# Post-Odette Humanitarian Actions in Vulnerable Coastal Barangays of Ubay, Bohol

A POST-PROJECT EVALUATION
MARICEL M. GENZOLA

# **Table of Contents**

1.	Introduction1			
	1.1.	Identifying Information		
	1.2.	Object	ives of the Evaluation	1
	1.3.	Metho	dology	1
	1.4.	Areas t	to Look Into	1
2.	Backg	ground o	n Typhoon Odette	2
3.	Gene	ral Asses	ssment of the Project	5
	3.1.	Project	t Review with the Barangay Coordinators	5
	3.2.	Self-As	sessment of the Coordinators' Involvement	7
		3.2.1.	On the Project Relevance	8
		3.2.2.	On the Project Efficiency	12
		3.2.3.	On the Effectiveness of the Project	13
		3.2.4.	On the Impact of the Project	14
		3.2.5.	On Project Sustainability	14
		3.2.6.	Overall Assessment of the Project	15
4.	On Ar	eas to Lo	ook Into	15
	4.1.	Project Level		15
	4.2.	Other I	Needed Interventions	16
5.	Photo	s and Im	nages Taken	18

# 1. Introduction

# 1.1. Identifying Information

Title of the Project Post-Odette Humanitarian Actions in Vulnerable Coastal Barangays of

Ubay Municipality, Bohol Province

Project Schedule February - November 2022

Project Sites Barangay Cagting, Cuya, and Guintaboan, Ubay Municipality, Bohol

# 1.2. Objectives of the Evaluation

The project evaluation aims to:

 identify and articulate the project's relevance to and effects on the project recipients as well as the local government;

- identify and analyze learnings as well as strengths and areas for improvement; and
- analyze the efficiency in fund usage vis-a-vis the implementation of plans and delivery of project outputs.

# 1.3. Methodology

Data was collected through:

- Review of project documents such as reports and documentation of meetings
- Focus group discussions (FGD) with (1) at least ten project recipients of the housing assistance, solar-powered charging stations, back-up generator set, and communication devices, and (2) coordinators and their assistants in Barangay Cagting, Cuya, and Guintaboan
- Key informant interviews with barangay officials

# 1.4. Areas to Look Into

This report looks into the relevance and effects of the project, specifically its three components:

Component 1	Component 2	Component 3
<ul><li>Construction of</li></ul>	<ul><li>Assembly of a solar-</li></ul>	<ul><li>Procurement and</li></ul>

- rainwater harvesting facility for the protection and recharging of open dug wells
- Distribution of Water containers and orientation on drinking water disinfection at point of use
- powered charging station (for small devices) in each barangay
- Installation of back-up generator set for the charging stations
- Procurement of communication devices for use in emergency operations
- distribution of housing materials to the most vulnerable households with totally damaged houses
- presence of temporary housing in safe locations
- role of the LGU
- number of most atrisk households that benefited
- Procurement and distribution of housing materials to less vulnerable affected Households
  - number of repaired partially damaged dwellings
  - materials provided in the repair kits
- Implementation of construction and repair of housing structures including cash-for-work scheme
  - mechanisms for the cash-for-work scheme
  - benefits of the cashfor-work to families

It also identifies learnings in the provision of humanitarian intervention and analyzes the efficiency in fund usage.

# 2. Background on Typhoon Odette

The project was the result of communication and consultation with members of the target group who were most affected by the typhoon – poor and elderly and women-led households,

collection of published data from national government agencies, and communication with officials of the municipal government of Ubay. The forms of assistance proposed were identified by the target groups themselves which were supported by official documentation of the crisis. Due to the large area devastated by Typhoon Odette (international name: Rai) as well as the effects and costs of the pandemic, responses to the needs of the affected population had been slow.

