



# Building Back Better In Tacloban Project

Documenting Plan International's OFDA-funded  
Post-Haiyan Community Rehabilitation Project

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### [About Plan International USA](#)

Founded in 1937, Plan International USA is an independent development and humanitarian organization that advances girls' equality and children's rights. Plan believes in the power and potential of every child. Working together with children, young people, supporters, and partners, Plan strives for a just world, tackling the root causes of the challenges facing girls and all vulnerable children.

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Cover Photo: Initial Plan response providing plastic sheets to temporarily replace roofs blown away by the typhoon.



## **Acronyms**

**BCPC** - Barangay Council for the Protection of Children

**CERT** - Community Emergency Response Team

**CFS** - Child-Friendly Space

**CPR** - Cardiopulmonary Resuscitation

**DRR** - Disaster Risk Reduction

**EVSU** - Eastern Visayas State University

**FGD** - Focus Group Discussion

**GBV** - Gender-Based Violence

**HOA** - Homeowners' Association

**KII** - Key Informant Interview

**NIT** - Neighborhood Improvement Team

**TESDA** - Technical Education and Skills Development Authority

**WASH** - Water, Sanitation, and Hygiene

**WASAR** - Water, Search, and Rescue

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## 1.0 Background

The “Building Back Better in Tacloban: Post-Haiyan Community Rehabilitation” project was a 17-month effort supporting the neighborhood rebuilding efforts of residents of Area 4 (Barangays 62 and 62-A) in Tacloban City, following the devastation caused by Super Typhoon Haiyan in November 2013. The local government of Tacloban reported that, within Area 4, 1,289 houses were destroyed or damaged—615 houses “totally damaged” and 674 “partially damaged”—by Haiyan. Area 4 was selected because of its vast devastation, proximity to the coast, and location beyond the government’s 40-meter no-build zone.



**Figure 1:** Child playing in a Plan-built playground as part of the protection component of programming.

Applying an integrated approach to neighborhood rehabilitation, the project sought to make Area 4 a model for other areas to emulate in seeking to “build back better” in the wake of Typhoon Haiyan. The project met or exceeded nearly all targets, improving shelter and water, sanitation, and hygiene (WASH) facilities and also Disaster Risk Reduction (DRR) and Protection mechanisms. All this was done using community-driven, participatory models that Plan has been using for decades. The project focused on four key sectors or pillars.

Shelter and settlements focused on transitional shelter assistance, including building transitional shelters with WASH facilities for those whose homes were destroyed, and repairing partially damaged shelters.

Support was given to families hosting other families. Also, the large number of informal settler families had their status formalized through negotiations with landowners and land rental assistance.

Homeowners’ associations were supported to allow families to negotiate together as a group with common landowners. Villa Plan, for example, involved relocating families to 30 transitional shelters with playground equipment and a Child-Friendly Space (CFS). The two-story shelters were all built on land bought from a single landowner.



Figure 2: In addition to the 10,000 deaths caused by the typhoon, as many as half of the area's buildings were damaged or destroyed by the storm.

### Water, Sanitation, and Hygiene (WASH)

*Water, Sanitation, and Hygiene (WASH)* involved the construction and repair of latrines, hand washing facilities, and household septic systems. Improved water access was achieved by connecting homes to water service, installing public taps, rehabilitating shallow wells, and building rain catchment systems. There was also widespread hygiene promotion, including hand washing, geared toward children. Flood control through the creation of drainage canals, elevated cement walkways, and community de-clogging of drainage ditches was another feature.

### Protection

*Protection* took the form of training and awareness-raising campaigns addressing child protection and gender-based violence, as well as establishing mechanisms to respond to the complaints of abuse survivors. 147 solar lamp posts were installed throughout Area 4 to increase the safety and security of the community at night.

### Disaster Risk Reduction

*Disaster Risk Reduction* involved recruiting volunteers to respond to future emergencies, including earthquakes, typhoons, fires, and water emergencies. Those trained now have the capacity to provide early warnings, organize evacuations, put out fires, and perform CPR. Secondary and elementary school students and teachers participated in school-based disaster preparedness through fire and earthquake drills and evacuations.

## **Objective**

Our goal is to distill and document the positive and negative lessons learned from the project, drawing out good practices and areas for improvement. This report will focus on the impact of shelter and settlements, particularly the challenges of building on space-constrained urban areas and meeting the needs of informal settlers (non-tenured residents). The added value of Plan's integrated participatory approach, its performance in mitigation work, and the sustainability of the project are also discussed in detail. Finally, the report documents lessons learned and the applicability of the approach to future interventions.

## Methodology

The evaluation team first collected and analyzed both qualitative and quantitative project data. Original data was collected during a site visit using a combination of qualitative data in the form of key informant interviews (KII) and focus group discussions, with stakeholders and Likert surveys generating quantitative data. These instruments were developed in collaboration with Plan.

i-APS worked closely with Plan's Tacloban-based staff, which formed the backbone of the Emergency Response Team and included both the program and communications staff. Their assistance was instrumental in establishing contact with the four primary target populations for data collection. Two local researchers were engaged to administer qualitative surveys and facilitate focus group discussions, as well as compile results. The following target populations were engaged:

### Beneficiaries

*Beneficiaries* included members of homeowners' associations (HOA), those who had totally rebuilt shelters, and those who had particularly damaged shelters repaired, among others. 53 Likert surveys and six KII were administered and four focus group discussions were held with beneficiaries in Barangays 62 and 62a, the Villa Plan HOA, and Area 4 youth aged 14-18.

### Community organization

*Community organization* representatives who were active during the project, such as members of the Neighborhood Improvement Team and Community Selection Committee, and those who remain active, including people currently working for the two Barangays and the Barangay Disaster and Risk Reduction Management Council. These findings were collected in six KII and 12 Likert surveys.

### Local government

*Local government* officials working for City offices in housing, social welfare, emergency response, engineering, DRR, and environment were interviewed in seven KII, with 11 Likert surveys administered.

### Plan staff

*Plan staff and partners* included staff in Manila and Tacloban with experience concerning the project, some former project staff, and partners such as Eastern Visayas State University, all of whom collectively completed eight KII and 10 Likert surveys. Others interviewed included a landowner, a carpenter trained by the project, and several emergency responders.

A total of 86 Likert surveys, 27 KII, and four focus group discussion sessions were conducted. The new data collected was triangulated with secondary data from "Building Back Better in Tacloban: Post-Haiyan Community Rehabilitation" project documents, including the "Final Program Results Report" and "Final Evaluation Report," as well as quarterly reports and the project's performance baseline report. A combination of file and original photos taken during site visits were also used.



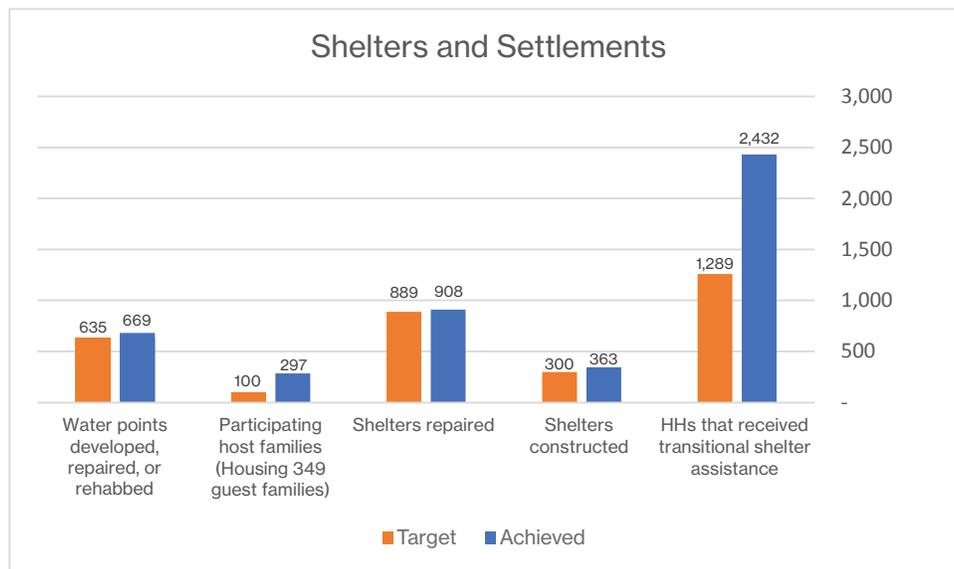
Figure 3: Focus group discussion held in Barangay 62a with project beneficiaries.

