

## FINAL PROJECT REPORT

### “Relief for Indonesia Earthquake Survivors” Donations provided through the GlobalGiving Relief Fund

Padang, Pariaman – West Sumatra, Indonesia – October, 2009 through May, 2010

#### ***Background on CHF’s Indonesia Earthquake Response:***

On September 30, 2009 a powerful earthquake measuring 7.6 on the Richter Scale struck the western Sumatra coast of Indonesia. Homes, commercial and government buildings, including schools and clinics, were destroyed during the quake. Approximately 1,250,000 people were affected by the disaster, the most prevalent damage being the total or partial destruction of homes and livelihoods. In response, CHF International deployed a team to the Padang Pariaman district of West Sumatra (located only 30 miles from the earthquake’s epicenter), where roughly 95 percent of



homes sustained severe to moderate damage. CHF set forth a rapid response program, aimed at meeting the humanitarian needs of affected households through an integrated transitional shelter, water and sanitation, and livelihoods approach. In order to address the needs of the most vulnerable households, CHF insisted on targeting remote and mountainous areas of the Padang, Pariaman district, where almost no aid had been provided by any other organization.

CHF Engineers and local beneficiary children in front of a newly constructed communal latrine.

As part of its emergency response to the earthquake in West Sumatra, Indonesia, CHF posted “Relief for Indonesia Earthquake Survivors” on GlobalGiving in hopes of maximizing the impact of program activities in the earthquake affected communities. With the generous support of GlobalGiving and its contributors, **CHF used the additional funds provided by the “Relief for Indonesia Earthquake Survivors” project to directly support earthquake victims through a water, sanitation and hygiene (WASH) scheme.** CHF’s GlobalGiving funds were used to build much needed communal latrines (with washing stations) to replace the previous ones which had been destroyed by the earthquake. This was an urgent and critical component in rebuilding the community’s sanitation infrastructure. Sanitary communal latrines and washing stations are often key components in enhancing the community’s health, minimizing human impact on the environment, and preventing vector-borne diseases.

The placement of communal latrines was based upon CHF’s in-depth community assessment of WASH needs and careful consideration of cultural norms in the affected areas. The following sections of this report outline the importance of latrine reconstruction and how the process was implemented in our beneficiary communities.



### **Post-Earthquake Assessment of Sanitation and Hygiene Needs:**



Community latrines were completely destroyed by the earthquake.

As part of our rapid assessment report, CHF carried out a house-to-house beneficiary survey to assess the needs among the affected District of Padang, Pariaman regarding shelter, relief received, water, sanitation, and hygiene. The household survey revealed that prior to the earthquake 65% of the community used household or communal latrines. Following the earthquake only 22% used household or communal latrines; as many sanitation facilities were completely destroyed or unusable. These results confirmed that community sanitation was in jeopardy, as open

defecation has increased by 7 percent, and river defecation has increased by 39 percent.

### **Selection of Communal Latrines as a Critical Sanitation Intervention:**

Following our assessments, it was determined that earthquake affected communities would receive the greatest benefit from well placed public latrines, which would provide a higher level of utility and sanitation. The selection of communal latrines was also based on our knowledge of culturally maintained practices. **Communal latrines are common throughout the Padang area, located in markets, mosques, government offices and other public areas where maintenance mechanisms are in place.** With this WASH intervention, CHF focused on the following critical considerations:

**Location** – The latrines should be located in places where community members are already accustomed to using public facilities. This would include government offices, schools, markets and mosques. These locations are ideal because they provide access to the largest number of households and because these are locations where there are likely to be maintenance systems already in place.

**Durability** – The communal latrine should be constructed of materials that are durable to high-volume use and easy to clean. It should not suffer damage from regular use by a large number of individuals.

**Utility** – The latrines should be designed in a way that provides the greatest number of public health benefits. This means that the latrines should have a reliable source of running water, a well designed septic system and adequate facilities for bathing and hand washing. This will be especially important in market locations where there is a great potential to spread disease through physical contact with food products.

**Cultural Standards** – Following local norms, the CHF communal latrine design includes double units with separate facilities for men and women.

CHF's Community Mobilization Team selected communal latrine sites with a focus on maintenance. Communal latrines in this area have maintenance mechanisms already in place. For example, contributions made to the local mosque will also be used for upkeep of the nearby communal latrine. Furthermore, the Team selected five locations where community members



would most benefit from improved sanitation infrastructure. The five communities are listed below.

