

# Papua New Guinea: Highlands Earthquake

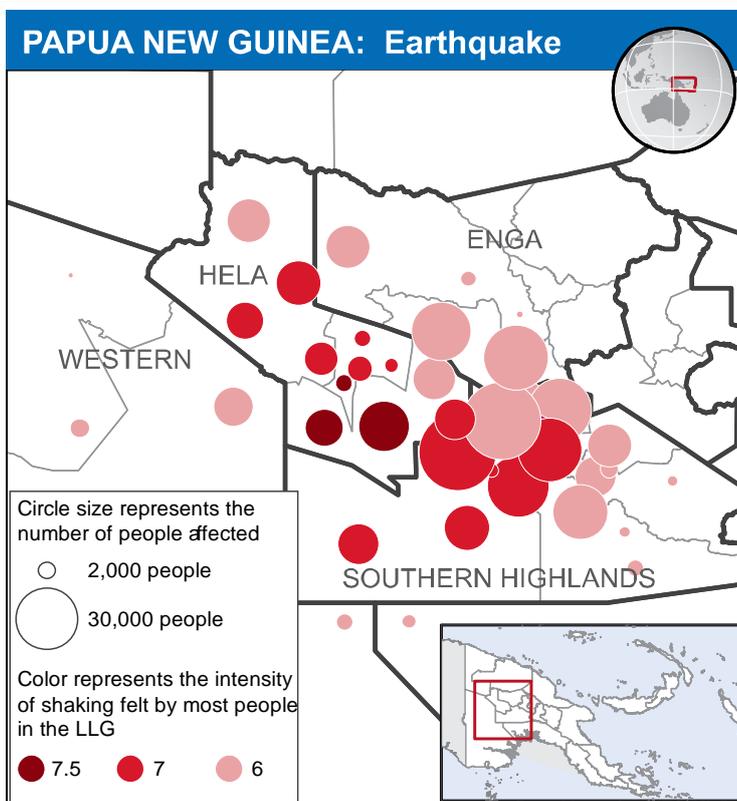
Situation Report No. 6

5 April 2018

This report is produced by the National Disaster Centre and the Office of the Resident Coordinator in collaboration with humanitarian partners. It was issued by the Disaster Management Team Secretariat, and covers the period from 27 March to 4 April 2018. The next report will be issued on or around 12 April 2018.

## Highlights

- 270,000 people are in need of assistance across four provinces of Papua New Guinea's highlands.
- 43,116 people (8,135 households) remain displaced in 44 locations and care centres.
- 80 per cent of health facilities are open, but almost 55 per cent have no water.
- Humanitarian operations in and around Tari, provincial capital of Hela province, have been suspended due to the rise in tension and outbreak of inter-communal fighting since 28 March.
- US\$ 43 million has been mobilized from the private sector for earthquake response and recovery, primarily as contributions to government efforts.



Map Sources: NSO PNG, NMB PNG, UN in PNG  
The boundaries and names shown and the designations used on this map do not imply endorsement or acceptance by the United Nations. Map created on April, 2018

**270,000**

people in need of assistance

**\$62M**

funding required by humanitarian agencies

**40,000**

women provide access to reproductive health care

**80**

per cent of health centres open

**187**

MT of relief items waiting transport

## Situation Overview

On 26 February 2018, a 7.5 magnitude earthquake hit the Highlands Region of Papua New Guinea (PNG), affecting an estimated 544,000 people in five provinces – Enga, Gulf, Hela, Southern Highlands and Western provinces, with Hela and Southern Highlands the most affected. More than 270,000 people, including 125,000 children, have been left in immediate need of life-saving assistance.

The latest tracking figures available from the Displacement Tracking Matrix (DTM) implemented as part of the Shelter Cluster response, indicate that 8,135 households remain displaced by the earthquake, or 43,116 people, across 44 locations and care centres. These figures may change as new locations are assessed.

Many of those displaced and now living in the care centres and other locations will not return home and the communities are in the process of defining alternative areas to relocate. Where housing has been damaged or destroyed, shelter materials and tools are urgently required as is training in their use. Community leaders and land

+ For more information, see “background on the crisis” at the end of the report

owners have reportedly started negotiating land for the displaced families, to be completed through traditional land and family ties. Assistance strategies should support this process of resettlement where possible.

Landslides caused by the earthquake have negatively affected food security, with many root crops and family vegetable plots destroyed. Damaged roads have also reduced access to markets and public services. The earthquake has also caused new damming as well as resulting flooding in some areas.