Based on NDRRMC Final Report on Typhoon Odette,

- Odette has the next highest cost of damage next to typhoon Yolanda (2013).
- After Ondoy (2009), it has the second highest number of affected regions.
- o After Yolanda (2013), it has the highest number of affected individuals
- Odette has the highest preemptive evacuation
- After the peak of death tolls for Yolanda (2013), casualties have been consistently low but with noticeable increase again for Odette.
- Odette has the highest damaged houses.
- After Yolanda (2013), Odette has the next highest cost of damage.<sup>1</sup>

The project was implemented in three coastal barangay of Ubay, namely Cagting, Cuya, and Guintaboan. These barangays face the east from which most typhoons cross and make landfall.

The target groups participated in a previous project funded by Civil Society in Development (CISU) which left communication lines open and enabled the communities to appeal for help to ALTERPLAN, DIB's local partner organization. The target groups live several kilometers from the town proper, making it a challenging area for responders. Notwithstanding the rough roads, the Department of Social Welfare and Development (DSWD), the municipal government, and private organizations and individuals sent relief assistance, mostly food items such as rice and canned goods.<sup>2</sup>

The Project focused on improving the delivery of safe water, establishing communication and power hubs, and providing transitional housing assistance for the most at-risk members of the communities. These were identified by the target groups and situation reports as urgently needed.

A previous project gave DIB and ALTERPLAN access to relevant data on risk and vulnerability factors, especially in the aspect of shelter. Research found that before the typhoon hit, there were 174 houses built on the shoreline and sandbars of the three barangays. These bore the brunt of the strongest winds of the typhoon.

Damaged power and telecommunications infrastructure made the consultation for the proposed project focus and interventions with Ubay stakeholders challenging. The local partners, however, persisted. The active participation of community leaders in the preparation

\_

https://ndrrmc.gov.ph/attachments/article/4174/Final\_Report\_for\_Tropical\_Cyclone\_ODETTE\_2021.pdf

<sup>&</sup>lt;sup>2</sup> Interview with Cagting and Guintaboan representatives 10 January 2022.

of the project application was considered key to the effective implementation of the interventions.

On December 16, 2021, one community leader, Rowena Acuram, president of DUYAN or the Dungog Ugyanong Abag ni Nanay sent a message to ALTERPLAN to inform the latter about the devastating situation of their communities after Typhoon Odette. She received ALTERPLAN's reply after two weeks because there was no cellular signal in their community. To send text messages, she had to go to the town proper. She was told that help was coming and advised to wait. By February 2022, there were further talks with ALTERPLAN.

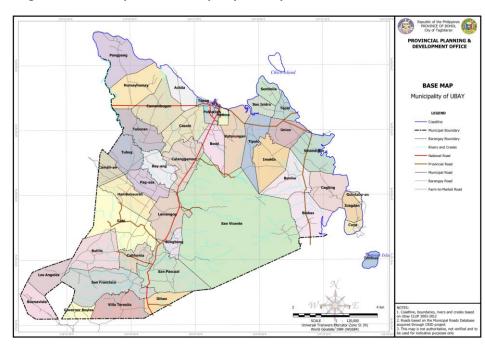


Figure 1 - Base Map of the Municipality of Ubay3

As earlier mentioned, the three target barangays—Cagting, Cuya, and Guintaboan—are all on the eastern coastline of the municipality. Among the 3 target barangays, Barangay Cagting had the highest population at 1,712, followed by Guintaboan with 676, and Cuya with 538. The average household size is 4.86. <sup>4</sup> Barangay Cagting has the largest land area with 599.79 hectares. Barangay Cuya and Barangay Guintaboan have land areas of 104.24 and 34.34 hectares respectively.<sup>5</sup>

 $<sup>^3</sup>$  https://ppdo.bohol.gov.ph/ppdofiles/Maps/MunicipalMaps/Ubay/BasicMaps/PDFs/Base%20Map-%20A4%20Landscape.pdf

<sup>&</sup>lt;sup>4</sup> Insert title of document. https://psa.gov.ph/sites/default/files/attachments/hsd/pressrelease/Bohol\_Table%204.pdf

<sup>&</sup>lt;sup>5</sup> Insert title of document. https://ppdo.bohol.gov.ph/maps/municipal-maps/2nd-district/ubay/thematic-maps/land-classification-map/

