<table>
<thead>
<tr>
<th>Event</th>
<th>8.0 Earthquake and tsunami near Santa Cruz Islands, Temotu Province.</th>
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<tr>
<td>SITREP No. 06</td>
<td>Date: 13/02/2013</td>
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<td>Next Update: 1800 Hrs, 14/02/2013</td>
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<tr>
<td>From:</td>
<td>NEOC/PEOC/NDMO</td>
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<tr>
<td>To:</td>
<td>N-DOC &amp; NDC Chairs and Members, P-DOC and PDC Chairs and Members, PEOCs</td>
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<td>Copies:</td>
<td>NDMO Stakeholders, Donor Partners, Local &amp; International NGOs, UN Agencies, Diplomatic Agencies, SIRPF, SIRC and SI Government Ministries and all SI Government Overseas Missions</td>
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**Situation**

*New information highlighted in red.*

At 12.12pm Wednesday 6th February, 2013 a 8.0 magnitude undersea earthquake occurred 33km West-Southwest of the Santa Cruz Islands and generated a destructive tsunami. At 12.23pm the SI Meteorological Service issued a tsunami warning for 5 provinces in Solomon Islands; Temotu, Malaita, Makira-Ulawa, Central and Guadalcanal. By 1.18pm the threat to the 5 Provinces had been assessed and for Guadalcanal and Temotu this was downgraded to watch status. The tsunami warning remained in effect for Temotu, Makira-Ulawa and Malaita Provinces until 5pm. A large number of aftershocks have occurred after the event, with 7.1 being the largest. The Temotu Provincial Emergency Operations Centre (PEOC) was activated and a team was deployed to the Temotu province to assist the provincial staff. The PEOC initially established on the Provincial Conference room was now relocated to the actual Provincial Emergency Operations Centre (PECO, Temotu). The PEOC was setup last night and has all the relevant EOC Teams in place with EOC Personnel from Honiara.

**Areas Affected**

Mostly coastal villages on Santa Cruz. An updated Map will be issued in tomorrow’s SITREP.
Status (All on this section are new)

Geo Hazard Advisors

The Geologist and the Seismologists since 10th Feb 2013 have conducted in depth assessments on the impacts of the earthquake and tsunami Luova, Melevi, Nela, Venga, Lata, Nangu, Bamoi. The team of two in their assessment has collected the data on the tsunami wave inundation, height and the scarpering effect it caused to the geological formation on the affected coastlines. It has been confirmed by the two that in fact the wave height was not 0.9m, but in some of the villages being affected for example at Nela, the wave height was measured was up to 3m, and this may be linked to the bathymetric of those areas.

Regarding the fears raised over the probability of a volcanic eruption, the team has assessed the Tinakula Volcano and has confirmed that it is highly unlikely that the current seismic activities are linked to any volcanic activities. On the concerns raised on the possibility for another major tsunami, the advise is that because of the 8.0 Mw earthquake and the 7.0 Mw plus almost a hundred plus after-shocks, it is highly unlikely for another major tsunami to occur as the tectonic plates resulting in the earthquake that triggered the tsunami may have already released the stress on the plates already.

Royal Solomon Islands Police Force

Security:

Anti Social behaviours started to arise due to delays in the delivery of relief items. It is suggested that a liquor ban would be a good measure in reducing such anti social behaviour.

The Royal Solomon Islands Police Force, as the lead of Response and Initial Assessment Cluster, has committed to continuing provision of security in terms of accompanying the relief teams when conducting the relief distribution.

The Provincial Police as the lead of the Provincial Disaster Operations Committee has been very active in supporting the on-going disaster response and relief efforts.

Disaster Victims Identification (DVI)

The Disaster Victims Identification (DVI) Team that has been deployed has done very little in terms of identifying the Disaster Victims due to the fact that the team arrived abit late and that the situation is that the recovered body’s were still in good condition and still can be easily identified. Therefore, the DVI Team has done the regular forensic operations duties in documenting the records of the deceased which include photographing. The team now has been integrated into the Provincial Police and are currently assisting in distribution of food supplies.