## Theory of Change

- **Integrated holistic approach**
  - Non-traditional design
  - Beyond the nuts and bolts of shelter hardware
  - Heart and soul of community engagement, WASH, child protection, and meeting psycho-social needs
  - Competitive advantage of Plan's experienced staff
  - Hardware-software mix makes for well-rounded community
  - Integration: road back to normalcy
- **Child-centered approach**
  - Child-centered community development approach
  - Child vulnerability: something to mobilize around
  - Great starting point: shared interest and motivation for community
- **Community-driven intervention**
  - Influence leadership through participatory skills building
  - Community put forward in leadership role
  - Builds organizational confidence and buy-in
  - Gives legitimacy to Plan interventions
  - Solutions evolve, not prescribed or imposed
- **Real-time evaluation**
  - Consultative dialogue established
  - Adapting to what communities want
  - More tailored intervention
  - Plan's strength at studying community dynamics
  - Profiling the interplay of actors
- **Engage and mobilize communities**
  - Bottom-up community leadership
  - Community involvement
  - Plan history of community mobilization
  - Apply skills learned in rural development to urban development
  - Strong community spirit and engagement
  - Putting community in the driver's seat
- **Participation throughout process**
  - Unusually high amount of engagement
  - No fixed process
  - Built-in flexibility
  - Adjustable to needs
  - Discussion and negotiation reduce misunderstandings
- **Developing sustainable systems**
  - Value for money
  - Initial mobilization may take longer but results last longer
  - People-focused approaches lead to sustainable solutions
  - Partnering with local government at the outset leads to continuity

## 2.0 Project Component Achievements

### Indicators by Project Pillar



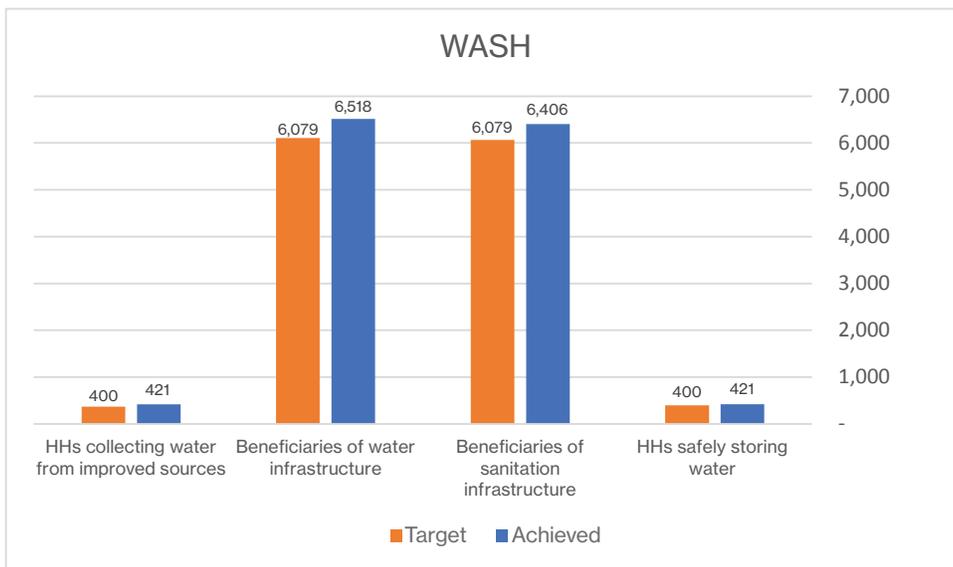
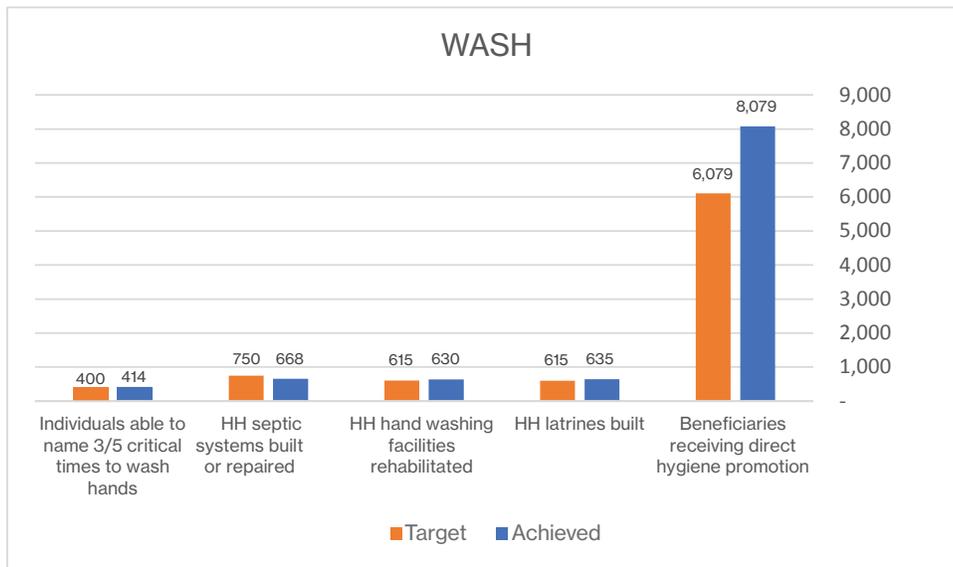
Shelter and Settlements



212 households received land rental assistance



The newly constructed Villa Plan provided housing, street lamps, and a community center to 30 families



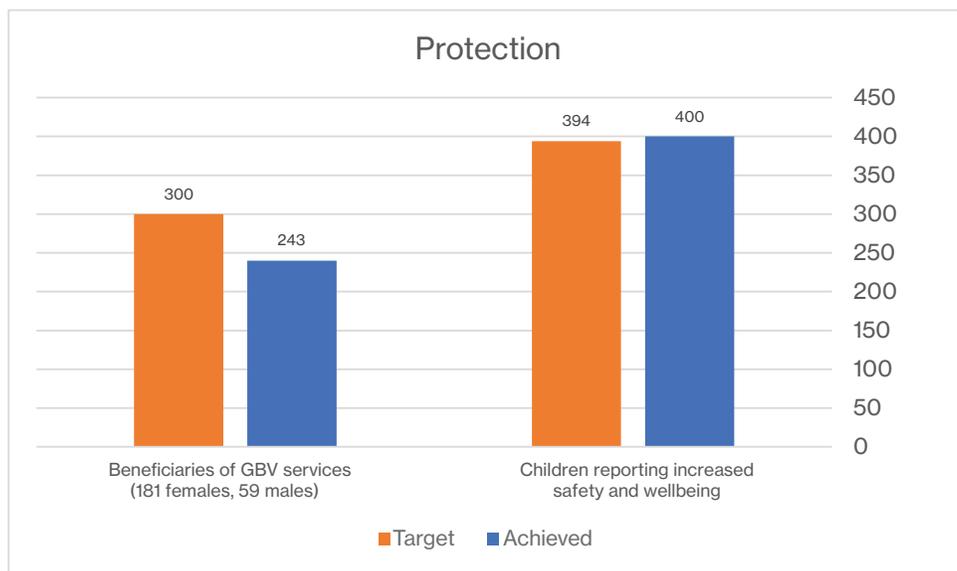
WASH



159 households (584 people) in Barangays 62 and 62-A received connections to clean water



299 rainwater catchments were installed as alternative sources

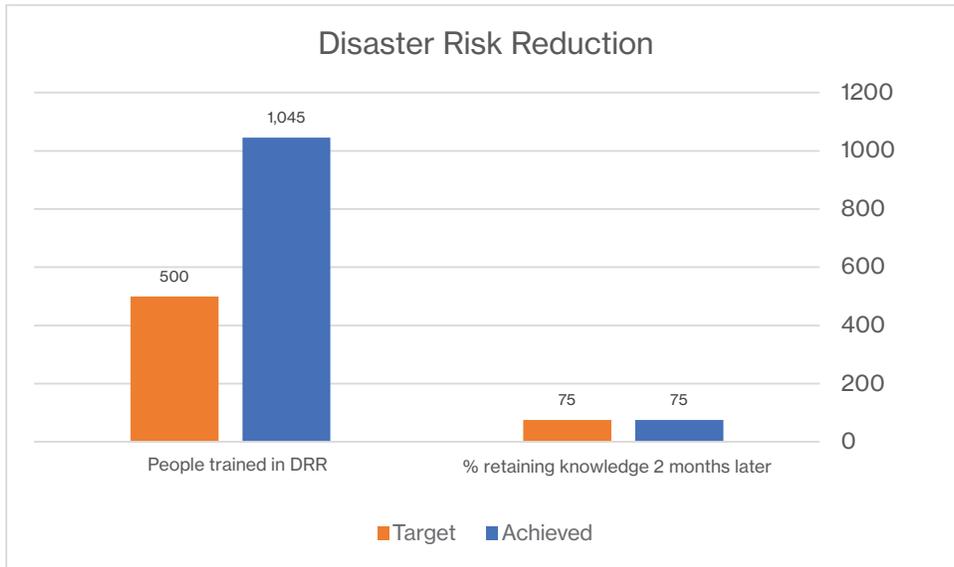


	Target	Achieved
People trained in child protection	20	1,069
People trained in GBV prevention/response (202 females, 101 males)	20	303

## Protection



147 solar lamp posts installed



## Disaster Risk Reduction



4,283 secondary and elementary students and teachers participated in evacuation drills

## Reasons for Over-Fulfillment of Assistance

### Responding to need

The primary reason Plan exceeded its set targets was that original need estimates were lower than the reality on the ground. Plan's detailed technical assessment found demand for shelter greater than baseline estimate data. "We did a validation of every household in the two Barangays and found 21 percent more households that needed assistance than first estimated," a local Plan staff person said. Further, the initial baseline survey was unable to capture many potential beneficiaries who would only later return to Area 4.

### Built-in flexibility

The flexibility of Plan's community participation model allowed for more shelters to be built. By remaining open to myriad shelter models, including new two-story structures, duplexes, new single-family shelters built atop existing repaired shelters, and the relocation of 30 households to the Villa Plan site, the project remained adaptive to community need and was able to house more families than initially planned. This flexibility also allowed for additional Barangay-level requests to be met, such as the installation and maintenance of solar lampposts and drainage systems.