In a PSA Press Release on "Bohol Poverty Incidence First Semester 2018 is at 21.1 Percent", it states that "Eight out of every one hundred families and 10.3 percent of individuals in the province did not have sufficient income to meet their basic food needs." 6

# 3. General Assessment of the Project

# 3.1. Project Review with the Barangay Coordinators

The barangay coordinators recalled how they were at a loss where they can seek assistance for rice, clothes, and potable water after the typhoon. Two weeks after sending a message to ALTERPLAN, Councilor Hayo of Barangay Guintaboan received a reply from Che Prudente, Technical Associate of ALTERPLAN. A series of meetings started in February to discuss the needed short- and long-term interventions.

There were informal exchanges prior to the FGD on the suspension of the housing repair work in seven households in Barangay Cuya due to delayed delivery of materials by the supplier, or if delivered by the supplier's truck, the ordered materials are brought to a particular place only. Thus, the concerned household had to pick up and transport the materials themselves. For those who can, it was suggested that the concerned household collect the materials directly from the hardware.

The FGD with barangay coordinators covered a review of the project rationale, its components, number of beneficiaries per project component, and budget utilization, especially for the housing assistance. It also included the difficulties encountered during the project implementation.

# On improving the quality and supply of potable water

In Barangay Cuya, the deep well and the rainwater catchment provided water to 40 families. The maintenance was done by the community residents. To ensure the quality of water, taking a bath and washing clothes near the deep well were prohibited.

In Barangay Guintaboan, the two water sources, the deep well and the rainwater catchment directly provided for the daily needs of 20 households. These also benefited those residing in the so called "interior areas" (with around 200 families) during the peak of the dry season. During school days, about 200 students get their drinking water from these two sources. The barangay government and school principal designated personnel to maintain these two vital water sources.

<sup>&</sup>lt;sup>6</sup> http://rsso07.psa.gov.ph/sites/default/files/2019-PR12-003.pdf

In Barangay Cagting, there are two deep wells--one in Purok 2 serving around 100 households and another one in Purok 6, which ALTERPLAN helped install. At least 60 households from the area benefit from this water source as well as from neighboring barangays.

### On installation of power and communication hub

The solar-powered charging stations and the generator sets were of much use during the six to eight months of no power supply in the barangays. Aside from charging mobile phones, the generator sets were used during wakes so that community members could pay their respects to the dead show their sympathy to the bereaved family.

Even as the power supply had been fully restored in Bohol, the generator sets were still useful:

- In Barangay Cagting, the generator set has been assigned to and used by the barangay coordinator for it to remain in good running condition, as advised by the supplier.
- In Barangay Guintaboan, the generator set had to be repaired and has been used to power the barangay office's computer.
- In Barangay Cuya, solar charging station can be used from 5:00 a.m. to 10:00 p.m. The mobile phones were with the barangay office and coordinator.

### On the repair of select housing structures and cash-for-work assistance

The teams of coordinators from the three barangays agreed that the housing assistance provided was a huge help to the beneficiaries. A total of ₱4.24 million was made available for the housing of 100 families identified by the barangay governments as most vulnerable. Each household received an allocation of ₱42,400 to cover construction materials (₱36,200) and labor cost (₱6,000) for those who would follow the proposed housing design. Fifty-two of the 100 beneficiaries complied with the preferred housing design (see table below).

Barangay	Number of Beneficiaries (Families)	Total Allocation (in Philippine pesos)
Cuya	8	339,200.00
Guintaboan	11	466,400.00
Cagting	33	1,399,200.00
Total	52	2,204,800.00

There were 47 beneficiaries who did not follow the proposed housing design because they found the size inadequate for the household size and preferred to have partitions.

Barangay	Number of Beneficiaries (Families)	Total Allocation (in Philippine pesos)
Cuya	21	760,200.00

Barangay	Number of Beneficiaries (Families)	Total Allocation (in Philippine pesos)
Guintaboan	19	687,800.00
Cagting	7	227,225.00
Total	47	1,675,225.00

Each of the 47 households received ₱36,200 for housing materials. The Lead Coordinator of Barangay Cagting presented a breakdown of the amount received by each of the seven households ranging from P22,085 to P36,200, or averaging P32,460.70.