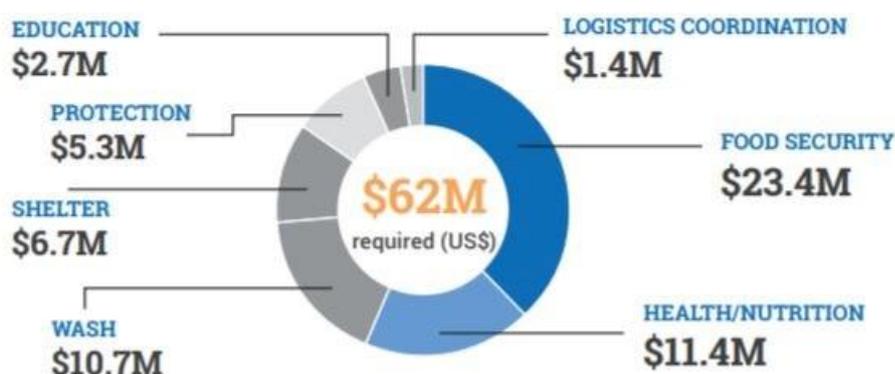
Of 86 reporting health facilities in Hela and Southern Highlands province, seven in Hela and 11 in Southern Highlands have reported being severely damaged, and 26 and 21 respectively have no water. While 80 per cent of health facilities in the affected areas are now open, many health workers have been affected by the earthquake and also require assistance. Psychosocial counseling for earthquake survivors affected by trauma and loss is urgently required, and Health Cluster partners are making efforts to train counsellors. Many children are reportedly afraid to return to their schools, even where school facilities are open.

The integrity of water sources has been affected and are not safe for drinking. Rainwater collection systems have been destroyed. With limited access to safe and clean water, waterborne diseases such as diarrhoea are a significant risk. An outbreak of dysentery affecting 25 people in Makuma, Ilallibu Pangia district, Southern Highlands province is suspected to be due to a contaminated creek.

Since 28 March, humanitarian programmes in and around Tari, the provincial capital of Hela province, have been suspended due to increased tension and inter-communal fighting. Many partners have temporarily relocated humanitarian staff to other locations, including to the Southern Highlands provincial capital, Mendi, in view of the situation. Humanitarian partners aim to resume relief work as soon as the security situation allows.

## Funding

On 28 March, the Disaster Management Team (DMT) issued the Highlands Earthquake Response Plan, which seeks US\$ 62 million to provide life-saving assistance and help re-establish basic services for 270,000 people in need of immediate assistance due to the 26 February 2018 earthquake and subsequent aftershocks and landslides. It also aims to help restore livelihoods of affected people and ensure protection services for the most vulnerable.



As of 4 April 2018, funding for the Highlands Earthquake Response Plan included \$9.2 million mobilized from the UN Central Emergency Response Fund (CERF), of which some \$3.2 million is for food assistance; \$1.3 million for health; \$1.3 million for nutrition; \$1.25 million for WASH; \$1 million for shelter; \$605,000 for protection; and \$485,000 for coordination of logistics and security.

The International Federation of Red Cross and Red Crescent Societies (IFRC) released a Disaster Response Emergency Fund (DREF) plan that mobilized CHF 209,398 (approximately US\$ 220,000) to support 3,000 people affected by the earthquake with life-saving assistance in the areas of shelter, health and WASH.

On 4 April, the Asian Development Bank (ADB) signed a \$1 million grant agreement with the Government of Papua New Guinea (PNG) to help fund priority relief and recovery activities from its Asia Pacific Disaster Response Fund (APDRF).

Overall, funding and in-kind contributions for the earthquake response reached over \$61 million through bilateral and multilateral channels as of 4 April, according to various sources including media reports. Key donors include eight UN Member States – Australia, Canada, China, France, Israel, Japan, New Zealand, and the United States – as well as the European Union. The majority of contributions to date, however, have come from the private sector (approximately \$43 million) directly to support Government response efforts, with large commitments from Bank

South Pacific Group, ExxonMobil, Kumul Petroleum Holdings, Oil Search, Ok Tedi Mining Limited (OTML), and Porgera Joint Venture.

Under the Restoration Act, the Government has allocated K450 million (approximately US\$ 138.8 million) for recovery and reconstruction efforts; of this amount, some K50 million has already been spent, primarily on clearing and rehabilitating roads and other transport infrastructure in the affected areas.