### Outside funding

By using non-U.S. Government funding raised to help with the disaster, Plan leveraged the OFDA funding and went beyond initial target estimates. "We were lucky enough to use standby funds with flexibility to top up," the Plan grant manager said. "We had a budget for 300 target transition shelters, but we couldn't tell 64 families we had no money to help them," a local Plan staff person said. "We were able find outside resources to meet their needs."

## 3.0 Shelter and Settlements Impact



**Figure 4:** Family outside a house that is a combination of a repaired structure and a totally rebuilt one.

### High level of beneficiary satisfaction

Findings from the Likert study showed beneficiaries considered completely rebuilt and repaired shelters the project's most significant community improvement. To have a "long lasting and better house" was the most common open-ended comment. "Our neighborhood is full of houses built with water connections, and houses fixed with repair kits given to beneficiaries." Another said: "Our houses before were dilapidated and barely standing. Plan provided shelter to the victims right on time. We were able to build back better." A local government official agreed: "A major achievement was rebuilding people's lives by providing them with their need for a home, a building in the community." This satisfaction was reflected in the three focus group discussions with beneficiaries. "My children and I have a place to sleep now and we don't get wet anymore," one female beneficiary from Barangay 62a said. "I am very satisfied. We now have our own house with a kitchen and bathroom, which we didn't have before," a beneficiary from Barangay 62 said.

### [Appreciation for structural resilience](#)

When asked to what degree they agree or disagree with the statement “construction quality is good and enduring,” beneficiaries responded with an average score of 3.8 out of 5. “We saw the amount of cement used which made our house sturdy, unlike before when strong winds would make our house shake,” and “Plan made a strong house for us unlike in other Barangays” were typical comments in the focus group discussions. Confidence was expressed in the durability of the new and repaired structures. “Almost all we needed we were provided. It feels safe in there, and it will stay up longer.”

### [Quality materials and solid construction](#)

Plan used quality materials for new construction and repairs. “We insisted on good lumber, though it is twice the price,” an architect who worked on the project said. “If we had built with coco lumber, the shelters would be rotting by now.” Procuring all materials in-country, but outside of Tacloban, worked better than offering victims cash to rebuild. “Even if we supplied cash there was nowhere to buy materials right after the storm, and they were expensive,” said the architect. Solid wood roof trusses and metal strips attaching the metal sheets kept roofs on during subsequent storms. A beneficiary of the repair kit commented, “It was a great help to me. The paper-thin roofing blew off my old house when the typhoon came. I was then given quality, corrugated metal roofing and good lumber that has withstood other storms. I am very thankful for what I got, though not a full house.”



**Figure 5: Carpenters from the community constructing trusses to support a roof.**

### [Flexible structure design](#)

While the first phase of the rebuilding shelter component had only a single-story house design, the commitment to responding to community needs led to the development of seven different house plans by the end of the project. Additionally, kitchen extensions were developed to be added outside the basic house frame, and a four-inch cement slab floor was added to protect from flooding, solidify the structure, and serve as a floor. Narrow, two-story structures were designed to be built on small lots. The project’s Final Evaluation Report notes, “The considerations to customize the assistance, both for repair of damaged houses and the construction of new ones, include the size of the lots where the houses are located and the number of occupants of the houses, among others.” New structures were built adjacent to repaired ones to meet the needs of extended families, and single-floor houses were enlarged for those who couldn’t go up and down stairs.

### [Extra rooms for protection](#)

Two-story structures with extra rooms were built, in part, to accommodate female children. According to the Final Evaluation Report, “Beneficiaries mentioned the openness of Plan to provide a room for children, especially for the young female teenagers.” A young female participant validated this in the focus group discussions. She noted there was no room in their old house; however, the house Plan built provided a room for her and her sister, which made her feel more comfortable. A local Plan staffer confirmed this when noting, “One-room design was a protection issue, so we designed an extra room that could be divided to allow young girls to have their own sleeping space.”



### [Family hosting](#)

While surveyed beneficiaries consistently emphasized the importance of rebuilding and rehabilitating shelters, the Final Results Report highlights the success of other shelter arrangements, including family hosting arrangements. The project financially supported hosting and hosted families, with the total number of beneficiaries triple the original estimate. Hosted families tended to require temporary housing while awaiting rebuilds or rehabilitation of their own damaged homes. Some families stayed together for longer periods. “These hosting arrangements were implemented under social contracts detailing the roles and responsibilities between the host and hosted families,” the report points out.

## **Shelter and Settlements, and Relationship Between Non-Tenured Residents, Landowners, and the City**

### [Large number of informal settlers](#)

As many as one-third of Area 4 residents were non-tenured residents or informal settlers. About half of the informal settlers were either not paying rent or had no contact with the owners of the land they were “squatting” on, though half did say they had good relations with the landowners. “A third of the 1,200 informal settlers had issues with landowners,” a local Plan staffer said. “We saw we needed to step in and help with settlers’ lease contracts to reach our goals.”

### [Municipal concern for land tenure](#)

Initially, the City advocated for relocation to a distant site on the outskirts of the City, but eventually agreed rebuilding was possible despite doubts about informal settlers. “We wanted families to stay there, but were concerned about how you respect land ownership,” a City housing official said during a KII. Signed agreements between informal settlers and the landowners were required before any project construction could occur. “The goal was to give formal status to non-tenured residents, who represented 35 percent of beneficiary households,” said one party involved with the negotiations for Plan. “It was part of community engagement to turn informal settlers into legitimate occupiers.”

### [The challenge of negotiation](#)

Identifying absentee landowners, sorting through multiple ownership claims, verifying ownership amidst deeds lost in the storm, and landowners reluctant to legitimize informal settlers, were common problems for Plan staff and their City Housing partners. Tracking and validating tenure documentation required extraordinary effort to reach expatriate owners and identify false claims. But the resulting legitimization of the tenants was considered worth the time and expense. This was the second-most addressed topic by Plan staff in the survey with open-ended question on challenges. One staff member noted, “Through cooperation and leadership with initially uncooperative beneficiaries, complex land tenure disputes were worked out.” Another Plan staff member commented, “The reluctance of landowners was overcome with determination.”

### [Finding creative solutions](#)

Plan agreed to pay three to five years of land rental assistance to landlords who signed formal agreements with informal settlers. According to the City Housing Office staff, the motivation of landowners increased greatly when Plan proposed “a very good, creative solution to soften their doubts by paying rent.” But beyond remuneration, landowners were also motivated by social conscience. “Many of the landowners who live in the area know the people and the context, and also wanted to help.” According to the Final Results Report, “It also gives shelter beneficiaries temporary land security as they strive to become more financially stable after Typhoon Haiyan.” By the project’s end, 212 formalized agreements had been signed between non-tenured residents and landowners, with the City government as witness.



**Figure 6: A Plan staff person explains lot-rental assistance guidelines to informal settlers.**

### Rent-to-own

129 of the impacted households were part of three homeowners' associations, with three different landlords, each of whom agreed to deduct Plan's land rental payments from the selling price of their properties. The three associations, Villa Plan, Caloocan Drive, and St. Raphael, have employed various methods to finance the land purchases. Villa Plan is finalizing its financing via the Community Mortgage Program. Another HOA has bank financing. Some use savings groups to collect money for a down payment, while Plan makes rent payments. "We hold meetings to discuss ways we can save money," one HOA member said in a focus group. "We will find ways to pay for the land gradually." According to the Final Results Report, "For the case of these organizations, land rental assistance contributes to their effort to find permanent land tenure solutions." Respondents to the community group, City government, and Plan staff all agreed—with a high average score of 4.4 out of 5 in the Likert studies —that informal settler families are on track for land ownership. The City Housing Office says it has been working closely with the HOAs to develop "different clearly defined payment plans."

### Challenges ahead

Despite obvious successes, there is some insecurity for a minority of informal settlers. Focus Group Discussions revealed that a few have already been threatened with eviction by landowners wanting to sell their land. This presents an issue, as tenants own their new or refurbished homes but cannot sell them under the agreements. Those who have fallen behind on payments to the National Housing Authority said they can't afford to pay arrears, and the NHA does not accept incremental payments. Some non-tenured residents pointed out they had not had rent payments in as many as 15 years, and any minimal payment would present a difficulty. Some focus group participants said they plan to move either to public housing with free land or to rural areas. Others claim they own land but have no documentation and refuse to contribute to HOA savings plans. No formal study has been done of informal settler threats of eviction. According to several KII interviews, City government and Barangay officials are taking active measures to protect tenants. "We will be talking with landowners to make sure rents are fair, and to prevent potential gouging," one City official said. The 62a Barangay chairperson added, "This land is not usable for commercial purposes or constructing a high rise. The tenants can't be forced off the land. The law protects the informal settlers. We will not be happy if there are attempts to evict tenants."



Figure 7: Lease contract signing facilitated by lawyers from the legal NGO Ideals.

## Donating 30 Rebuilds to Villa Plan

### Relocation within Area 4

Most landowners signed lease contracts with informal settlers, but 40 refused. Empty lots with willing landlords were found for eight, which left 32 households (150 people) without land to build on. Plan facilitated the creation of a HOA and procured a land parcel. The land was prone to flooding and required extensive landfill and drainage, including construction of a cement barrier running the length of the property. After reclamation of the wetlands, 32 two-story shelters, a Child-Friendly Space, and a playground were built. “We were renting a small area of land before the typhoon, but after the landowner refused for us to use the land we didn’t know what to do,” one Villa Plan HOA member said in a focus group discussion. “We wanted to stay around here. It is near the school, church, hospital, and market, plus our livelihood is here.”

