

# CENTRAL SULAWESI EARTHQUAKE RESPONSE

## **Final Report**

DECEMBER 2019

## **Summary**

In September 2018, a magnitude 7.4 earthquake triggered a tsunami in Central Sulawesi, Indonesia, leading to soil liquefaction, landslides and destroying entire villages. In the aftermath, the Government of Indonesia recorded 4,340 casualties, 172,635 people displaced, and 100,028 houses damaged (Central Sulawesi Provincial Government, January 7, 2019). We are grateful for your support to Mercy Corps Indonesia' emergency response work in Indonesia. **Together, we have helped approximately 143,729 people meet their immediate needs, and build back for a brighter future.** 

The most affected areas identified by the Government of Indonesia were the districts of Sigi, Donggala, Parigi Moutong, and Palu City. Mercy Corps Indonesia is currently working in Sigi to help residents cope with the impact of the disaster and to support their social, physical, and economic recovery. One year into the response, Mercy Corps Indonesia' focus has shifted from meeting immediate hygiene and shelter needs to addressing community priorities for long-term recovery around water and sanitation infrastructure, economic recovery, and mental health. This includes supporting farmers (the vast majority of the population) in improving their crops, and working with community groups to improve their capacity to lead long-term water and sanitation projects.

### **Immediate Relief**

### **Relief Supplies**

Mercy Corps Indonesia distributed non-food relief kits to meet immediate needs around hygiene, shelter and lighting, water and sanitation kits, cooking, cleaning, and construction. In total, Mercy Corps Indonesia distributed 9,849 kits benefitting 24,542 people.

In Sigi District, this included 2,208 hygiene kits, in Sigi Biromaru, Gumbasa, Kulawi, Dolo Selatan, and Tanambulava sub-districts benefitting approximately 10,500 people (each kit provides adequate supplies for a family of five). The hygiene kits include soap, shampoo, towels, jerry cans, buckets, and other needed items. The criteria used for beneficiary selection was two-fold. First, the most vulnerable groups including elderly with dependents, pregnant women, women-headed household with dependents, disabled family heads with dependents, and orphans below 18 years old were identified. And second, affected farmers were included in the distributions, which will enable Mercy Corps Indonesia to do a more in-depth assessment on disaster-affected livelihoods in the agricultural sector and availability of crops for food security.





Left: An elderly individual with dependents is checking the list of relief items and signing the beneficiary list. The lists were made available to the Village Government and Health Cadres to ensure that the data can also be accessed by the government and to prevent duplication of kit distributions. Right: A Mercy Corps Indonesia team member distributes a shelter kit and asks the recipient about any additional assistance needed to transport their materials.

Mercy Corps Indonesia distributed 469 shelter kits (including a tarp, foam mattress, blankets, and mosquito net per family family) in Dolo Selatan, Lindu, and Sigi Biromaru sub-districts to meet immediate needs for temporary shelter, benefitting 2,876 people. We selected these kits because while some temporary (semi-permanent) shelter support had been committed by the Government of Indonesia and other humanitarian agencies, the reach of this aid has not yet met all local needs. Particularly in Sigi, the hilly terrain makes it impossible to build typical semi-permanent shelter options, as they require relatively wide, flat land. At the same time, longer-term shelter committed by the government is likely to take 18 the 24 months, at the earliest, to build in part because Furthermore, the location needs to be based on the Rehabilitation and Reconstruction Plan released by the National and Local Government of Indonesia.

We also distributed 250 family solar lamps in Kulawi sub-district where residents lost all electricity service in the disaster. Although the local government has started repairing and rebuilding the grid, progress is inconsistent, particularly in Kulawi, which has proven to be one of the most challenging areas for the government to reach. Under these circumstances, solar lamps have been very effective in

providing basic lighting overnight, allowing recipients to move around and complete household chores at night. The lifespan of the solar lamps that Mercy Corps Indonesia distributed is approximately 100,000 hours (i.e. eight hours of power every day for more than 30 years).