Health Sector

1. Up-date assessment

   The total number of injured people directly impact by the earthquake/tsunami is thirteen. This number may not reflect the true impact of the injuries, because people are not coming forward for medical care, because of fear of further tsunami and collapsing infrastructure due to the continuing strong tremors,
which has been continuous in the few days after the tsunami. There are reports of diarrheal disease and red eyes in some of the camps. 173 patients have been seen at Lata hospital since the tsunami. Most of the presentations were for influenza-like illness. Second presentation is due to trauma.

2. Detail assessment
The Health sector is currently doing a in-depth health sector assessment of the health impact of the disaster. It is envisaged that this exercise will take at least 10 days. Initial report from the in-depth assessment are coming in. The assessment team had completed in-depth assessment at Manoputi camp, Nagu, Namoi, Meteni, Luameta, Bonate, and Masoko. Today the team is making in-depth assessment of Luova, Nella, Baenga, and Venga.

3. EPI Program
The status of the cold chain has been affected by the continous interruption of electrical supply to the freeze at the hospital. All vaccines have been damaged. The EPI network has been affected in the Zone 1 facilities.

4. Urgent Issues
Water is the most important priority at present. The WASH team is currently addressing that issue. A report from WASH cluster will be forwarded separately. Sanitation is another critical issue in the affected communities. These were observations from health team visits. Health team visits have noticed in the camps that there are adverse conditions that people are exposed to at the camp sites.

5. Ways the Health Sector is addressing the problems
The immediate problem is the availability of water for the people, both at the camp sites, and other communities that are affected. The WASH cluster team is currently addressing this problem. Sanitation, hygiene, waste management in the camps, and the communities is also another immediate issue that was identified in the health sector assessment.

Recommendation:
6. WASH cluster is to address the immediate water, sanitation, hygiene, and waste management.
7. Health continues to manage general medical conditions and perform in-depth health assessment and be on standby for emergencies.
8. Urgent need for vaccines to be delivered to Lata Hospital

Wash Summary

Water

Situation
- Mobilized on Saturday, a Nomad water treatment plant on the ground as well as water bottles and some tanks and water storage containers.
- Situation found many people had no water in the area where they were staying up the hill so were thirsty as their water source before the tsunami had either been tanks that had been destroyed or springs etc that were near to the sea that they were too scared to go to.
- In addition many people from around Graciosa Bay and the people of Lata had been using a water system that had not supplied water for 1-2 weeks so they had largely used up any water in water tanks in Lata.
• The water at the spring that people used to use for Lata and would manually collect water from when the water system wasn’t working was in a pool that was covered by the tidal surge / tsunami with resultant debris.

Achieved

• Nomad water treatment system working (took 2 days to reach full capacity, this means that we improved from about 2hrs to fill one 5000 litres bladder (i.e. biggest truck can carry) to 1hr to fill 1 bladder). 7500l distributed so far expect to be able to deliver approx. 15,000l/day (=5 liters/person/day within the road network (3000people)) could be upgraded to 20,000l/p/day max from tomorrow dependent on two trucks available for transporting water.

• A significant proportion of the 66,000 litres of bottled water in Lata has been distributed

• Most people within road network have jerry cans and collapsible 10l containers (for those communities outside road network, full assessments have not yet received to plan distribution). Allows them to collect and carry water as well as collect and store any rain using distributed tarps.

• Lata spring pool cleaned out of debris to allow this to be used for manual collection and inlet water for Nomad (water still cloudy due to regular quakes stirring up silt on bottom of spring)

• Water pumps and pipes feeding Lata checked and confirmed problems (pipeline no major problems found). Contractor (Island Enterprises) from Honiara brought in to fix pump with correct spare parts. Currently expected to get pump running tomorrow it should be noted that the pump could have other undiagnosed problems that will be identified when started up.

• Confirmed that all other informal springs on road network we are aware of are not suitable for second Nomad (either too far from road or too small)

Actions to undertake

• Lata Pump to be run to get water tanks in Graciosa Bay and Lata filled probably day after tomorrow, this will reduce water transport needs and will result in many people returning to their normal homes

• Water distributions to be continued with improved tracking to ensure frequency of delivery is adequate for 5l/p/day. 5l/p/d agreed by WASH cluster with advice from MHMS despite not being aligned with Sphere Standard of 15l/p/day as this is meeting drinking and cooking needs. It is too difficult to achieve 15l/p/day with trucks on the ground in Lata.