Households with partially damaged structures were given cash and housing materials worth P5,000 each.

Barangay	Number of Beneficiaries (Families)	Total Allocation (in Philippine pesos)
Cuya	65	325,000.00
Guintaboan	65	325,000.00
Cagting	70	350,000.00
Total	200	1,000,000.00

# 3.2. Self-Assessment of the Coordinators' Involvement

The coordinators expressed their appreciation and gratitude for the assistance extended by DIB and ALTERPLAN to their respective communities. Their experience as coordinators was, they added, rewarding. The lead coordinator of Barangay Cuya said that although he experienced difficulty in dealing with barangay officials, the work they did was not demanding.

According to the lead coordinator of Barangay Cagting, it was gratifying to had been able to prove to the barangay officials that the project would yield real and tangible results. Receiving appreciation from the community members whom she had helped through the project brought her a sense of accomplishment and satisfaction, a feeling all the other coordinators shared. However, she said that there were instances that the project would demand so much of her time that there would hardly be any time left for her family. She persisted nonetheless.



Figure 2: FGD with the Project Team of Barangays Cagting, Guinbatoan, and Cuya.

When asked if they would be interested to do a similar work, all the coordinators gave affirmative answers. The lead coordinator of Barangay Cagting quickly said that projects like this are of a big help to others.

# 3.2.1. On the Project Relevance

The project addressed the basic and urgent needs of the target project recipients.

# On access to adequate, clean, and potable water supply.

This component improved the quality and ensured the supply of drinking water after the typhoon. An estimated 360 households (or 1,750 individuals) directly benefited from the rainwater harvesting facilities and recharged dug wells. The rainwater harvesting facilities had roof catchments with storage jars, first flush pipes, and drum filters in the following barangays. The one installed at Purok 6 Day Care Center in Barangay Cagting was used by 66 households. It also provided water to the day care students. In Purok 1, 62 households got their water from the rainwater catchment facility installed by ALTERPLAN.

In Barangay Cuya, two rainwater catchments were installed in the basketball court. It was used by 38 households from the nearby community, the day care and barangay center office workers, as well as frequent barangay folks. In Purok 1, 30 households used the facility is connected to an open dug well.

The facility installed in the Guintaboan Public School benefited 40 households and the school, while another facility at the day care and the barangay office cum center provided water to not more than 60 households.

The FGD participants shared that for those with damaged houses they had to stay in the evacuation center at night to rest and sleep. For them to move on with their lives, during the day, they would go back to their damaged houses, retrieve and sort out their soaked-wet and mud-covered belongings. Their clothes were of no use, and very dirty. They had no money to buy soap, and there was no water to wash their clothes.

For some, it took them two weeks to wash up their dirty clothes, fetching water using pails from two deep wells, or from the rainwater catchment.

Residents use the water from the deep well for washing clothes or taking a bath, but for drinking, they buy purified water. They were wary of drinking the water from the deep well because it is near a septic tank.

There are four rainwater catchments, three of which were provided by a Japan-based NGO Ako, Ikaw Foundation located in the interior areas. The foundation also helped the barangay in their mangrove planting efforts.

She shared that arrangements are being made with Barangay Juagdan for a joint agreement to provide water supply to the barangay, since the residents are solely dependent on deep wells and rainwater catchments in their areas for their water needs. She said this project will greatly benefit adequate and potable water to her barangay constituents.

To recharge ground water supply, the open dug wells in Purok 1 in Barangay Cagting and in Purok 1 in Barangay Cuyawere improved. These were lined with concrete hollow blocks and the floors covered with concrete slab.

In Barangay Cuya, water is filtered from the catchment and flows to the deep well to replenish the water supply. Water that is pumped comes from the catchment or the deep well.

### Distribution of materials and orientation on drinking water disinfection at point of use

Jerrycans or water containers were distributed to a total of 859 households: 522 in Barangay Cagting, 140 in Barangay Cuya, 188 in Barangay Guintaboan.