## Humanitarian Response



### Education

#### Needs:

- The DMT response plan targets 10,000 children whose access to schooling has been affected by the earthquake
- Priority response activities include:
  - Setting up safe temporary learning spaces (SLTS), and ensuring water and sanitation facilities in them;
  - Providing psycho-social support to school children and teachers;
  - Raising awareness on earthquake preparedness, sanitation and hygiene;
  - Providing teaching and learning materials, as well as recreational kits.

100

school-in-a-box kits  
ready for distribution

#### Response:

- Two safe spaces for children and women have been set up to date, one within the Catholic Diocese of Mendi and one in Kupari, in Tari. However, while the safe space for women and children in Mendi is functional, the safe space in Tari has temporarily ceased functioning due to the security situation there.
- Ten early childhood development (ECD) kits and ten recreational kits have been sent to Mt. Hagen, destined for Mendi. Two other ECD kits are already in Mendi, and the remaining ECD kits, recreational kits and 50 school-in-a-box kits in Mt Hagen will be taken to Mendi this week.
- Another 40 ECD kits, 40 recreational kits and 50 school-in-a-box kits have been airlifted to Moro, and will be moved to Tari once the security situation allows.
- ECD materials for 80 STLS are in the pipeline for printing.
- 31 teachers/volunteers from four areas have been trained on the use of ECD kits, recreational kits and on running safe spaces.
- A consultant will be contracted to support National Department of Education on cluster coordination.

#### Gaps & Constraints:

- The total number of schools damaged, and school children's access to education consequently affected by the earthquake, remains unclear.
- The Provincial Departments' of Education coordination capacity requires further support.



### Food Security & Livelihoods

#### Needs:

- An estimated 153,000 people will require food assistance due to loss of main people requiring food staples in damaged and destroyed gardens and damaged roads reducing market assistance access.
- The latest mobile Vulnerability Assessment Mapping (mVAM) report indicates that up to 64,000 people were experiencing conditions of extreme food insecurity before the earthquake event, with reports of children eating one meal a day (mainly "kaukau" or sweet potato).
- Priority response activities include:
  - Supplying relief food;
  - Providing farming supplies, seeds and planting materials;
  - Training for farmers and households

58,700

people received food  
assistance

#### Response:

- To date, at least 58,677 people have received some form of food assistance. Supplied food items include rice, tinned fish and beef, bottled water, biscuits, cooking oil, and flour.
- ADRA supplied food to 900 people in Huiya using a distribution listing methodology to enable better targeting.

- WFP has airlifted 80 MT of high-energy biscuits from the UN Humanitarian Response Depot (UNHRD) in Dubai to Papua New Guinea, enough to feed approximately 60,000 earthquake-affected people.
- Numerous bilateral food donations from government and private sector donors, as well as community- and faith-based groups and individuals have been made for distribution through government channels. While most of the donated food is store-bought, there have also been reports of church-affiliated groups donating kaukau to fellow church members in affected areas.

### Gaps & Constraints:

- Tracking and targeting of food assistance distributions needs to be strengthened, and the protection needs of girls, women, boys and men need to be considered in planning and implementing food distributions.



### Health and Nutrition

#### Needs:

- Access to healthcare for 544,000 earthquake-affected people needs strengthening due to extensive damage to health facilities; of the 67 health facilities reportedly damaged by the earthquake and subsequent aftershocks, 27 per cent remain closed and/or have not reported their status.
- Priority response activities include:
  - Strengthening health sector coordination at national and provincial levels;
  - Restoring primary health services through repairing damaged health facilities, replenishing medical supplies, and conducting integrated community health outreach;
  - Restoring maternal and new-born health services;
  - Restoring the cold chain and integrated outreach for immunizations to prevent the spread of vaccine preventable illness;
  - Activating an emergency surveillance and response system;
  - Addressing post-disaster mental health and providing post-trauma counselling and psychosocial support.
  - Community-level malnutrition screening for early case identification and referral;
  - Procuring and distributing therapeutic foods and associated equipment for targeted management of severe acute malnutrition (SAM) cases;
  - Training service providers and volunteers on SAM and infant and young child feeding.