### Negotiations with a benevolent landowner

The HOA and the landowner are in the final stages of a purchase agreement for the tract. With the cost covered by the Community Mortgage Program and rent paid by Plan and HOA savings, “we are very satisfied,” said one HOA member. “Plan gives us houses and paid rent for land. Now it is up to us to come up with the rest.” The landowner was also satisfied with the long, but fruitful, process. “We can help those who need a house. We met with Plan often. They did all the paperwork, and they explained well what the details were before we signed.” The City Housing Office has taken over for Plan in supporting the process. “We now have meetings with the City Housing Office once a week,” a HOA member points out. In the City government, community group, and Plan Likert surveys, an average rating of 4.5 out of 5 was given to the statement, “The Villa Plan HOA is providing good leadership.”



Figure 8: Resettled families in two-story, rebuilt structures in Villa Plan.

## S&S Lessons in Space-Constrained Urban Areas

### Urban Challenges

Population density, small lots, large percentages of informal settlers, inadequate drainage and frequent flooding, narrow passageways, and fragmented communities were all major constraints faced in building back better in Area 4. The primary best practice employed by Plan in meeting these challenges was getting the Barangay, community groups, local government, and beneficiaries involved at every level of decision-making. This participation fostered a sense of ownership and allowed solutions to emerge for each challenge. “At first there was some resistance,” a local Plan staffer said in a KII. “The government questioned the high level of consultation. The community wondered why there were so many meetings just to build houses. We told them Plan isn’t here to decide for you. The result was tripartite engagement between the community, the government, and Plan.”

### Flexibility

In response to small and varying-sized lots, shelters were designed to fit in limited spaces, and included duplex and two-story shelters. “Engineers provided technical validation for each house,” a local Plan staffer said. “Houses were designed to fit lot sizes of 50, 30, and 20 square meters of space. The smaller lots required two stories.” Neighborhood Improvement Teams were created that partnered with local government and university engineers and trained carpenters, plumbers, and laborers from the community. A sense of ownership quickly emerged. “It wasn’t just us,” a Plan staffer said. “We involved people who know the community well.” One City housing official added, “These are the best ‘temporary’ houses in all of Tacloban. It is really amazing that they are built on so little space.”

## Success Story

### A Community Carpenter Earns a Trade While Building 20 Shelters

Jona Cortez, a married mother of three, heard that Plan was looking to train carpenters, plumbers, and electricians to build and repair houses destroyed or damaged by Typhoon Haiyan. The fact that her father was a carpenter gave her confidence she could handle the job. Jona underwent a day of classes covering how to read building plans and measuring and cutting wood, followed by 15 days of on-the-job training supervised by the government’s Technical Education and Skills Development Authority (TESDA).

She was then placed on a crew with eight others who were, like Jona, mostly from the Barangay. She put her carpenter’s square to work, constructing frames and trusses, with quality hard wood. She poured cement and cut and installed metal roof sheeting, which she considered the toughest part of the job ... though the “smelly job” of connecting septic tanks came a close second.

Over 15 months, Jona built 20 single and two-story shelters, and repaired another 25, including her own.



Figure 9: Jona Cortez, carpenter

“You can say that these houses are built nice and strong,” she said. “We got no complaints.”

She has repaired five houses since the end of the project, before recently taking time off to care for a new baby. “When the baby gets bigger I plan to work as a carpenter again. **Because of Plan I was able to earn money, improve my house, get water access, and pay land rental.** The biggest drawback? **“Occasionally hitting my finger with a hammer.”**”

## Beneficiary Response to Two-Story Temporary Shelters

### Larger families satisfied with bigger shelters

The two-story temporary shelters were developed to accommodate beneficiaries with large families and small lots. The second floor allowed for a children’s bedroom and could be divided to create a separate space for females. According to the 62a Barangay chairwoman, “The design was intended to accommodate big families on lots 20 square meters or smaller.” Beneficiaries with small lots are greatly appreciative of the two-story shelters, according to three focus group discussions, as they would otherwise not have gotten houses big enough for their families. “It really is a big help for us, especially for my children because back then we had no comfort room and our house was small for a family of six,” a beneficiary from 62a said. “We hardly had space to sleep in, but it is so much better now because we have a second floor.” A beneficiary from 62 further noted, “It depends on the space of the lot, because the engineer does an assessment first. In our case, we only have 18 square meters, that’s why we got two-story house.” An unexpected advantage was expressed by a man who had to take refuge on his roof during the storm surge, “When it rains hard, the flood water will not reach us in the second floor.”



Figure 10: A father and children at the door of a shelter built on cement footing to reduce flooding.

## 4.0 Water, Sanitation, and Hygiene (WASH)



Figure 11: A man gets water from one of 20 common taps managed by a community group.

### Water connection, kitchen, and comfort room appreciated

A quarter of the cost of building a shelter went to the water connection, toilet, septic, and kitchen. According to Plan, “All houses have toilets. Almost all have repaired and drained or new septic tanks. Living conditions are improved through WASH.” According to the three beneficiary Focus Group Discussions (FGDs), these additions were greatly appreciated. “For me, Plan is a big help. We now have our own house with water connection, kitchen, and bathroom,” said one respondent. “The water connection is a really big help. We have been living here for years and never got a water permit,” added another. Twenty tap stands were installed after Plan helped reorganize the Sagkahan Water Association in 62a. The association continues to play a significant role in managing and maintaining the tap stands by charging a modest sum for access. There was some contention over a handful of users not paying fees, but overall the system has worked well. The Final Results Report points out that 299 rainwater catchments were also installed in Area 4 “as an alternative source of water supply for washing and bathing. It also mitigated flooding by directly reducing the volume of rainwater to fall into the ground.”

### [Large-scale hygiene promotion](#)

A hygiene campaign was run in Area 4, with a majority of the population receiving messages about the importance of using soap to wash hands, establishing household hand-washing stations, avoiding open-air defecation, and maintaining proper solid waste disposal. Forty Junior Hygiene Promoters were recruited, trained, and took the lead in conducting outreach in the schools and throughout the community. “We would gather people in a neighborhood with the help of the Barangay, and sing songs and do hand-washing demonstrations,” one youth promotor said in the FGD. “It was fun. I would like to do more.”



Figure 12: Rainwater catchment system installed behind a rebuilt shelter

### [Septic system challenges](#)

The project put new below-ground plastic septic tanks behind rebuilt shelters, as well as rehabilitated existing septic systems, which included emptying and repairing them. However, septic system problems related to toilets that would not flush was one of the most common beneficiary complaints. “When it rains, we have difficulties flushing our toilets,” and “It does not flush well,” were comments in the beneficiary FGDs. Heavy rains or flooding can fill the septic tanks with rainwater and make it difficult or impossible to flush. One solution is to raise the level of the septic system, and, more importantly, the level of its outlet to be above the high-water mark during flooding. “In the longer term, we need to fix drainage and better control the flood plain,” a City housing officer said.

## 5.0 Protection

### [Solar power protects children](#)

The installation of 145 solar lamp posts was a popular aspect of the protection component, with beneficiaries citing it as the third most significant improvement in the Likert surveys, behind shelters and community participation. “The surroundings are clean and bright” and “peaceful and brighter” were comments in the surveys. “The solar lamp posts in the streets and pathways are such a great help,” a man said in the 62a FGD. “During power outages, we have street lights.” Despite some issues finding spare parts, beneficiaries believe the system is well maintained by the Barangay. “The light near us was broken and we told them about it and they fixed it,” one beneficiary said. A City building official points out that solar lights are expensive to install and maintain, “but there are no electricity bills.” Despite these ancillary benefits, the initial motivation was to contribute to child protection, and to this end the solar lamps have been effective. “We feel safe when we are walking home,” one girl said in the youth FGD.

## Success Story

### Keeping the Community Safe and Secure by Maintaining Solar Lamps

As part of the protection pillar of the project, 147 solar lamp posts were installed in the two Barangays. The company installing this greatly-appreciated lighting trained two technicians to maintain the lights. In Barangay 62a only one of the 102 solar lamp posts is currently not working and an electrical lamp post has been installed until the necessary spare parts are received.

Edgardo Macapanas underwent maintenance training organized by Plan and installed 10 of the lights himself. Since then, he has been changing battery parts every three months and installing other spare parts left by the supplier as needed. The biggest problem is getting spare parts sent from overseas, which can take several months. **“There is great value in these solar lights. When there is a black or brown out, we are the only Barangay that has lights,” he said. “They help people safely use the paths at night. They feel more secure.”**



**Figure 13: Edgardo Macapanas, Barangay security officer and solar lamp post repairman**

Like others in the community, Edgardo wore several different hats during the rehabilitation, including being part of the Community Emergency Response Team. He underwent training in first aid, CPR, and ambulance response to motor vehicle accidents. “I learned from the example of Plan how to handle people well by being calm, and giving them a chance to speak up.”

### Progress with children’s and women’s rights

Plan’s child-centered community development approach is especially relevant during disasters, as women and children are often the most vulnerable populations amidst the chaos of such situations. “A total approach that includes social development issues helps families and communities,” a woman from the City Social Welfare and Development Department said. “Gender-based violence and child abuse come with disasters. Integrating social issues is a less haphazard approach.”