Earthquake-affected communities in Omu Village, Sigi Biromaru sub-district are waiting to exchange vouchers for kits. The vouchers prevented duplicate distributions.

Finally, Mercy Corps Indonesia distributed 506 cooking kits, 163 construction kits, and 112 cleaning kits benefitting 6,320 people across Kulawi, Dolo Selatan, Tanambulava, and Lindu sub-districts where more than 90% of the houses were heavily damaged. The cooking kits included the equipment needed to prepare both the food distributed by aid agencies after disaster and the food that is locally grown (e.g. pots and pans, cutlery, and clean water storage vessels). The construction kits are used to clean up debris and build temporary shelters, including tools like wheelbarrows, hammer and nails, and shovels and are meant to help bridge the gap until residents receive information from the government on safe locations for permanent shelters. The cleaning kits consist of items to clean the inside areas of tents or temporary shelters, such as mops and brooms, dustbins, plastic boots, and disinfectant. Communities affected by the earthquake and tsunami are deeply committed to cleaning up the debris and rebuilding their homes.

One of the main challenges for these distribution was road access. Although some of the villages can be reached by car, most roads in the target areas are only accessible by timed one-way traffic and are not accessible by large trucks (only 4WD cars and small trucks). It was also not possible for the team to stay overnight in affected areas due to safety. For instance, Salua Village in Kulawi sub-district has been continuously affected by flash floods after heavy rainfall, following the earthquake. All of these factors extended the time required to make needed distributions.





Left: An elderly person in Mataue Village, Kulawi sub-district, gratefully receives a solar lamp from our staff, while one of the female-headed households receives a cooking kit from Mercy Corps Indonesia in Boladangko Village, Kulawi sub-district (right).



A recipient of a kit in Salua Village, Kulawi subdistrict, is seen here loading a construction kit from Mercy Corps Indonesia on top of his bike.

#### Safe Water

Mercy Corps Indonesia distributed 1.7 million liters of potable water to 16 villages by water truck, meeting the needs of 15,560 people a day. Water was provided in Sigi Biromaru and Dolo Selatan sub-districts. People were given 4 gallons of water per person per day to meet basic needs for water (per the Sphere Handbook standards for 2018). The water trucking was a short-term measure until we could work with partners and the government to ensure a plan was in place to rehabilitate water structures see post-disaster recovery, below, for our long-term response.



Reci Rosalina from Jono Oge Village, Sigi Biromaru sub-district, is grateful as now her family now has enough safe water to drink after the earthquake, as well as water for cleaning and bathing.

## **Post-Disaster Recovery**

#### Water & Sanitation

To ensure communities can meet their longer-term needs, Mercy Corps Indonesia constructed new water sources in 35 villages. This included boreholes/shallow wells, gravity systems and piping installation, water treatment points and water filtration systems, benefitting a total of 8,145 people. For



example, we build 20 shallow wells and installed 11 water piping systems in 22 villages, and installed 4 water treatment points and sand water filtration systems in an additional 35 villages.

With long-term sustainability at the forefront of our program design, we established or reactivated village water committees that were involved in the design and construction phases and will be charged with maintenance. These committees also help ensure that the most vulnerable community members are able to access clean water.

In addition to clean water infrastructure, Mercy Corps Indonesia also constructed / rehabilitated latrines, benefiting 12,535 people. We utilized a community-based inclusive construction process and a gender-sensitive approach, building community facilities sufficient lighting, access for those with disabilities and enough space for women for additional washing activities. Each latrine also has an operation and maintenance flyer. The new communal latrine construction are across 8 sub-districts and 32 villages, while latrine rehabilitation was carried out in 9 sub-districts and 43 villages. We also provided 1,213 latrines with fecal sludge management, benefitting more than 37,000 people, and served 29,539 people with solid waste management.