**80**  
per cent of health  
facilities open

#### Response:

- More than 80 percent of health and sub-health centres in earthquake-affected areas are open and functioning.
- Health surveillance systems have been set up in Hela province with community-based surveillance and rapid response trainings underway; 30 health workers, including 16 community members and 14 public health and clinical workers, were trained on Early Warning, Alert and Response (EWARS) facility-based and community-based surveillance system.
- Trainings are also underway in Southern Highlands province with 57 health workers trained to date on Early Warning Disease Outbreak Detection. To ensure rapid response to outbreaks, WHO also trained 16 provincial health professionals, including medical officers, health inspectors, public health specialists and laboratory technicians in putting a system in place for deployment of rapid response teams to the field for investigation and action.
- Children under 5 years of age living in nine care centres have been vaccinated by local mobile health teams in SHP, including 873 children vaccinated for Measles Rubella and 641 children who received oral polio vaccine.
- The health centre team in Makuma, Ialibu Pangi district is providing basic health education and treatment with oral rehydration salts (ORS) and antibiotics in response to 25 cases of dysentery reported on 29 March, of which 19 cases occurred among school children between the ages of 1 and 10 years.
- Line-listing and specimen collections for suspected measles cases are pending.
- A joint WHO-National Department of Health (NDOH) mental health team has been in Mendi, Southern Highlands province since 25 March to provide psychosocial support for affected communities and traumatized health workers. The three team members are deployed for three months.
- A joint UNICEF-WHO-NDOH is supporting the Southern Highlands provincial health authority to provide integrated immunization, maternal and neo natal child health and nutrition services. Similar intervention plans are now finalised for Hela province.
- Cold chain equipment is to be distributed to Hela and Southern Highlands provinces, with roll-out of solar fridges to support vaccination
- Water quality testing has been conducted for the Kikori River.

**Gaps & Constraints:**

- Delivery of relief supplies and medicines to affected areas and shelters, as well as health workers reaching emergency shelters to provide health services, remains logistically challenging.
- Displaced local health workers require support to rebuild homes and families.

**Logistics****Needs:**

- Repair and rehabilitation of earthquake-damaged transportation infrastructure, including airfields, bridges and access roads.
- Sustainable last-mile transport arrangements to hard-to-reach and remote locations.
- Strengthened coordination to facilitate access to humanitarian logistics capacities provided by the Government, bilateral donors (including foreign military assets) and private sector companies.
- Priority common logistics services to be provided include:
  - Logistics assessments and planning to improve access to the affected population;
  - Technical assistance to establish a humanitarian supply chain;
  - Logistics coordination and information management support

**187**

MT of relief items awaiting transportation

**Response:**

- Logistics Working Group has been supporting the Government-led response with logistical coordination, cargo consolidation, information management and technical assistance to establish a humanitarian supply chain.
- Between 27 March and 2 April, four RFAs were submitted by two organizations to the Logistics Working Group to transport a total of 187 MT of food and non-food items from Port Moresby to Mt Hagen and Moro. Information on planned and dispatched humanitarian cargo can be found at: <https://tinyurl.com/ybf624a7>
- As well as a Logistics Coordinator in Port Moresby, WFP has deployed an additional logistician to Mt. Hagen to support cargo consolidation, logistics coordination and provide technical assistance to the Government and other humanitarian responders. A logistician will also be deployed to Moro in the coming week. The Australian Defence Force (ADF) C-130J left PNG on 27 March after having carried out a number of rotations from Port Moresby (POM) to Mt. Hagen and from Mt. Hagen to Moro, airlifting over 40 MT of relief items on behalf of 6 organizations, agencies and Government authorities.

**Gaps & Constraints:**

- Access constraints are hampering the delivery of aid to remote earthquake-affected areas, many of which can only be reached via helicopter.
- Some transport providers do not wish to tender/bid for services to Tari and Mendi due to the perceived security situation.
- Information gaps on cargo pipeline (planned and distributed) and transported corridor are affecting logistical planning and response.

**Protection****Needs:**

- Cluster partners will target 270,000 people with protection assistance and services, particularly marginalized and vulnerable groups including women (especially single, pregnant and lactating women), adolescent girls, female-headed households, persons living with disabilities, older persons, and children (especially those unaccompanied and/or separated).
- Within the earthquake-affected population of 544,000 people, there are an estimated 35,782 females of reproductive age of which 4,938 may be pregnant. Based on national averages, 895 pregnant women may be at risk of miscarriage or unsafe abortions in the next nine months, while 716 women and girls are at risk of sexual violence.
- Priority response activities include:
  - Providing emergency psychosocial support (there is large-scale of psychological trauma in Hela and Southern Highlands provinces with limited access to mental health services or support for those in need), first aid and referral services for the most marginalized and vulnerable people;
  - Providing dignity kits containing essential protection and hygiene supplies to women and girls;
  - Strengthen services and promoting inclusion of persons with disabilities in response activities;

**40,000**

women provided access to reproduction health care

- Providing gender-based violence (GBV), child protection and sorcery-related violence prevention and response services, including strengthened referral pathways and service providers, community mobilization and messaging;
- Establishing safe centres for women and children;
- Preventing sexual exploitation and abuse of affected people through the coordination and reporting mechanism and sensitizing armed forces and humanitarian workers;
- Promoting accountability to affected people by establishing a common service to receive and monitor feedback, complaints and rumours on the humanitarian response.