### Abuse awareness increased

Progress has been made through the promotion of children’s and women’s rights and by establishing mechanisms for reporting abuse. “People became so aware and active. They now know how to respond,” one Barangay official said. “We learned about the women’s rights Magna Carta. We learned how to refer to different agencies. Before there was not enough knowledge about children’s and women’s rights.” The Barangay 62a chairwoman said people were afraid to complain about violence in the past. “Now the Barangay has one person in charge of child protection and gender-based violence. Plan was a big help especially in raising awareness.”

Child-Friendly Spaces and playgrounds welcomed

The concept of the Child-Friendly Spaces (CFS) was to provide a supportive environment for preschool children to deal with post-storm trauma, build their self-confidence, and raise awareness of children’s rights. Buildings were constructed with water and electrical connections, volunteers from the Barangay Child Protection Committee (BCPC) were trained as facilitators, and art supplies were furnished. One Child-Friendly Space was built in each Barangay, plus one on the Villa Plan relocation site. “We were supposed to build more but available space was limited.” The Final Results Report highlights that the Barangay will shoulder the annual rental cost for the initial eight years, with the facilitator being paid by funds from the BCPC. “As the Barangay is now on the phase of recovery and rehabilitation, the CFS will also be used as a Day Care Center in coordination with the City Social Welfare Office for the accreditation and affiliation,” the report states.

**Success Story**

**Helping Young Children Cope With Trauma**

In her previous work as a nutrition educator in Baranguay 62a, Ruffa Polido was appreciated by the mothers and children she helped. As a result, she was a natural choice to fill the role of Child-Friendly Space facilitator. Her training by Plan involved being taught how to handle children through interactive facilitation. Plan also brought in a child protection specialist to train the facilitators on making children aware of their rights.

**“I still benefit from the training every day, especially using games and art to stress the importance of good hygiene and cleanliness and how children can protect themselves,” she said.**

Perhaps the most important aspect of the initial training, just months after the typhoon that caused 10,000 deaths, was how to deal with the psycho-socio impact of the storm on children. The facilitators were taught how to treat a child who has experienced trauma. “We learned how to talk to children and where to bring them for additional help if needed. The CFS also served as a refuge where the children could play and tell stories and forget about their bad experiences.”



Figure 14: Ruffa Polido, Child-Friendly Space facilitator

Ruffa was charged with working with elementary-school and preschool children in the Child-Friendly Space built by the project in the Villa Plan development, which included 30 households all located in two-story structures. She herself was eligible for a one-story house rebuild in the second batch of construction, as she had a young child with a heart problem. Her house, which was made of poor-quality coconut wood, was completely destroyed by the storm. “We have our own comfort room now as before we had to share facilities. We have a better house now and an agreement with the landowner. It is a good house.”

## 6.0 Risk Management Policy Practice



Figure 15: Community Emergency Response Team volunteers conduct DRR exercise.

### Barangay DRR taken seriously

Twice as many adults and youth underwent DRR training than initially planned. Aside from building volunteers' skills, they also got emergency response equipment, including radios and other tools. The extensive training had community emergency responders learning to stabilize broken bones, use fire extinguishers, organize evacuations, and many other risk management skills. School children practiced duck-and-cover and fire drills in their preparations. "Because of Plan we are better prepared to respond to storms, earthquakes, fires, and drownings with equipment, uniforms, and training," the Barangay 62a chairwoman said. The citizens of the two Barangays in Area 4 also enthusiastically participated in drills organized by the Community Emergency Response Team (CERT). "We have team-building activities. We introduce ourselves. We eat. We talk about disaster preparedness. We do practice drills. It was fun," one beneficiary said.

### Household emergency preparation

Residents were also encouraged to prepare for emergencies by storing a radio, flashlight, hygiene kit, extra food and water, and a "go bag" with important documents to carry during an evacuation. "We learn preparedness," one beneficiary said in a KII. The early warning system has proven particularly effective, with all community members surveyed having received at least one early warning message prior to a disaster occurring. One youth DRR volunteer said that during the last evacuation there were few people left to evacuate when he went around his neighborhood, because most had already gone to designated evacuation points.

### DRR now engrained

The Barangay 62 and 62a DRR activities have been sustained to the present. There was strong agreement (4.4 out of 5 on Likert surveys) among beneficiaries, community groups, City government, and Plan staff with the statement that community DRR is “still active.” The ultimate endorsement of the DRR preparations was made by a City DRR official. He said he found that Barangays 62 and 62a were the only ones out of the 138 in the City that did not need DRR training. “They already had their own DRR plans, which we used as a model, and they helped us train the others,” he said in a KII. “DRR takes time to become part of the culture, and they have succeeded.”



Figure 16: A youth volunteer demonstrates proper use of a fire extinguisher to students.

### Youth leadership in DRR

A Barangay 62 counselor highlighted the contribution of the 40 Junior Hygiene Volunteers “who conducted emergency drills for fire and earthquakes.” One youth commented in a FGD, “We learn how to prepare for a calamity and give safety tips for earthquakes, like cover, duck, and roll.” Another added, “In role-playing exercises, we act out different parts, like victims, rescuers, news reporters, and people to evacuate.”

## Success Story

### Making His Community Safer and Developing Useful Skills

Kim Ravela, now 18, received his first Plan-organized training when he was a Junior Hygiene Promoter. He visited schools, encouraging students to wash their hands with soap, and helped organize fire and earthquake drills. He then underwent Emergency Response Training, also supported by Plan, which included water search and rescue (WASAR), basic firefighting, and basic emergency preparedness, all of which involved alerting the population of impending storms and organizing evacuations.

His WASAR training was the most challenging, and not necessarily because of learning CPR or how to put on a neck brace, but because he had to learn to swim. “We were put in the sea two kilometers from the shore, and had to swim in as a relay team.” The training paid off, as he was later involved in pulling a drowning teenage boy from the sea and administering CPR.

But the firefighting training he first received from Plan interests him the most. **“I now know how to use a blanket to put out a fire, go into a burning building with oxygen, and how to handle a fire hose,” he proudly points out.** He is now an official regular volunteer of the Delta Fire Brigade, having passed two years of training and membership. His



Figure 17: Kim Ravela, Delta Volunteer Fire Rescue

ultimate goal is to finish college, get fire officer certification, and become a professional firefighter for the City.

Kim points out that much of the emergency preparedness equipment in the Barangay today, including life buoys, rope, stretchers, warning flags, and radios, was donated by the project.

## 7.0 Mitigation Work Performance

### Mitigation with settlement infrastructure

A high water table and poor drainage make Area 4 particularly vulnerable to flooding, especially during heavy rains. At the community’s urging, the project invested in kilometers of small, medium, and large drainage canals, while organizing the dredging of existing canals. Combined with the construction of elevated concrete walkways and flood control areas, beneficiaries in FGDs reported less flood damage and improved runoff. “I appreciate the improved drainage system very much,” a beneficiary from Barangay 62 commented. “We got a load of gravel dumped behind my kitchen and we don’t get flooded anymore.”

### Community de-clogging of drainage canals continues

Community members cleaned and de-clogged drainage canals in exchange for food and pay after the storm, but today much of the clean-up is done by volunteers. “Here in our Barangay (62) the drainage is being maintained, because every Saturday we do clean-up of our surroundings.” Residents of the previously flood-prone Villa Plan resettlement site are particularly motivated, with one noting, “We have our own community work here. We clean the pathways and de-clog the drains regularly.”

### Progress made but work remains

The drainage work in Barangay 62a has brought great progress, according to the chairwomen, but there are still problems. The biggest one is that the Barangay drains are not connected to the City system or any other outlets. “The City is supportive, but doesn’t have resources for the big job of connecting drains to the City drainage system,” a Plan engineer pointed out. “Urban areas generally have limited areas for runoff water to go; they are so densely built.”



Figure 18: De-clogging of drainage canal by community volunteers on Barangay 62a

## Collaboration with Eastern Visayas State University

### Local university drainage assessment

The Eastern Visayas State University (EVSU) Engineering Department conducted an extensive site drainage assessment and made recommendations on drainage needs. “EVSU looked at the drainage system and ways to solve problems,” a local Plan staff member said. The study suggested the creation of a flood-control zone, maintaining existing canals through dredging, containing surface water with concrete pathways, and building a large 300-meter-long main canal. “With different levels of elevation, we needed first to retain water and then let it flow out slowly,” an EVSU professor involved in the study said during a KII. “To complete the work, there has to be a bigger outlet to get water to flow out of the Barangay.” The University engineers supervised the construction and managed the student assessors, who used sophisticated global-positioning system (GPS) measuring equipment. Local Plan staff said they were very pleased with the EVSU collaboration. “The State University partner advised us to build a cement wall rather than cover wetlands because it is illegal and would cause more flooding.”