No.	Location	Korong	Nagari	# Latrines
1	Mushola Istiqomah, Dusun Kampung Tengah	Ganting	Sungai Asam	1
2	Mushola Dinnul Islam, Dusun Koto Padang	Alahan Tabek	Sikucur	1
3	Daerah Padang Kubang, Dusun Kampung Ingu	Sungai Geringging 1	Kuranji Hulu	1
4	Surau Kampung Suduik, Dusun Padang Pasaman	Tanjung Alai		1
5	Mushola Bukit Lintang, Dusun Bukit Lintang	Ladang Rimbo		1

**TOTAL LATRINE PROVISION**

**5**

### ***Design and Construction of Communal Latrines:***

The building structure was designed to be both durable and cost effective, using ferro-cement which requires a wooden frame, and a combination of cement and chicken wire for the walls. Locals are familiar with this method of construction because it has been used on older houses in the area. The floors were constructed of concrete and concrete blocks and the roof was built using transparent fiber roofing sheets. Each communal latrine includes two separate latrine stations and, to promote hygiene and access to clean water, each communal latrine was built with a washing station located to the side with four water faucets. The water faucets are fed by a clean water supply – each latrine includes a water tower- and a water system was installed to provide clean water and dispose of dirty water and waste properly through a septic system. Each latrine is also connected to an electrical system to provide night-time lighting.

The latrine plans and drawings were designed internally by one of CHF's Construction Managers.

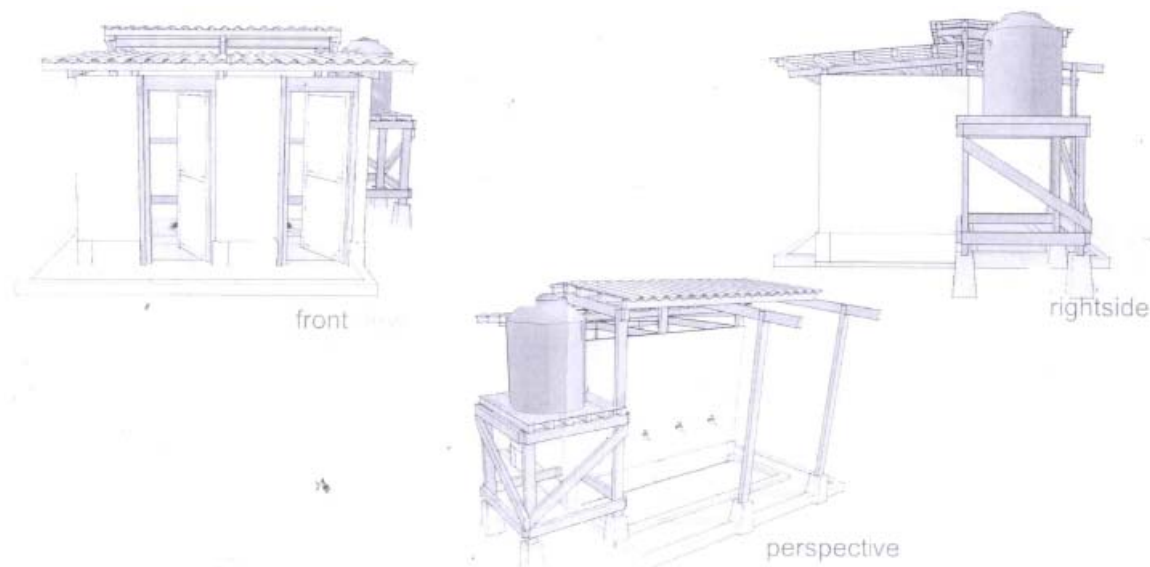


Each CHF Communal Latrine was outfitted with water. This includes a functioning water tanks, potable water source, and water spouts for washing.



The frame of a communal latrine under construction.





### **Community Benefit:**

Each of these latrines is located on mosque grounds, maximizing potential use and ensuring maintenance. Each latrine's location follows sphere minimum energy standards, which state that communal latrines should be no further than 50 meters from the dwellings of primary users. Approximately 20 households qualify as primary users for each latrine. Those who pray at the mosque but do not live close enough to qualify as primary users, up to 100 households, may also use the latrine, thereby increasing its communal benefit. Each latrine unit could have approximately 200 households. This project complimented CHF's other WASH activities (from other funding sources). This project also assisted CHF in maximizing the benefit of its other program activities (shelter and DRR) by providing its beneficiary communities with much needed communal latrines.



The communal latrines made possible with the generous support made to CHF's Earthquake Response efforts in Indonesia were an integral part of serving our beneficiary communities. The water and sanitation infrastructure of these communities was often completely destroyed, and many households had no access to sanitary washing and latrine facilities. These efforts are central to ensuring that sanitation for families is maintained. Lastly, the quality of these latrines will ensure that our beneficiary in Pariaman, Indonesia will continue to use CHF's facilities well into the future.

Final inspection on a CHF communal latrine. These latrines will be maintained by the public and used by all the surrounding households.