#### Response:

- The National Counselling Hotline provided trauma counselling on more than 1,300 phone calls from the affected area, and responded to concerns about corruption, exploitation and discrimination resulting from the distribution of relief supplies, law and order issues, lack of care centres and on-the-ground counselling services, water contamination and resulting illnesses, fear for safety due to sleeping outside or in insecure shelters, distress over school closures, and sorcery accusations.
- Reproductive Health kits distributed to Pimaga District Hospital in Southern Highlands province will support 40,000 women for three months to access life-saving reproductive healthcare at the community and primary healthcare level, including access to male condoms, individual clean delivery kits, birth attendant delivery kits, treatment for sexually transmitted infections, equipment for clinical delivery assistance, and treatment of miscarriages. Healthcare providers in Pimaga District Hospital also received training to strengthen their knowledge on the utilization of the Reproductive Health kits.
- 100 Dignity Kits were distributed to the affected women in Ulira center, and 29 Dignity Kits were distributed to the affected women in Daga 1 center
- The capacity of 120 key stakeholders to provide psychosocial support including for children, gender-based violence in emergencies, and stress management was strengthened.
- As reported under Education, two women and child safe spaces were established in Tari and in Mendi.
- Gender and protection mainstreaming support is being provided to assessments and response plans.
- Digicel and UN-Women are supporting the dissemination of audio messages – available for free on Digicel mobile phones in affected areas – containing key information on self-care and response, with bi-weekly text messages advertising the service to be sent to 100,000 people each week. An additional 10,000 automated calls will be made with the same messaging.
- Flyers with common messages are being shared (e.g. What is an earthquake?) and community leaders are participating, translating messages into local languages, such as Huli.

#### Gaps & Constraints:

- Lack of a medical doctor in the Pimaga District Hospital and only two nurses and one midwife to manage maternal and neonatal health.
- Limited capacity of health workers on delivering sexual reproductive health services.
- Women in scattered and remote areas unable to reach healthcare services due to lack of mobile clinic and outreach services.
- Lack of coordinated response on gender-based violence, child protection, and sorcery accusation related violence.



#### Shelter / Camp Coordination and Camp Management

##### Needs:

- An estimated 60,000 people (10,000 households) in Southern Highlands and Hela provinces require shelter assistance.
- A large percentage of these households have been displaced. Displaced people staying in care centres and with host communities require access to basic services, particularly safe drinking water and sanitation facilities.
- Priority response activities include:
  - Providing shelter, shelter tools and non-food items;
  - Improving sites in identified care centres;
  - Creating safe, dignified and protected temporary living conditions for the displaced population through care centre management;
  - Rolling out the Displacement Tracking Matrix;
  - Sharing safe shelter messages related to landslides, site selection and shelter technical design.

**85**

households received shelter and NFI assistance

**Response:**

- Between 26 March and 3 April, 85 households were served with essential household and shelter items in Mendi/Munhi LLG.
- Canvas tarpaulins, rebuilding toolkits, mosquito nets and hygiene kits (numbers not confirmed) were distributed in the Strickland/Bosavi region to assessed care centres at Dodomona, Huya, Walagu and Adumari.
- Cluster partners are planning joint response in such care centres, with distributions planned for the week of 9 to 13 of April. Communities in these locations are highly-organized and conducting self-distribution of relief items in an orderly and equitable manner.
- Partners are setting up offices in the Highlands region, which will enable proximity to affected areas and better coordination and provision of assistance.

**Gaps & Constraints:**

- Huya, where the community is mourning the loss of 11 members (most of whom cannot be recovered from a landslide) is particularly vulnerable to having too many agencies arrive.
- Displaced populations are living with host populations, which are not receiving assistance.
- For partners planning longer-term shelter recovery interventions, the issue of land use and resettlement will require further attention.