• Assess all springs around island to confirm what repairs are needed

• Assess all villages to find out how many water tanks destroyed and how many need replacement

• Track return of people from camps to villages to ensure sufficient water supplied to correct places

• Respond to other sectors as they create any place where people will be at high concentrations i.e. child friendly spaces / camps etc. (These will required water storage)
• When Lifestraws (i.e. personal treatment devices) arrive we will focus on delivering these to the more remote people at the Lord Howe island side of Santa Cruz as transport of water there would impose big logistical challenges

• Confirm water quality of Lata spring (bacteriological with e.coli test) should be able to deliver sample on tomorrow’s plane for result by Saturday. This will confirm a risk management water safety planning approach showing risk of water contamination.

• Identify any remote villages using different to normal sources with dirty water i.e. with upstream gardens etc that need chlorine tablets. This will only be if we run out of Lifestraw family kits

• Trucks need a 8 tonne truck as there only one in Lata. This is only size truck that 5000l bladder will fit on.

• Pump for Lata supply is very old and may fail again, a replacement will need to be sought

• If any communities far away from Lata confirm not to have any water (i.e. traditional source destroyed by earthquakes) water transportation will be logistically challenging (Note this is any community that has no source of water, clean or dirty, and will have been surviving on drinking coconuts) One OBM can carry approx. enough water for 22 people for one week.

• Camps would be much more easily serviced if we could leave tanks in each camp however no “clarified” system exists in camps to agree ownership and management of these tanks

• The Lata water system supply Graciosa Bay (200 stand taps) has very high leakage rates and will need replacement in the medium term if system is to operate properly.

• UNICEF support to the WASH cluster includes provision of 350 WASH kits, purification tablets and soap. In addition, UNICEFs provision of tents and tarpaulins to support shelter needs.

Sanitation

Situation

• Before the tsunami outside of Lata most people used the bush as toilet. In Lata, mainly toilets and latrines.

• Findings in camps found that many people in camps were using open pit defecating near to large concentration of people

Achieved:

Hygiene message with water distributions and assessments included messaging on dig and cover defecation at least 100m from habitation and downhill, away from rivers
Action plans:

- Coordinate with MHMS on any disease outbreak especially diarrhoea (which has not yet been noted)
- Respond to any high concentration location created e.g. schools, meeting places etc. with latrines Issues and Good Sanitation was not commonly practiced before the tsunami, sustainable behaviour change is beyond the terms of reference of short term response.

Hygiene

- Hygiene messaging consistent with sanitation situation described above and malaria etc. Hand washing included but feedback from some is that there is not enough water to wash hands.
- Coordination to be done with health team; hygiene messaging to be jointly managed by wash and health

Issues:

- Need to get more water to communities so they are prepared to use some for hand washing
- Need to improve dissemination of information and training to communities on low water usage hand washing (i.e. tippy taps hand washing station).
- Need to confirm if enough soap has been distributed to every family (100g/p/month) i.e. about 5-6 bars per family per month would be in line with Sphere Standard

Fisheries

The Fisheries Sector has deployed a staff member to conduct the fisheries sector assessment. The data should include quantity, size and length (fishing nets and fibre glass canoe), brand (OBM engine), cost (dugout canoe and paddle etc.). Villages that were already briefed include Bania, Manoputi, Nemba, and Venga, Nela, and Lata area 4, Luova, Minevi, Wia, Malo and Nanggu. Others who were far away and could not receive the message include Neo, Nea, Bamo, Bimbi and Dedu. So far they are still collecting raw data and did not submit any report yet.

Provincial Assistance:

- A Multi-Sectoral team was deployed to assist the PEOC which was activated. They are providing regular updates to the NEOC.
- Six teams deployed to North East Santa Cruz, Nea, Nela/Venga, Luava/Malo/Neo, Nemba/Manoputi, Bania have returned and are finalizing their reports.

National Assistance:

- The on-going coordination and oversight of the Response/Relief Phase by the NDC
- The activation of the N-DOC Clusters.
- NEOC remains activated and is coordinating the response and coordination of agencies/DM Stakeholders at the National Level whilst the PEOC is coordinating the Provincial Level efforts.
- The Royal Solomon Islands Police Vessel (Patrol Boat) has been deployed under the Initial Response and Assessment Cluster, and it will remain on Santa Cruz for at least 14 days, assisting in assessments and emergency relief missions.
The MV Arnavon cargo ship has been charted by the SI Government and is currently in will return to Lata.