In addition to the above latrines, we also constructed 40 permanent latrines in 10 schools, involving the school committees to ensure on-going maintenance and repairs. We took into account protection and disability considerations, and the latrines for male and female students were appropriately segregated and had ramps for easier access. The facilities are also equipped with hand washing facilities and space to change clothes. These permanent latrines are benefitting a total of 1.895 students, along with 133 teachers and school staff.

To ensure long-term gains for water, sanitation and hygiene (WASH) advances, Mercy Corps Indonesia worked with government staff, other NGOs and communities through various activities including Training of Trainers and workshops. We also focused on students, who are excellent community advocates. These workshops focused on improving holistic, community-led sanitation activities, including hygiene promotion and sanitation. Through this capacity building work, we reached close to 19,000 people.





New latrine constructed by Mercy Corps Indonesia in Luku Village (left) and a rehabilitated latrine now with washing facilities in Pesaku Village (right).

#### **Agriculture & Livelihoods**

The vast majority of the population in the region of Sulawesi affected by the earthquake and tsunami are farmers. With agriculture providing the primary way of making a living, the destruction of the primary irrigation system in the Sigi District was disastrous for farmers. Lack of water for agriculture led to crop failure; as a result, farmers tried to change their crops from paddy to horticulture, which was extremely challenging.

To address this critical issue, Mercy Corps Indonesia worked with farmers and local organizations to construct 98 shallow wells in the 4 most affected sub-districts and 15 villages, helping to offset the lost water and covering up 784 hectares of land. In addition, we are also working with farmers to

We are also supporting farmers to improve their agricultural practices, particularly given that the more limited water availability has changed the types of crops farmers are now growing. We established three demonstration plots for maize, which our programming has shown is one of the best ways to help farmers learn new techniques – with evidence they can see and touch. This 'field school' for farmers is helping farmers learn how to grow new crops, and also includes financial literacy training and education around how to access new markets and get good prices.



A farmer celebrates his first watermelon harvest using shallow well irrigation water made possible by Mercy Corps Indonesia. He used the profit to pay back his debt, rent 1.2 hectares of farmland next to his own, and as the capital for his next crop. Even after all that spending, there was enough to fulfill his household needs. He noted, "I encouraged other farmers and neighbors to promptly recover by planting horticulture while waiting for the rehabilitation of Gumbasa Irrigation. I told them not to surrender to the situation easily, and I am ready to help as much as possible."

#### **Mental Health & Preparedness**



Mercy Corps Indonesia conducted psychosocial first aid trainings for community members, NGOs and government staff.

Indonesia is a country with frequent natural disasters. While all of our efforts always focus on long-term sustainability, we are also working closely with communities and the government on disaster preparedness and emergency response. In Sulawesi via this response, we conducted emergency response trainings, and included a focus on psychosocial first aid training – which is an often overlooked area in recovery and yet has a fundamental impact on peoples'

ability to overcome trauma and be prepared psychologically for the next disaster. We conducted mental health consultations, sessions on drug abuse

prevention and education for youth, and art therapy sessions. Mercy Corps Indonesia believes mental health is an integral part of building resilient communities.

### Voices from the **Field**

#### Clean Water & Sanitation

"We were struggling to find potable clean water, but now, Alhamdulillah (praise to God), the water trucking has subdued the community's anxiety. All neighborhoods in this village now have clean water," said Uzran. Several water tanks could easily be seen along the road. Water trucks take turns to fill in the water tank every day. Masbubar, the wife, added "The water (in the water tank) is for drinking and cooking. We tend not to take water from the tank to bathe: we save it for drinking.



Uzran and Masbubar live in Wisolo Village, South Dolo Sub-district. Their water source was completed destroyed by the earthquake, and they benefitted from water trucking in the immediate response phase, followed by water piping constructed by Mercy Corps Indonesia to their village from a clean water source.



Noval received clean water from Mercy Corps *Indonesia in Bora Village, via a sand filtration system* which will provide a long-term clean water supply.

