



LOMBOK, INDONESIA EARTHQUAKE

Responding to the Critical Need for Clean, Safe Drinking Water

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watermark®
Because Every Drop Counts

Planet
Water™
Foundation



The shallow second 6.9 magnitude earthquake leveled tens of thousands of homes, mosques, and businesses across Lombok on August 5th taking the lives of 555 people, injuring 1,300, and leaving 353 internally displaced.

According to scientists from NASA and the California Institute of Technology's rapid-imaging project, the earthquake lifted the island as much as 25 cm in some areas. In other places, the ground dropped as much as 15cm.

Supplies for those made homeless are still being distributed with about 30,000 tents sent to affected areas. Drinking water is a critical need.



Lombok is perhaps not as well-known as its western neighbor, Bali, but remains a beautiful destination of choice. This island, like many of the Indonesian archipelago, lies on the infamous ring of fire. Just south of Lombok, tectonic plates are colliding at some of the fastest rates in the world (greater than 7cm per year), in a process known as subduction, where one plate slides under the other deep into the mantle. It's the stresses from subduction that causes many earthquakes to occur, and it's the heating up of the subduction plate and subsequent melting that leads to many volcanoes on the overlying plate.

As a result, Indonesia is used to both earthquakes and volcanic activity. On Lombok, the Rinjani volcanic complex rises on the northeastern side of the island, and indeed its natural beauty is one of the features that attracts tourists to the island.

TIMELINE OF DESTRUCTION

- July 29:** Lombok is rocked by a 6.4 magnitude quake
 - August 5:** The island is devastated by a 'massive' 6.9 earthquake
 - August 9:** Lombok is hit by a third quake measuring 6.2
 - August 19:** Two earthquakes measuring 6.3 and 6.9 respectively
 - August 25:** A strong 5.7 quake strikes more fear in the citizens
 - August 28:** Two quakes measuring 6.2 and 5.6 hit within hours
- Death toll:** 555
- Injured:** 1,300

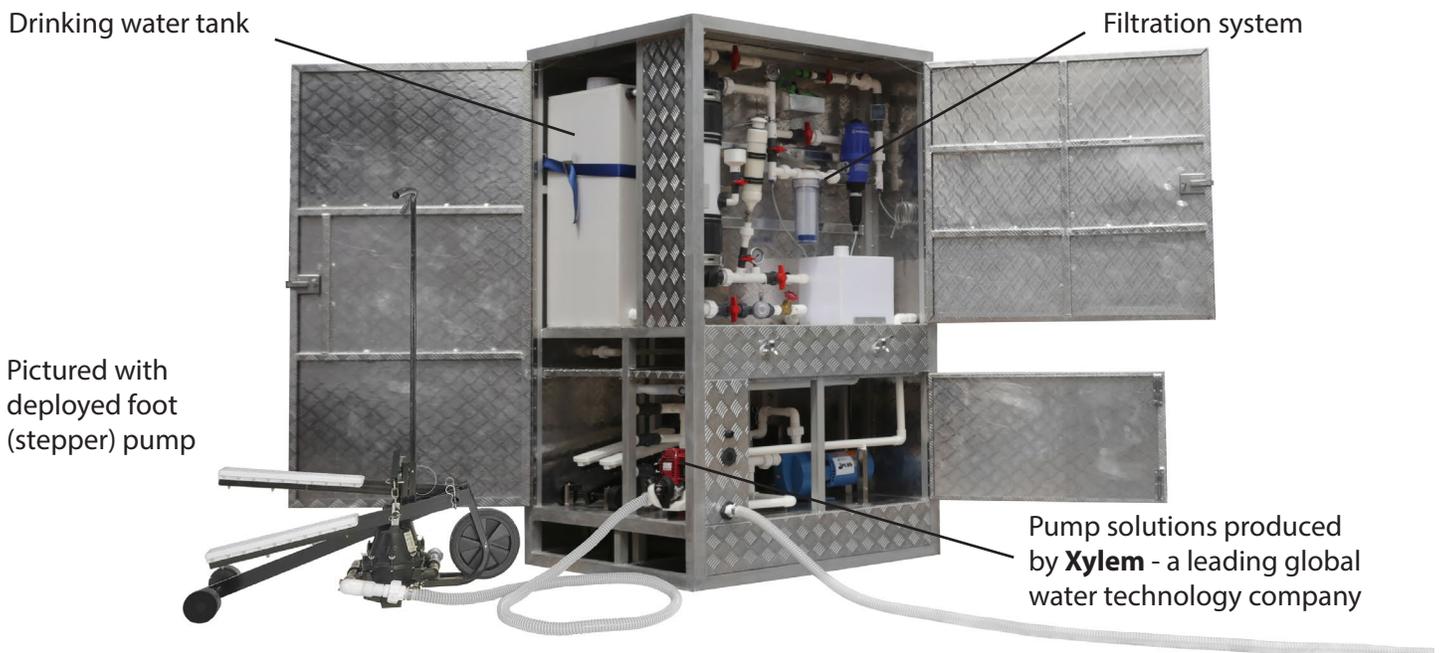




AquaPod™

DRINKING WATER KIOSK

Planet Water's AquaPod was designed based on 15 years of experience in providing clean, safe water access to over 1,000 communities in 15 countries - often in the wake of natural disasters and other such situations where rapid response and a robust, easy to operate solution is of critical need.