Recipients were taught on how to properly use water purification tablets to ensure the cleanliness of water stored in jerrycans.

The FGD participants from the three barangays were all appreciative of the jerrycans which they now use to store water. However, some had stopped using water purification tablets because of their aftertaste.

In Barangay Cuya, the 140 households who received jerrycans for their respective home use had limited mobility when lockdowns due to the pandemic were imposed. Many of them dug wells for water, which despite the area's proximity to the sea, was not salty.

# On access to alternative power supply and internet connection resulting in the establishment of power and communication hubs.

## 1. Provision of solar-powered charging stations

The alternative power supply and internet connection benefited all households in the three barangays which did not have electricity for at least six months after the typhoon.

The members of the Dungog Ugyanong Abag ni Nanay (DUYAN), a local organization composed of mothers in Barangay Cagting, were among the recipients of water jugs, water purification tablets, and a solar-charging station with a generator provided by ALTERPLAN.

The charging station in Barangay Cuya was lodged at the Barangay Center care of Brgy. Cuya, while the barangay government of Guintaboan supervises the one placed at the barangay center.

For eight months, the solar-powered charging stations were used for free to charge cell phones, flashlights, and batteries. Up to the first week of December 2022, there were still a few households without power connection who use of the charging stations.

Back-up generators were placed near the charging stations in each of the three barangays. These were entrusted to the same groups taking care of the solar-powered charging stations.

The generators were used during wakes of community members and as a back-up power source to the solar-powered chargers on rainy days.

In Barangay Guintaboan, the charging station was used to power the computer of the barangay office and to charge cell phones and batteries. This was used from February to August 2022.

Barangays Cagting and Guintaboan received a mobile phone each which was used by barangay residents to contact relatives about their situation or to ask for help. In Barangay Cuya, the satellite phone helped barangay constituents contact their relatives wherever to inform them of their situation or seek for assistance.

# On access to safe and secure housing through transitional housing and housing repair assistance

Housing assistance ranging from ₱36,000 to ₱46,000 were provided to the most vulnerable households, i.e., those with single parent or elderly household head, with many children whose housing structures were either totally or partially damaged, and who have stayed on a private property for two to three years.

Housing assistance were given to 99 households whose houses were totally damaged by the typhoon. These were in the forms of labor and construction materials; materials only, or cash reimbursements for materials purchased.

- 1. Barangay Cagting 40 households
- 2. Barangay Cuya 29 households
- 3. Barangay Guintaboan 30 households

Two hundred households whose houses were partially damaged received construction materials or cash reimbursements up to P5,000 each.

4. Barangay Cagting – 70 households

- 5. Barangay Cuya 65 households
- 6. Barangay Guintaboan 65 households

# Provision of cash-for-work for community members working as laborers, and the opportunity for further knowledge and skills enhancement on house construction

Most of the destroyed houses in Barangay Cagting were made of light materials. Forty households had totally damaged structures, and 70 households had partially damaged houses or lost their rooftop or part of their house. They spent their Christmas in makeshift houses and several more months to keep them warm and protect them from the elements as they had no resources to rebuild their houses using sturdier materials.

All the eleven (11) FGD participants from Barangay Guintaboan had their houses totally or partially damaged after the typhoon. As they rebuilt their houses in the day, they spent several in the nearby school, which served as the evacuation center during the typhoon. Those living far from the school, they resorted to building makeshift structures using materials left behind.

A barangay kagawad in (name of barangay) did a quick survey of the households which she reported to ALTERPLAN.

She identified 57 households with totally damaged houses. Many of the 130 households with partially damaged structures lost their roofs due to strong winds.

One FGD participant shared that she borrowed P20,000 from ASA Philippines, a microfinance institution operating in the area. She used the loan to reconstruct their house. The livelihood assistance she received helped her repay the loan.