"Before the earthquake, villagers already had to walk quite far to fetch water, but it was possible to find water sources. However, since the earthquake things were worsening; the debit of water greatly decreased, and we had difficulty in storing water," said Noval. He explained that the water often got turbid, probably because of the water piping damage caused due by the guake. Clean water is such a rarity, despite the need for villagers for daily activities. People try to save water from the little that they have. The sand filter system built by Mercy Corps Indonesia in his neighborhood has made a significant positive impact in his community. Noval conveyed, "After assistance from

Mercy Corps Indonesia Indonesia, we are grateful and thankful. The assistance has significantly helped us easily access clean water." He continued, "The filter has helped us remove the turbid water." Since then, he has been using the water mainly for drinking, after boiling it first, and for cooking. He emphasized, looking proud, "The assistance from Mercy Corps Indonesia Indonesia has let us having water in front of the house. It is clean and has helped people in this area."



Risnawati and Nadia are two of the students from 22 Palu Junior High School who benefitted by latrine facilities in their school built by Mercy Corps Indonesia. The new bathrooms allow them to spend less time waiting for latrines, and more time learning!

Risnawati and Nadia are two of the students who benefitted from 22 Palu Junior High School receiving new latrine facilities built by Mercy Corps Indonesia. The lack of sanitation facilities in their schools had directly affected them as students. Nadia confessed, "There were four bathrooms, but only two were functional." It showed the urgency to have additional bathrooms to accommodate all students in this school. She also added. "We often

had to line up to go to the bathroom. There were even times there was no running water. So it took a long time to wait up."

They also admitted that they had to change their PE uniform inside the classroom due to lack of availability of changing space in the bathroom; this further resulted in privacy concerns for the female students. When they informed that they would have new bathrooms in their school, it provided them with hope. Big smiles shown on their faces as they expressed their gratitude. "Grateful, and glad for people who are willing to help us," said Nadia which was shortly followed by Risnawati who said, "I also feel grateful and thankful for repairing our school's bathroom." The new bathrooms allow them to save time without missing much of the study time that they usually would spend waiting, and their privacy is protected.



Herlina, a staff of Pandere Community Health Center who participated in the Mercy Corps Indonesia-led Psychosocial First Aid Training in Tuva Village

### **Psychosocial Support**

"Awareness about mental health in Tuva Village is very low, especially regarding its family support system. We need some training, especially for the family to guide them about possible avenues of support for those who had issues with their mental health."

Herlina admitted there was a rise in cases of mental issues after the earthquake. She disclosed, "Postearthquake, there were several cases of anxiety disorder. Even I felt some anxiety myself. However, as an officer, I must be strong. I had to be able to face people who need my support. That is why I opened the community health center shortly after the earthquake."

Mental health issues are often neglected, especially in the emergency phase, since most of the focus is on immediate needs. As a Community Health Center officer, she said, "Psychological First Aid training is

very important because it is a necessary training for myself and all affected communities. If possible, this training should be regularly held so that it could create a greater impact." She continued, "We as the staff of Community Health Center need more of this kind of training to be able to more profoundly examine profoundly mental issues." She is planning to gather all participants and hold follow-up sessions to spread the knowledge more broadly to the public.

### Thank You!

Our response to the destruction in Sulawesi was only made possible through the support of donors like you. Your contribution has made a significant difference in peoples' lives - helping them to recover and build back stronger for a brighter future. On behalf of our hard-working relief and recovery team in Indonesia and the almost 150,000 people reached through our response, we extend a sincere thank you for your support.

#### CONTACT

Ade Soekadis **Executive Director** asoekadis@id.mercycorps.org

#### **About Mercy Corps**

Mercy Corps is a leading global organization powered by the belief that a better world is possible. In disaster, in hardship, in more than 40 countries around the world, we partner to put bold solutions into action — helping people triumph over adversity and build stronger communities from within. Now, and for the future.

Mercy Corps Indonesia

Gedung AD Pemier 3rd floor, suite 01, 02, &03, JI. TB Simatupang No.5 Ragunan, Pasar Minggu Jakarta Selatan 12550

mercycorps.org