre William | Banban | 35 629 |
|  |  | Rowhani | Sue Whitely | Rowhani/Sapi | 36 830 |
|  |  | Bernier Bay | Madeleine Ngweta | Aore plantation /George Lini | 77 61 963 |
|  |  | Nasalanvunmol | Velivo Wallie | Narango | 5386793 |
|  |  | Belmol | dormin |  | 5926886 |
| SOCOPOI MELE | 5342353 | Lehilehina | Posava Vemalehi | Araki | 54 03 911 |
|  |  | Tata | Ishmael Rongo | Tata | 33800 |
| ZONE 8 |  | Paiareve (Nasulesule) | Lorres Ninisia | Nasulesule | 77 55 077/5949831 |
|  |  | Ebenezer | Sera Mele | Ebenezer | 53 63 523 |
|  |  | Tavuamai | Steven Walter | Jarailand | 53 58 937 |
|  |  | Venie Mataipevu | Nixon Bani | Mataipevu | 33800 |
|  |  | Menevula | Maybline Path | Wunpuko | 77 34 224 |
|  | Day Spring | Ruby Daniel | Olpoi | 54 11 643 |
|  | JN Mackenzie | Nelly Roger | Nogugu | 33800 |
| ZONE 9 | Selusia | Bae Luke Saul | Vasalea | 33800 |
|  | Limarua | Goerge Kaloman | Wusi | 5905178 |
|  | Sulemauri | Tamata Garae | Sulemauri | 33800 |
|  | Mamara | Edson Nampas | Tasiriki | 33800 |
|  | Saletui | Precilla Tasi Aru | Tanovusvus | 7782928 |
|  | Ian Livo | Sano Jimmy | Kerepua | 53 59 342 |
|  |  | Jinaure | Amon Roger | Avunarara | 5668475 |
| Jennifer Andrew | 5624263/7792857 | Avunatari | Obed Sumbetovi | Avunatari | 35587 |
| Sebas |  | Amapelao | Betina Charley | Amapelao | 56 51 493 |
|  |  | Kitacu | Vacant | Avunaro | 33800 |
| ZONE 10 |  | Nanuhu | Florah Pakoro | Nanuhu | 5435542 |
|  |  | Taharo | Edmund Vurobaravu | Avunabulu | 5466908 |
|  |  | Alowaru | Bani Enneth | Alowaru | 54 02 682 |
|  |  | Banaviti | Mathrone Suzie Vatu | Avunarani | 53 66 012 |
|  |  | Parker | Selwin Garae | Aore Adventis | 33800 |

# Emergency Storage and prepositioned supplies.

Red Cross have a warehouse newly constructed in the Provincial headquarters area in Luganville.

ADRA have a 6.7m x 5.5 m concrete storage located at Sarakata.

The International wharf warehouses, cruise ship terminal and chiefs nakamal should be considered for emergency storage in Luganville area until the NDMO warehouse and PDO office is constructed.

There are many commercial warehouses in the area, so real estates could be contacted to determine if there are any available facilities.

The Vanuatu Red Cross Society has the following Non Food items prepositioned in Luganville:

|  |  |
| --- | --- |
| Tarpaulin | 200 |
| Hygiene Kits | 100 |
| Jerry can 10L | 100 |
| Sleeping Mats | 100 |
| Mosquito net | 200 |
| Shelter kits | 200 |
| Kitchen set | 200 |
| Blankets | 100 |
| Solar Lanterns | 100 |

# Emergency communications

Commercial Radio networks are available in Santo.

Digicel and TVL are operational in Sanma province.

Ports and Harbour; Customs VHF channel 16

OGCIO Sat Phone

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **3** | Activated | 00870776442484 | Luganville | Santo |

Red Cross Sat phone

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Description** | **Sat-Code** | **Van-Code** | **Pin -No** | **Sat Phone Number** | **Current location** | **Propose location** |
| **2** | Satellite Phone | 698 | 678 | 8816 | 31850246 | Luganville, Santo | VRCS Sanma branch, Luganville, Santo |

World vision Sat phone

|  |  |  |
| --- | --- | --- |
| Vomboe Molly | APM Northern Area Program Santo) | 881631430933 |