There were other organizations that extended support to typhoon-affected families:

- 1. The local government of Ubay provided ₱1,000 to each family whose houses were totally damaged.
- 2. ECOWEB<sup>7</sup> or Ecosystems Work for Essential Benefits Inc. distributed sheets of corrugated iron roofs and nails donated by the Church of the Latter-Day Saints.
- 3. IKAW AKO Foundation provided construction materials, but the recipients had to shell out money to pay for the laborers.
- 4. ALTERPLAN assisted 30 households. The housing assistance for those whose houses were totally damaged included toilet bowls. To cover the cost of hiring at most three laborers, ALTERPLAN allocated ₱6,000 and the remaining P36,000 was for the house construction.

\_

<sup>&</sup>lt;sup>7</sup> https://ecowebph.org

Admittedly, the financial assistance they received could not cover all the expenses of rebuilding their houses. This forced some to borrow money.

Project beneficiaries in Barangay Cuya appreciated the housing assistance of ALTERPLAN. This helped them continue staying in their damaged houses; others stayed for a month with neighbors or relatives house or stayed at the chapel or school. Having completed their houses, they can now sleep soundly and do not worry about leaking roofs.

One FGD participant and recipient of the cash assistance said that she had to borrow amount of P20,000 from a moneylender who charged 20% interest to augment the P15,000 worth of housing materials and P20,000 cash from ALTERPLAN. She repays the loan using her and her husband's income and money sent by her child working in Manila.

One participant said that she received P36,000 for the purchase of various construction materials, such as "Amakan"<sup>8</sup>, GI sheets, cement, pieces of wood, and "Bon Bon"<sup>9</sup>. She and her husband worked together to put up their house. Delays in the delivery of construction materials were reported to have hampered the rebuilding of the beneficiaries' houses.

All the 14 households with totally damaged houses initially agreed to follow the model house design. However, only eight decided to pursue the original plan, therefore receiving t he full amount of ₱42,200. One participant admitted that she was undecided with the proposed ALTERPLAN design until it was too late. Thus, she was one of the 16 households who received construction materials worth P36,200.

Cash assistance also came in the form of a refund. Five households received a refund, four (4) received P20,000 plus, and one (1) got P19,000, and all received construction materials.

The FGD participants found the use of clay in making houses as interesting. It seemed to them as useful, sturdy to withstand the strong rain and wind, and thus, relevant to their situation being in a typhoon-prone area.

One of the completed houses used mud clay for a portion of the outer wall. The clay, however, was sourced from another barangay.

# 3.2.2. On the Project Efficiency

On access to adequate, clean, and potable water supply.

<sup>&</sup>lt;sup>8</sup> Amakan, also known as sawali in the northern Philippines, is a type of traditional woven split-bamboo mats used as walls, paneling, or wall cladding in the Philippines. They are woven into various intricate traditional patterns, often resulting in repeating diagonal, zigzag, or diamond-like shapes. Wikipedia

<sup>&</sup>lt;sup>9</sup> https://materialdistrict.com/article/an-edible-building-material-made-of-food-waste/

- The rainwater catchments and the open dug wells directly provided water to at least 360 households or 1,745 individuals. This estimate excludes households in neighboring areas who get water from these sources especially during the dry season.
- The jerry cans that were distributed to 850 households or 4,131 individuals covered 100% population of each of the three barangays based on the data of the Provincial Planning and Development Office (PPDO) of Bohol.

# On access to access to alternative power supply and internet connection resulting in establishment of power and communication hubs.

- The project provided alternative source of electricity and internet connection to at least 219 households (the number of direct beneficiaries of the rainwater catchments in the three barangays). These power and communication hubs benefited families who had to charge the battery of their cellphones, flashlights, and portable lamps, among others. Informants claimed that at one time, these hubs were able to serve all of the estimated 606 households in the three barangays.
- The generator sets were used several times to provide power supply for lights used during wakes.

### On access to safe and secure housing

The total budget utilized for housing assistance was ₱4.8 million, benefiting 299 households or approximately 1,453 individuals, or an average household assistance of P16,000 per household. For the 99 households who received the maximum amount of assistance of P42,000, responses of the FGD participants suggested that they were able to construct complete comfort rooms and will therefore be less likely to experience sanitation-related health problems.