Key AquaPod Features

- Turn-key emergency water supply system housed in a lockable, vandal-resistant, aluminum container.
- Compact, light-weight design facilitating an 18 unit placement in a standard 40 foot shipping container and size compatibility with aircraft main cargo decks and lower cargo holds.
- Four-stage water purification process for the provision of clean, safe drinking water from surface and ground water sources.
- Three on-board pumping solutions, selectable with the turn-off valve, for any power condition - be it petrol, electric, or manual.
- Drinking water production at 1,000 liters per hour capable of supporting the daily drinking water requirements of 9,500 people.

Four-stage Purification

Mesh (Screen) Filtration

Ultrafiltration (0.01 micron)

Activated Carbon Filtration

Residual Chlorination

Clean, Safe Drinking Water

Delivering Emergency Access to Clean, Safe Drinking Water

"It was shocking to see the extent of the devastation - way beyond my expectation and much worse than what you see in the international press. Community after community flattened in rubble with hundreds of thousands of people now living under canvas tarps with marginal access to safe drinking water and basic supplies."

Mark Steele, Founder and CEO, Planet Water Foundation

It has been nearly one year since Hurricane Maria devastated Puerto Rico in September 2017. Then, Planet Water Foundation, along with Xylem and DHL responded to the critical need for drinking water by deploying water filtration systems (AquaTowers) in areas where the island was left without electricity or water. Eleven months later, when the earthquakes began to shake Lombok, Indonesia, leveling the small communities located on the northern half of the island, Planet Water Foundation and its partners moved quickly to provide much needed support by deploying an AquaPod - Planet Water's new platform designed specifically for providing access to safe drinking water in response to natural disasters - and a number of AquaTowers in areas of need.

The AquaPod was earlier conceived in 2016 and refined during the design process from experiences in Puerto Rico. What was not planned is how quickly the first AquaPod would be needed and how the same leadership team that responded to Puerto Rico would be positioned and committed to provide rapid support in Lombok.

During the first week of August 2018, the first AquaPod was completing its field-testing in Cambodia. When the first series of earthquakes hit Lombok, word of the significant devastation arrived to the Planet Water team from Ishak Kasum, Planet Water's Program Manager in Lombok. Ishak's home was also in ruin and his family had been safely relocated to an encampment established in the higher elevations - safe from potential tsunamis. As the earth continued to shake - the need for clean water, food, and medical supplies became urgent.



On August 15, Planet Water and Xylem agreed to jointly deploy the AquaPod, and DHL's leadership, once again, provided logistics support in airlifting the AquaPod from Siem Reap, Cambodia to the relocation community of Kampong Karang Bedil in Lombok. The AquaPod was subsequently deployed by Mark and Ishak along with Mainor Vega from Xylem who had also deployed projects in Puerto Rico. DHL teams from Bali and Lombok were also present managing the AquaPod's delivery to its deployment site.

Today, the AquaPod is not only proving to be what was first envisioned - an easy and rapidly deployable water purification system for emergency response to natural disasters - it is actually saving lives on Lombok.

A big thank you to Xylem and DHL for their support of the people of Lombok during their critical time in need!



Kampung Karang Bedil, Lombok

Deployment Location Profile

Jalan, Raya Gondang, North Lombok
Regency West Nusa Tenggara

Displaced People: Approx. 800
Longitude: 8.340800
Latitude: 116.191700

Water was already difficult to access before the earthquakes roiled the ground and destroyed the small island's limited public water supply. Lombok's ground water supply is typically shallow during the dry season, forcing rationing, and use of river water flowing from the mountains during rainy season that carries pollutants that sickens residents - unless it is boiled prior to consumption.

After the earthquakes hit, residents in displacement camps have had no other option than to drink from the streams. Instances of diarrhea are very high and most residents have experienced abdominal pain and vomiting, accompanied by fever, flu and cough.

With the August installation of the Planet Water AquaPod in Kampung Karang Bedil, they are now drinking clean, safe water that is sourced by the nearby river and then purified by the AquaPod. Incidences of abdominal pain are reducing and residents within the makeshift community are now smiling when their turn to drink arrives.

Visitors from around the region have heard about the AquaPod, and residents of Kampung Karang Bedil are generous - understanding that life changes quickly, they offer to help fill large jugs.







AquaPod[™]
DRINKING WATER KIOSK

Pump solutions by
xylem

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**Emergency Response
Drinking Water Kiosk**