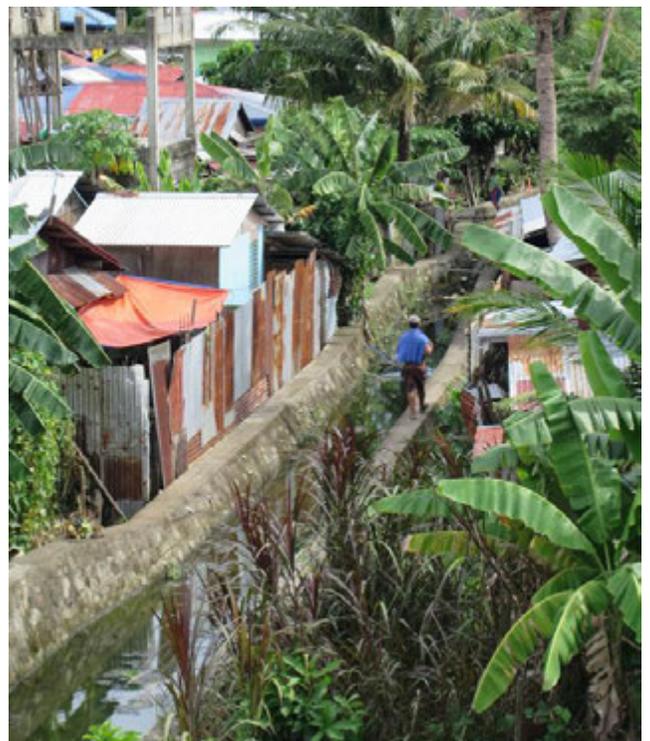


Figure 19: Part of a new drainage canal recommended by the EVSU study



## The Performance of Mitigation Work in Recent Storms

### [Typhoon Ruby tests mitigation work](#)

A second typhoon struck Tacloban a year after Typhoon Haiyan. Ruby (“Typhoon Hagupit” in international nomenclature) was the first serious tropical storm to test the extensive DRR work undertaken by the project. According to beneficiaries testimony in the FGDs, the newly-built and repaired shelters were undamaged by the storm. The early storm warning and evacuations also worked smoothly, according to Barangay officials. “Following a typhoon warning, my role was to go around, house to house, to tell the residents to evacuate,” one youth said. “Most residents didn’t have to be told, they already evacuated. We assisted them on the route to get to evacuation points.”

### [Mitigation work reduced flooding](#)

Cement and gravel work greatly reduced the impact of storm flooding in Area 4. Passageways normally impassable from mud and water after storms are now high and dry thanks to the construction of two-foot-high concrete paths. The four-inch concrete slabs and stilt foundations used in shelter construction also offer significant protection from post-storm flooding. “The drainage system I appreciate very much, because we got flooded a lot after storms before,” was one beneficiary comment. “We were looking for a way to keep rainwater out during big storms. We were given gravel to spread around our house, and paint to seal walls,” was another comment made. “It worked.”

## 8.0 Value Added of Integrated Approach: Hardware (Shelter and WASH) and Software (Protection and DRR)

Plan’s community development approach added value. Integrating the nuts-and-bolts of shelter and WASH programming with community development techniques like protection and DRR is a non-traditional approach to emergency response. Yet, all stakeholders have welcomed the mix. Community groups, City employees, and Plan staff were asked in the Likert survey to what degree they agreed that there were “major advantages of combining the hard and software,” the average score was very high, 4.6 out of 5. “Plan added a plus,” a City Housing Office staffer said in a KII. “It is much more than just housing. It is holistic and long-term. I love the social change part.” A Barangay 62 counsellor said raising awareness was an important Plan contribution. “Knowledge and the ability to improve our lives is better than just building new houses. Houses can be washed away, but knowledge will remain in our minds and our hearts.”

## Success Story

### Participatory Leadership Pays Individual and Community Dividends

Just before Typhoon Haiyan blew through her seaside Barangay, Felipa Espejo was newly elected to the post of Barangay Chairwoman. Facing the devastation in the aftermath of the storm, she commented that “Plan came by and we told them about all our problems with shelters, latrines, drainage, and they listened.”

When the chairwomen complained of stagnant water after strong storms, Plan proposed creating a flood plan. When the single-floor houses were too small for big families with small lots, Plan suggested two-story shelters. When informal settlers expressed fears of evictions, a plan was devised to formalize their status with landlords. “Plan was a big help, and responsive to our needs. It wasn’t just about housing,” she said. Plan’s participatory process was particularly welcomed by the chairwoman. She said that when first elected, she believed her job was to come up with ideas and tell her constituents what she intended to do. “Working with Plan taught me to be near the community, to hold public hearings and increase community awareness by reaching out to the population,” she said. “Empowering the population enables the Barangay to respond better to their needs.”



Figure 20: Felipa Espejo, 62a Barangay Chairwoman

According to Espejo, Plan did much more than build shelters. It inspired the community to organize itself for disaster risk reduction, hygiene education, and awareness of women’s and children’s rights. **“Plan’s added value is in training us in community participation,” she said. “It is still happening today. We have an active emergency response team of 23 practicing drills and evacuations. Every month we have volunteers unclogging canals and cleaning streets in exchange for food and Zumba exercise classes,” she said.** “This is my legacy as a leader and I am in my third term.”

## Beneficiaries on Plan Engagement and Neighborhood Improvement

### High level of satisfaction

Beneficiaries were asked in a Likert survey how much they agreed with the statement that the project “met expectations and satisfied needs.” It scored a relatively high rating of 4.2 out of 5. Community groups, also in a Likert survey, gave the statement that the project brought “significant and timely results” a near-perfect score of 4.8. “Plan International brought so much assistance to our Barangay,” one beneficiary said in a FGD. “If they had not come, I could not picture our situation after the typhoon.” Another beneficiary compared Area 4 with neighboring Barangays, where “many houses are still damaged. So, thanks to Plan because it has made a big difference to the households here.” One Barangay 62 beneficiary added, “We are happy because we have our own house with water and kitchen. Every family needs a home.”

### Plan engagement appreciated

Beneficiaries, community groups, and City government all had positive things to say about Plan’s approach and commitment. “We had good relations with Plan staff. They know how to handle people and implement well,” was one beneficiary FGD comment. Beneficiaries rated the statement “Plan understands needs and is engaged” with a score of 4.2. “They ask if we have any complaints, they listen to us and they assist us,” was one comment by a beneficiary in 62a. “Plan staff are committed to be of service to us. They are serious about it,” and “Plan staff are approachable and mingle well. Their methods are good. They are respectful,” were beneficiary comments from 62. A Plan staff person points out that Plan takes community engagement very seriously and that Plan staff is both methodical and patient. “In the end ... it is good value for money.”

### Positive relations with community groups and local government

Community groups in the Likert survey gave the statement on “strong degree of collaboration and participation” a high rating of 4.7 out of 5. “Plan took action whenever there were problems. They are like family,” was one KII comment from a member of a community group. City government officials gave the statement that “consultative dialogue made for smooth relations” a very high rating of 4.7. “Each organization brings its own style and working environment. Plan is very involved and engaged. Community development is central especially with Plan,” said a City government WASH official.



**Figure 21: City DRR official pleased with collaboration with Plan and Area 4**

### Community participation key to success

Community Group members rated “Plan’s participatory approach by friendly staff” a perfect 5 out of 5 score on the Likert survey. When discussing “significant improvements” from the project, beneficiaries listed “people participation” as the second most common answer, behind only shelter. Typical comments included, “We were part of the decision-making process,” and “The most significant improvement to our neighborhood during the project was people helping each other.” Plan staff gave “strong collaboration and participation” a Likert rating of 4.7. “Community facilitation and coordination should not be secondary,” a Plan staff member said. “Healing, education, and child protection are all essential parts of the Plan approach.”

### Community validation

The selection of project beneficiaries was one of the most potentially controversial aspects of the intervention, but community involvement and transparency made it work smoothly. “Beneficiaries were not chosen by Plan, but by the community,” and “The feedback mechanism and validation were open to all” were beneficiary comments. A local Plan staffer suggested that, “Selection can be tricky. Involving religious leaders, teachers, youth representatives, and local officials in community validation reduced the impact of local politics. This involves a lot of talking and negotiation, but avoids misunderstandings and headaches later on,” the Plan staffer said. A Barangay 62 Counsellor lauded the selection process that involved a scoresheet to judge need. “I give Plan a good grade for ensuring that the vulnerable were chosen as the first beneficiaries, including the elderly, persons with disabilities, pregnant women, and single parents with lots of children.”



**Figure 22: Single-parent families with young children were among those given priority for rebuilt houses.**

### Long-lasting knowledge

In the beneficiary Likert survey, “knowledge” was considered the third most long-lasting project improvement. “We have been awakened by the knowledge shared by Plan,” and “A lifetime of knowledge was given by Plan through trainings and seminars,” were responses to open-ended survey questions. The transfer of positive values by Plan was also appreciated by the beneficiaries and community groups. “The most wonderful impact of the Plan project, aside from the rehabilitation of houses and WASH, is the good values and collaboration among our neighbors that they imparted to us. We have learned the value of fellowship,” was one comment. “We learned good values from them, like how to deal with people, always with a smile,” a community group volunteer said in a KII.

## Success Story

### A Community Participation Super Star

Neighborhood Improvement Teams (NIT) were created in the two project Barangays to represent the community in relation to rehabilitation work. The 62a NIT included about 55 members who were split into shelter, WASH, protection, and DRR subgroups. Rhodora was chairperson of the Shelter subgroup, which was charged with ensuring that the selection of beneficiaries was fair and transparent and the rehabilitation work met expectations.

“There was a small group that was dissatisfied, and would scold us, but most were very satisfied,” she explained. “We would go with the engineers to inspect houses, and we would send volunteers on motos to accompany materials to be sure they arrived as promised from the warehouse.”

Rhodora’s NIT work led to training by Plan on promoting backyard gardens “that are good for your health, and reduce daily expenses.” She was also involved in DRR by assisting in the drafting of an emergency response plan with Plan’s help. “The last time we met was to prepare for a pending storm, and give an early warning,” she said.