**Water, Sanitation and Hygiene****Needs:**

- Some 312,000 people are estimated to require WASH assistance to prevent and reduce the incidence of waterborne disease outbreaks due to contamination, damage or destruction of surface and rainwater collection systems
- Priority response activities include:
  - Providing safe drinking water through restoration of rainwater collection systems, water trucking, installation of water treatment and distribution of storage tanks;
  - Distributing jerrycans for water storage;
  - Providing emergency latrines that are gender-segregated and disability-friendly, including regular desludging and maintenance;
  - Distributing hygiene kits and disseminating basic life-saving hygiene promotion messages.

**4**

rainwater harvesting systems installed in care centres

**Response:**

- Two WASH technical specialists were deployed to assist PHAs in Hela and Southern Highlands to provide input for WASH implementation through the PHAs and facilitate assessments and acquire relevant information for WASH cluster.
- 74 villages have been reported as reached with water and 45 villages with WASH NFIs, including 1,200 water containers, as well as water purification supplies and soap.
- 400 hygiene kits have been distributed.
- Existing water supply systems in one aid post, one secondary school, and one district hospital have been rehabilitated.
- New rainwater harvesting systems installed in four care centres in Southern Highlands.

**Gaps & Constraints:**

- There is a lack of verified information on water quality at remaining water sources.
- Provincial Health Authorities (PHA) require technical assistance on WASH provision.

## General Coordination

The Government is leading the response operation and has welcomed the support of humanitarian partners. The National Disaster Committee (NDCComm) and relevant sub-committees have been mobilized to develop the national response strategy. The National Disaster Centre (NDC) coordinates assessments and relief operations. On 1 March, the Government appointed an Emergency Controller to lead the National Emergency Disaster Restoration Team in overseeing relief and recovery efforts. On 27 March, the Parliament adopted the two bills on the declaration of a State of Emergency in the earthquake-affected provinces and establishing the WESH Restoration Authority.

The Government has established two Forward Operating Bases (FOBs), one in Mt. Hagen led by the Western

Highlands Provincial Disaster Coordinator, and one in Moro led by the Southern Highlands Provincial Administrator. The Government also established Emergency Operations Centres (EOCs) in the capitals of Hela and Southern Highlands provinces, Tari and Mendi respectively. Provincial Administrators have assumed leadership in coordinating provincial responses.

The National Department of Health (NDOH) is leading the integrated health and nutrition response for the earthquake affected areas with support from the humanitarian Health Cluster. Health Emergency Operation Centres have been established in the NDC and in Mendi and Tari.

The inter-agency PNG Disaster Management Team (DMT) is coordinating relief efforts among humanitarian partners and with private sector companies, in support of the Government-led response. Six informal clusters (Education, Food Security, Health and Nutrition, Protection, Shelter, and WASH) and three working groups (Communication with Communities, Early Recovery and Logistics), as well as the Inter-Cluster Coordination Group support the work of the Disaster Management Team.

On 5 April, the inter-agency DMT deployed a field coordination team to Mendi, the Southern Highlands provincial capital to support information exchange, response planning and other coordination initiatives among partners and with provincial authorities and security forces. A similar field coordination presence will be established in Tari when the security situation allows. Logistics coordination specialists have been deployed in Port Moresby and Mt. Hagen to provide supply chain coordination support to the Government and the PNG-DF.

The Government has tasked the PNG Defence Forces (PNGDF) to enhance security in affected areas, and to assist local partners in the distribution of relief items.

Humanitarian partners are encouraged to register on [www.humanitarian.id](http://www.humanitarian.id) and actively use the dedicated earthquake response window on [www.humanitarianresponse.info/en/operations/papua-new-guinea](http://www.humanitarianresponse.info/en/operations/papua-new-guinea).

#### **Background on the crisis**

On 26 February 2018, at 03:44 local time, a magnitude 7.5 earthquake hit the Highlands region of Papua New Guinea (PNG), with the epicentre located 30 km south of Tari town, Hela Province. The tremor was the largest earthquake recorded in the region since a similar event in 1922. A series of strong aftershocks, including a 6.7 M tremor on 8 March in the same area, caused widespread panic amongst the communities. According to preliminary estimates and based on latest earthquake intensity mapping, around 544,000 people in five provinces were affected and more than 270,000 people are in immediate need of assistance. Of those in need of assistance, more than 125,000 are children, 55,000 aged less than five years.

#### **For further information, please contact:**

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For more information, please visit <http://pngndc.gov.pg/> or <https://www.humanitarianresponse.info/en/operations/papua-new-guinea>.

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