The Ministry of Health has deployed a National Health Response Team to Lata and is currently conducting assessments and carries out other health/medical and clinical tasks as part of providing support for the Provincial Health Sector.

SI Red Cross, World Vision, Oxfam, Save the Children, ADRA and some other NGOs have deployed their National Staff under the Initial Response and Assessment Cluster and also under the Welfare/IDP Cluster, all team are working together.

International Assistance:

Australia, New Zealand, the EU, the UK, Japan and the UN have offered support if required. Australia has assisted in the aerial assessment with the use of the RAAF C130J and the fueling of the RSIPF PV Patrol Boat.

Future Operations:

- Complete emergency relief operations
- Conduct gaps analysis for future request by PEOC/NEOC/Clusters and International Partners
- Conduct the Detail Sector Assessment by respective sectors.
- Compile the Initial Damage/Needs Assessment and the Detail Sector Assessment Reports.
- Deployment of additional personal under the NEOC, Welfare/IDP, Infrastructure and Response Clusters to relieve the current teams on the ground.

Recommendations:

- Immediate supply/distribution food, water, clothing and tarp
- Verification of and consolidating of field information
- Development of distribution plan

Specific for the Water and Sanitation under the Health Sector in the Public Service Cluster, the following recommendation were being recommended for the Graciosa Bay- Lata Water Source by the WASH Team that are currently on the ground:

Immediate/Short Term Solution:

- Thorough cleaning up of the pool water source including the logs and mud.
- Rebuilding of the retaining wall with stones and mesh.
- Fixing of the inlet of the suction pipe.
- Repair and maintenance of the pump (electrical parts). (Material Lists with DPS currently in Honiara). Spare parts for the pump are obtained from the Island Enterprise. It is recommended that technical staffs from the Island Enterprise should come and install the spare parts in the pump.
- Temporary pipe line to feed the Graciosa Bay Community to be surveyed and quantified by RWSS Engineers.
- Source one more NOMAD Water Purification Plant to compliment the one currently provided by the SI Red Cross.
Longer-term solutions:

- Lift the inlet pipe up
- Change filter
- Rebuild new pillar in concrete
- Check main lines if any leakages

Evaluation:

Based on analysis, it is worth noting that the rate of progress of which the Assessments and Relief Activates has been conducted is slow but improving due to many factor including the on-going tremors/after-shocks that hampered assessment and relief distribution efforts as the safety of humanitarian responders is paramount to this operation.

The other two priority areas based on the supplied information are the issue of the provision of clean water for drinking and other purposes (cooking), and the issue of the Internally Displaced People (IDPs)

NEOC Activation:

- NEOC has been activated on Full-on Activation mode.
- The Initial Response and Assessment, Logistics and Support, Infrastructure and Welfare/IDP Clusters have all been formally activated by the N-DOC with approval of the NDC
- All organizations regarded as DM Stakeholders, SI Govt, NGOs, UN Agencies and the Province has activated their own respective response arrangements that compliment the SI DM Arrangements.

Assessment:

Assessments for the Initial Damage and Needs have now been completed in most villages. The Sectors are currently conducting Detailed Sector Assessments. However, the logistics in terms of transport (vehicles/boats) have hindered progress for teams to be deployed. This has resulted in some teams not being able to deploy to complete their DSA today.

It should be noted that the household and the population data including the statistics for the damaged and destroyed household should be known in two days time as data entry and verification is still in progress as more data is still coming in. Hence, the Initial Damage and Needs Assessment Report should be ready by then.

Feedback to Original Station
[Insert a statement if any feedback is required]

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<thead>
<tr>
<th>SENDER DETAILS</th>
<th>RECEIVER DETAILS</th>
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<tr>
<td>Name: George Baragamu</td>
<td>Name: N-DOC &amp; NDC Chairs, P-DOC &amp; PDC Chairs</td>
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<tr>
<td>Contact: 53003</td>
<td>Contact: NDMO &amp; MECDM, Temotu Provincial Govt</td>
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