In terms of the efficiency of construction work, it took at most two weeks for households with totally damaged housing structures to construct their new houses. This is the maximum timeframe set by the project. Households who followed the proposed design, which has a floor area of 14 x 16 square feet, were given ₱42,000 each: ₱36,000 for purchasing housing materials and ₱6,000 for paying two full-time construction workers. It is said that Amakan "can last up to ten years", and if maintained well up to twenty years.

The size of the proposed housing design proved inadequate for households with more than four members. For example, one FGD participant from a household with eight members had to have their own design to accommodate all of them in the house. With this, the family received only the budget allocation for the construction materials, and any additional construction materials and the labor cost had to be borne by them.

# 3.2.3. On the Effectiveness of the Project

All the FGD participants were thankful to ALTERPLAN and DIB for the assistance extended most especially to those hit hardest by the typhoon. They said that moving in to their new houses

gave them a deep sense of security and safety. Had there been no housing assistance, they said they would still be living in makeshift structures months after the typhoon. Having their own comfort rooms was the most appreciated by the project beneficiaries.

# 3.2.4. On the Impact of the Project

By improving the quality and quantity of drinking water, the project resulted in better health and sanitation conditions in the three barangays and neighboring communities. It also provided communities a more sustainable access to adequate water supply by allowing them to store rainwater and replenish the communal open dug wells. To a certain extent, the project contributed to addressing the limited access to adequate and clean water which has been a priority concern of the provincial government.<sup>10</sup>

Residents even from the far-flung puroks trekked on foot or rode motorbikes to reach the charging stations. It can be said that all of the 558 population of Brgy. Cuya, and 676 population of the Brgy. Guintaboan, at one time or another benefited from the use of the charging stations. In Barangay Cagting, it can be surmised that the solar-powered charging station served about almost all the RWC users and Jerrycan recipients

The project's provision of housing assistance helped protect 299 households from the elements, especially those with vulnerable members such as elderly and children. The poor marginal fishers, subsistence farmers, and landless rural workers would have experienced much difficulty to source funds to repair or construct their housing structures.

Part of the Project's housing assistance was the construction of toilets for 99 households, whose houses were totally damaged by the typhoon. This intervention was an initial step to address health and sanitation concerns, and at the same time, helps prevent groundwater contamination.

# 3.2.5. On Project Sustainability

All the three project components were monitored. They also involved supervision, training, and coaching of the persons tasked to oversee the use and maintenance of the equipment, such as solar-powered charging stations.

The water facilities were supervised by organized barangay-based women associations or the barangay government unit to ensure proper use and maintenance. Simple policies and procedures were formulated for effective project management. For example, residents are not allowed to take a bath or do their laundry near the deep wells to ensure proper maintenance and protection of the groundwater supply in Barangay Cagting and in barangay Cuya.

<sup>&</sup>lt;sup>10</sup> https://ppdo.bohol.gov.ph/profile/bohol-facts-and-figures/bohols-development-challenges/

The involvement of two to three laborers, usually immediate family members, in putting up the housing structures provided an opportunity to learn or enhance skills and practices in construction work. They also received cash for the work done.

The training and technical assistance extended to the lead and assistant coordinators was crucial in the sustainability of the project impact. With the help of ALTERPLAN, they developed or enhanced their capabilities in doing guided rapid community assessment on the damages caused by the typhoon, planning projects, monitoring and supervision, building and sustaining linkages with local government officials and resource institutions, and networking with suppliers of construction materials. These activities, the FGD participants said, made them more committed to serving their communities.

# 3.2.6. Overall Assessment of the Project

The Project has satisfactorily achieved its Objectives and accomplished its Expected Results. The Project has addressed the major post-disaster concerns – access to adequate supply of clean water; access to resources to build or rebuild damaged housing structures, and access to alternative power sources.

The Project had an innovative and integrated approach of providing clean and adequate supply of water from source to user. It promoted the maximum use of rainwater through construction of catchment structures as well as constructing deep wells for the re-charging of groundwater systematically from the rainwater catchments. It provided sturdy and well-covered containers to store the water. It provided Aquatabs to clean the water of impurities and germs. Thus, water is safe to drink even by children.