Ever active in the community, Rhodora is also the Vice President and Treasurer of the Caloocan Drive Homeowners’ Association, which consists of 123 members in 70 households. The HOA is negotiating with a common owner to purchase the lots, with membership dues to be used for the down



Figure 23: Rhodora Diasog, Barangay Service Point Officer

payment. **“Without Plan we would not have become homeowners, and not had houses built. Plan has made life a lot easier. We have internal water connections, arrangements with owners negotiated with the help of Plan, and have had lots and lots of training.”**

The NIT is no longer active, but about half its original members are now working for the Barangay in health, nutrition, security, and in Rhodora’s case, service delivery. She attributes her strong sense of community values to working with Plan staff. “I learned so much from them. They were always smiling even when some people were complaining.”

## 9.0 Evidence of Sustainability

### [An exit strategy focused on sustainability](#)

Roles and responsibilities of the Barangays, the City government, and the communities for continuation of project components after the end of Plan's involvement were clearly defined in the Plan Exit Strategy. According to the Final Results Report, the Exit Strategy called for the Barangay and the city to "continuously strengthen and sustain a functional emergency response mechanism." The Barangay committed to continue community drills and simulation exercises, hold regular meetings with the Barangay Council for the Protection of Children (BDRRMC), financially support CERT members, keep the early warning system in order, and conduct continuous advocacy campaigns on DRR in schools and the community. The City promised to continuously provide training support and equipment for DRR.

### [Public meeting on close-out and transition](#)

All beneficiaries were given individual "deeds of donation from Plan" for their totally rebuilt transitional shelters at a public meeting. The City mayor, the Barangay Councils of both 62 and 62A, the City Housing Office, and the City Disaster Risk Reduction and Management Office (CDRRMO) also attended to publicly share their commitment to the beneficiaries for the sustainability of the project.

### [Area 4 follow-on activities](#)

Beneficiaries generally agreed with the statement that both the "City and Barangays were keeping commitments" from the project with an average Likert score of 3.8. There is evidence that both the City and the Barangay were satisfied with their collaboration in DRR. The City Housing Office is actively supporting homeowners' associations with their collective rent-to-own schemes. There is also collaboration between the Barangays and the City social welfare and development office regarding gender-based violence and child abuse. "Thanks to training and raised awareness, the community now knows how to respond," the head of a City-supported women and children's shelter said in a KII. Both Barangays are supporting the Child-Friendly Spaces.



Figure 24: Homeowners meeting with a landowner to discuss land settlement issues.

### [Neighborhood Improvement Team \(NIT\) engagement](#)

NITs were the project’s community foot soldiers. About 50 worked full-time in 62a, across shelter (20), DRR (10), WASH (10), and protection (10). Though the NITs were disbanded at the project’s conclusion, about 30 former members are employed by the Barangay as health workers, nutrition scholars, security, and service officers (including the focal point for gender and child issues). Three NIT volunteers now have jobs with the City, with one conducting drills for the Tacloban Rescue Unit, another working in the DRR office, and the last working on HOA land ownership in the Housing Office.

### [Community participation contributes to sustainability](#)

Plan’s model for community development creates a sense of community ownership, which results in sustainability. “Being more people-centered, and not imposed, makes it more sustainable and part of natural development,” a local Plan staff person said. “Through advocacy, everyone becomes involved. Developing capacity maximizes chances for sustainability.” A Plan International Philippines Country Office staff person commented, “Child-centered community development is not just about children, because it is supported by the entire community who are organized, and will continue relations with the government after Plan leaves.”



Figure 25: Plan staff visit a house under construction with beneficiaries.

### [Government collaboration from the beginning](#)

Plan’s effort to engage the City government from the very start of the project greatly increased their interest and commitment to project sustainability. “Our overall implementation philosophy is to work with the government, and not preclude it,” said one Plan staffer. “The result is greater legitimacy and buy-in, and a longer-lasting organizational confidence.” When surveying City government workers, a high Likert rating of 4.8 out of 5 was given to the statement that “City staff skills have improved” as a result of the Plan project. “The learning from Plan training has been maintained until now. Plan came up with an entire package that still shows resilience,” a City DRR staff person said. A City Housing Office staff person agreed that sustainability was built-in from the start, saying, “I have lots of experience in development and seen a lot, but Plan’s work here is most impressive. I have seen the impact and effort of the social dimension. Plan did a good job of seeding values, and building mechanisms for continuity.”

## Organizational Experience of Plan

### [Innovative approach to Emergency Response](#)

Plan compensated for limited experience in shelter programming by engaging staff with shelter planning and implementation expertise, including six structural engineers and sewage and drainage specialists. Building off their extensive programming experience in rural community mobilization, Plan adapted to the complex urban setting to successfully apply its proven techniques in Area 4. Combining the hardware of constructing shelters and WASH programming, with the software of community development, including women’s and children’s rights and DRR, went beyond traditional emergency responses and proved to be very sustainable.



### [Plan management flexible despite challenges](#)

Plan management proved flexible in accelerating management procedures to ensure rapid delivery of goods and services. It also took extra precaution to ensure quality and transparency in the delivery of goods and services. This included purchasing of quality lumber and other building materials, as well as storing them in secure warehouses, and organizing community volunteers to escort deliveries. Reconstruction is very lumber-intensive, and despite the high demand for building materials across Leyte Island after the storm, the project experienced only a two-week stockout of wood. “There were some challenges hiring, since all organizations were eyeing the same talent and some building materials were scarce,” the Plan grants manager said. “Cash flow was not a problem, as we followed the scheduled fund releases and got reporting back regularly.” There were some complaints from local Plan staff, who would have liked funds to have been dispersed from the central level more rapidly to better meet the emergency response needs.

### [Consultative dialogue incorporates community feedback](#)

Plan’s total effort was research-driven. It started with a community feedback survey, which set priorities. A house-to-house damage assessment was then conducted by engineers, while other real-time evaluations were conducted on gender-based violence and hand washing habits. The project even took care to ask children what colors they preferred for their new shelters. The Plan methodology included group meetings designed to explain and discuss processes, an emphasis on consensus and community involvement in selecting beneficiaries and strategies, transparency in listing beneficiaries, soliciting beneficiary feedback, and systematic conflict resolution. This approach allowed Plan to constantly adapt to needs and, ultimately, resulted in a high level of community engagement.

### [Integrating partnerships](#)

The respective roles of the City, the two Barangays, and Plan were clearly defined in memorandums of understanding at the outset. Similarly, social contracts were signed with beneficiaries clarifying their responsibilities. One staffer in the City Environment and Natural Resources Office suggested that partnerships with Plan were simplified because they hired local people as counterparts and utilized common approaches. They offered, “We are on the same wave length with Plan when it comes to social mobilization to get communities involved in planning and engaged. We are speaking the same language.”

### [Precursor to gender-transformative programming](#)

Though the child-centered approach to development was employed, women were a primary focus and beneficiary group. A primary target of the project was to provide emergency and transition shelter assistance to 6,000 people with a 50/50 gender distribution. In the end, 7,759 received shelter benefits at a ratio of 54 percent females to 46 percent males. Prioritizing pregnant women, woman-headed households, and low-income earners ensured that women were the first to receive benefits.

### [A focus on women’s as well as children’s rights and increased awareness of gender-based violence](#)

A modest target of 10 females and 10 males was set for training in women’s and children’s rights. This target was greatly surpassed with 1,069 trained, three-quarters of whom were women (839 females and 230 males). In terms of gender-based violence, the target was to provide services to 300 people (250 females, 50 males). The target wasn’t achieved as 240 were reached, including 181 females and 59 males. Another indicator was people trained in GBV prevention or response. A modest target of 20 was set with a 50/50 gender ratio. A total of 303 people were trained, including twice as many females (202) as males (101).

Women trained and encouraged to take leadership roles

At every level of the project, women played an active role. More than half of the members of the Neighborhood Improvement Teams, which maintained sanitation and implemented and monitored the project, were women. Seven community carpenters, who were trained and hired by the project, were women. A target of 500, females and males in equal numbers, was set for training in Disaster Risk Reduction. This was greatly surpassed with 1,000 being trained, though that number was not disaggregated by sex in reports.

**Shelter**

Percentage of total affected population in the program area receiving emergency/transitional shelter assistance, disaggregated by sex:

Target	Achieved	% of Target
<b>2.95%</b> (6,079 people targeted/204,491 affected, with 50/50 gender distribution)	<b>3.79%</b> (7,759/204,491)  Of the 7,759: male = 3,565 ( <b>45.9%</b> ) female = 4,194 ( <b>54.1%</b> )	<b>128%</b>

**WASH**

Most activities were performed in schools, so it might be possible to estimate gender balance based on enrollment ratios.

**Protection**

Number of people trained in child protection, disaggregated by sex:

Target	Achieved	% of Target
20 (10 female, 10 male)	1,069 (839 female, 230 male)  Female target achieved <b>8,390%</b> , male target achieved <b>2,300%</b>	<b>5,345%</b>

Number of individuals benefiting from GBV services, disaggregated by sex:

Target	Achieved	% of Target
300 (250 female, 50 male)	240 (181 female, 59 male) <b>75.4%</b> female, and <b>24.6%</b> male <b>80%</b> achieved, <b>60.3%</b> of it was female, and <b>19.6%</b> male	<b>80%</b>

Number of people trained in GBV prevention or response, disaggregated by sex:

Target	Achieved	% of Target
20 (10 female, 10 male)	303 (202 female, 101 male) <b>66%</b> trained were female, <b>33%</b> were male The female target exceeded by <b>2,020%</b> , and male exceed by <b>1,010%</b>	<b>1,515%</b>

**DRR**

Number of people participating in training, disaggregated by sex:

Target	Achieved	% of Target
500 (250 female, 250 male)	1,054	<b>210%</b>

### [More than half of total respondents for the study were females](#)

In the original research conducted for this study, equal numbers of females and males underwent KIs. Of the 53 KIs that were conducted with beneficiaries, community organizations, local government officials, and Plan and partner staff, about half were men and half women. This reflects the degree to which women were involved at all levels of the project. In the four focus group discussions with 69 participants, including beneficiaries (2 FGDs), homeowners, and youth, three quarters of the participants were female.