The provision of housing materials with toilet bowls to the most vulnerable sector is an immediate and strategic response of ensuring their wellbeing from further exposure to natural elements. It is also a health and sanitation safeguard for the family and the community as a whole.

The provision of charging stations for cell phones, rechargeable lamps or whatever gadgets and generator sets to the communities somehow put some semblance of normalcy to the residents. They can use their cellphones to contact relatives on their family condition, and possibly seek some help to help them tide over till they have recovered, or have some semblance of light in their homes at night.

The Project responded to real and felt community needs.

# 4. On Areas to Look Into

# 4.1. Project Level

The coordinators were effective in eliciting and sustaining community support, project monitoring, and linkage building. They had difficulty, however, in keeping records of orders and

payments made to the suppliers of construction materials. One coordinator said that he relied heavily on ALTERPLAN's finance officer in handling and consolidating records as well as in writing financial reports. A certain level of adeptness in recording transactions could have been developed among local project staff members.

The supporting documents were readily referred to but for some information on the summary of project expenses, the Project Team spent some time to do the computations.

With reference to the. the selection of households to be assisted, the FGD participants cited that the criteria used was not communicated clearly to the beneficiaries as well as to the community at large. Some FGD participants shared that there were families who had totally damaged structures but were not selected and assisted.

# 4.2. Other Needed Interventions

Livelihood assistance surfaced as a pressing need among project beneficiaries. Although the housing assistance was extremely helpful, having no stable sources of income was a big hardship for some.

The following concerns were likewise raised:

build soils.

- In Barangay Cagting, the care and maintenance of the mangrove area in Purok 2 might be compromised as new settlers from the sandbar in Purok 7 come in. The improvement and protection of the open dug well in Purok 2 would require an estimated budget of ₱30,000.
- In Barangay Guintaboan Water is a real need for the barangay residents that a possible source identified was accessing and drilling at water source in Barangay Juagdan (An adjacent barangay) as identified by the Water Resource Center of the University of San Carlos. This will entail laying of a 1.5-kilometer long water pipe to Guintaboan, and ensure recharging or replenishing groundwater at water source in Juagdan.
- In Barangay Cuya, the repair and maintenance of the rainwater harvesting facility in Purok 3 would need ₱35,000.
- Many more households with totally damaged houses need assistance: 17 in Guintaboan, 17 in Cuya, and more than 100 in Caigting.
- To promote mangrove<sup>11</sup> stewardship, incentives can be offered and sanctions imposed by concerned local government unit.

<sup>11</sup> Mangroves provide natural infrastructure and protection to nearby populated areas by preventing erosion and absorbing storm surge impacts during extreme weather events such as hurricanes. They are also important to the ecosystem too. Their dense roots help bind and

- For the rural health unit to test the water quality in open dug wells regularly and competently, they should undergo continuing capacity-building and education.
- A dialogue between and among concerned stakeholders regarding construction of sea wall would be helpful in controlling waves and coastal erosion.

# 5. Photos and Images Taken



Figure 3: Rainwater catchment attached to the Barangay Center of Guintaboan.



Figure 4: Rainwater catchment (below) attached to the Public School of Guintaboan but within the

**Barangay Center compound.** 



Figure 5: An aerial shot of Purok 1 community, users of the Rainwater Catchment put up by the

ALTERPLAN – DIB Project.



Figure 6: An aerial shot of a part of Barangay Guintaboan fronting the Barangay Center



Figure 7: Rainwater catchment in partially damaged Covered Court of Barangay Cuya.



Figure 8: A closer shot of the rainwater catchment in the Covered Court of Barangay Cuya.



Figure 9: Jerry cans waiting for their turns to fetch water from the improved dug well in Barangay Cuya.



Figure 10: Pointing out the mud clay on the outer wall of the housing structure



Figure 11: Completed structures of once totally-damaged houses.



Figure 12: FGD participants gathered in front of the completed housing structures.