## 10.0 Conclusion

### [Beyond project targets](#)

The Final Evaluation Report suggests that the project was a “great success” if measured by meeting or exceeding its set targets of houses built and repaired, water connections and septic systems built, or children and women’s rights protected. But it was the “intangible elements” that allowed a community broken by the storm to rebuild itself with some well-considered outside assistance. The successful shelter and settlements and WASH interventions were matched by creative alternative strategies, such as support for informal settler rental arrangements and families hosting other families via social contracts. “The infrastructure elements of the project were complemented by project ‘software’ interventions in protection and DRR. These activities made what could have simply been a reconstruction project into a community rehabilitation effort, led by community members themselves,” the report concludes.

### [Effective polyvalent emergency responses](#)

As an organization, Plan is well placed for effective Emergency Response, with prerequisite programming skills enhanced by innovative community development models. Plan staff have the skills to blend hard assistance (shelter and settlements, WASH) with the finesse of community engagement methodologies that engage and inspire communities toward sustainable interventions. Plan’s work in Tacloban was greatly appreciated by community leaders, beneficiaries, and government partners. And the years of experience that Plan’s staff brought to bear in management, community organization, child protection, WASH, and DRR augmented capacity and facilitated the project’s overall success.

### [Child-centered community development](#)

The focus on children in emergency response is novel but has proven its worth for future similar interventions. The youth turned out to be a good community entry point, with Youth Hygiene Promoters reinforcing proper hand-washing and sanitation messages to the entire community. Further, topics such as the rights of the child, disaster risk reduction, and the early warning system have maintained a high level of community awareness, while FGDs with youth demonstrated the retention of WASH and DRR knowledge. It was also apparent that a sense of responsibility had developed, with many noting that the solar lamp posts increased their sense of security and that bullying had been reduced due to greater awareness of the different rights of the child. The focus on youth bodes especially well in the long term, as these individuals will become Tacloban’s future leaders.



**Figure 26: School children practice hand washing with soap in an exercise organized by Youth Hygiene Promoters.**

## 11.0 Lessons Learned and Recommendations

### [Best practices for improved quality of life.](#)

If bringing together hardware and software for “building back better” in emergency responses continues to present a good overall value, the lessons learned in Tacloban can serve as a guide for developing similar future interventions. Below is a list of best practices that resulted in improved quality of life for the citizens of Barangays 62 and 62a.

### [Creating a high level of community engagement](#)

Community Emergency Response Teams (CERT) were formed to work in DRR. Neighborhood Improvement Teams (NITs) were trained and formed to oversee the four project pillars. The active participation of the community created a sense of ownership, a collective sense of fair processes, and limited disputes. The key to creating an open, transparent, and sustainable intervention is community engagement.

### [Encouraging women to take leadership roles](#)

Active women’s participation in leadership broadened community discussions, and ultimately reduced the vulnerability of women. Single women with children were given priority for shelter, women were made aware of their rights, and community responses for gender-based violence were developed. Women filled leadership roles on the NITs that helped maintain sanitation, and implemented and monitored the project. They also were active in HOAs and guided children involved as Junior Hygiene Promoters. Women became the heart and soul of the project.

### [Hiring local construction laborers](#)

Plan trained and hired community members to work as laborers, carpenters, and plumbers. They were certified by the Technical Education and Skills Development Authority (TESDA) and served as the workforce that repaired and built houses. Seven of the 140 residents trained were women, all coming from Area 4. After the project building boom, some continued to work in the building trades. Their participation as laborers and contractors throughout the project helped reinforce the goal of the community “building back better” itself.



Figure 27: Quality materials used in construction account for solidity of structures.

### [Assigning priority to the vulnerable](#)

Vulnerability assessment criteria were established early on to identify priority beneficiaries. Neighborhood Improvement Team members took part in the vulnerability assessment and communicated the criteria to the community. Vulnerability indicators were assigned points that emphasized families with very young children, pregnant women, the elderly, the disabled, those with very low incomes, and those with totally damaged homes. This transparent beneficiary selection process helped ensure the project reached the most vulnerable families and reduced any hints of favoritism.

#### Using quality construction materials

All stakeholders consider the houses built or repaired by the project to be solid and of high quality. “Good” lumber was selected over coco lumber and thicker cuts of plywood were chosen, while heavier galvanized iron sheets were used for roofing. Intentionally selecting quality materials contributed to the sturdiness of the structures. Concrete foundations and metal straps for attaching corner posts and roof framing also increased durability and contributed to the structures being undamaged by Typhoon Ruby and other subsequent tropical storms. Plan provided paint to help seal the siding. Transitional shelters were built to Shelter Cluster guidelines and have proven more resilient than other “transitional” shelters in Tacloban.

#### Tripartite coordination from the start

Memorandums of Understanding between Plan, Barangays 62 and 62A, and the City Government of Tacloban clarified the roles and responsibilities of each signatory and led the way to collective ownership and coordination. The tripartite collaboration was reflected in each of the project pillars. Everything from shelter design and negotiating land ownership, to coordinating DRR efforts, working on drainage, and reducing gender-based violence involved the City, the two Barangays, and Plan as equal partners.

#### Flexibility to find creative solutions

Maintaining consultative dialogue and community engagement increases the likelihood of identifying shifting community needs and priorities. Being flexible allows for adjusting strategies based on those needs. Designing two-story houses for larger families with small lots, taking on floodplain and drainage work at the community’s request, enabling 30 informal settlers to relocate on a single property with a rent-to-buy scheme, and formalizing informal settler leases with rental assistance were all creative solutions to emerging challenges that were not included in the original plan.

#### Focus on water management

Construction of latrines, canals, septic tanks, and rainwater catchments all contributed to a better quality of community life by improving sanitation, reducing flooding, and even causing a drop in dengue fever by interrupting mosquito breeding cycles in stagnant water. Efforts to improve drainage systems included dredging and covering canals and constructing elevated cement walkways, which have also served to reduce flooding. The elevated walkways have also made it easier to move, and improved the smell in Area 4.



Figure 28: Flood catchment area and elevated cement walkways built by project

## Recommendations

### [More resources for repairs](#)

All Area 4 households were evaluated by engineers, who judged them to be either in need of a total rebuild, or capable of repair. The repair kits supplied by the project contained a finite number of materials, which were not always sufficient to complete the repairs, according to beneficiaries. The limited budget for repairs resulted in complaints from some households that received repair kits but were not able to complete repairs. Generally, the repair kit met the needs of smaller houses but it was larger ones that found the kits to be insufficient. Considering the lower cost of repair over a total rebuild, future interventions should find a balance between new construction and repair jobs. “They are the same victims, but more benefits go toward total rebuilds than repairs,” a Plan staffer pointed out.

### [Consider income generation](#)

Area 4 benefited from a USAID-funded community-based enterprise project that built livelihood skills and assisted in the establishment of small convenience shops, for example. Consideration should be given to incorporating income-generation activities into future emergency response projects or affiliating with other existing projects. Assistance in entrepreneurial endeavors, like food processing or vending, could make a major impact on “building back better” and community wellbeing.

### [Resources for integrated water management](#)

The project faced limitations with drainage and flood control, because of lack of connection to City sewage and drainage systems. Limited space for run off makes self-contained drainage systems difficult in urban areas. Any future drainage and sewage systems should look beyond the immediate community, and aspire to find structural solutions by integrating drainage systems to outside outlets.

### [Improved septic designs](#)

In areas with high water levels and heavy rainfall, better designed septic systems are needed to avoid difficulties with flushing. Elevating the tanks could prevent rainwater from entering septic system outlets that are lower than flood levels. One suggestion for future projects is to get more buy-in from different stakeholders at the onset to ensure reliable septic systems are built and maintained. This could include the City government, the Barangay, and the community through labor equity. The project target of “the number of household septic systems developed, repaired, or rehabilitated” was the only one that was underachieved, indicating room for improvement in this area.

### [Accelerate financial management](#)

Getting resources rapidly into the hands of those on the front lines of an Emergency Response is always a challenge. Finding a balance between establishing accountable systems that justify expenditures and moving money rapidly needs to be found. One way is to further decentralize finances by placing a dedicated Plan finance person in the field with authority to approve large expenditures. “In an emergency response, it is difficult to be exact in a fluid market,” a Plan grants manager said. An accelerated procurement process with more flexibility would allow Plan to speed up payments while ensuring quality control.

### [Broaden the scale of intervention](#)

Combining the hardware and software approaches in this project was experimental, so there was a certain logic in limiting the methodology to Area 4. In retrospect, considering the massive amount of storm damage across the City, more could have been done to help other Barangays. Now with some validation, this proven methodology can be applied in the future on a larger scale, without reducing any of the component parts that have all proven to be successful and sustainable.



**Figure 29:** The plastic double-barrel septic system has a tendency to fill with flood water.



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