

CASE STUDY

PHILIPPINES 2016–2020 / TYPHOON HAIYAN

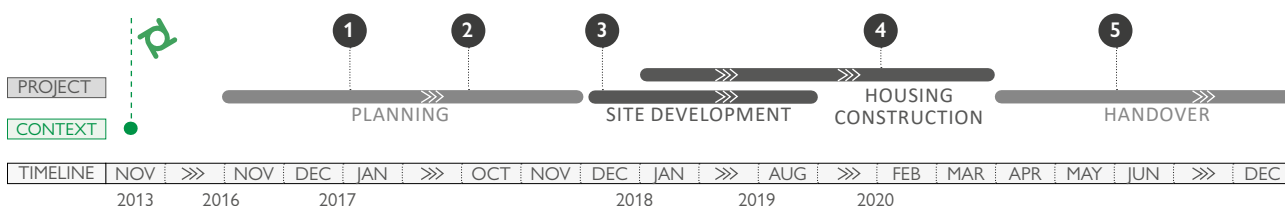
KEYWORDS: Community engagement, Permanent housing, Resettlement, Settlement Planning

CRISIS	Typhoon Haiyan (Yolanda), November 2013
PEOPLE AFFECTED	3,424,593 HHs (16,078,181 individuals) affected*
HOMES DAMAGED/ DESTROYED	518,878 homes partially damaged 493,912 homes totally destroyed**
PROJECT LOCATION	Tacloban, Philippines
PEOPLE SUPPORTED BY THE PROJECT	883 HHs (4,640 individuals)
PROJECT OUTPUTS	883 permanent homes constructed (connected to water, drainage and sanitation systems, community facilities, and a road network) Land tenure support provided to 883 HHs
SHELTER SIZE	A: 28m <sup>2</sup> (524 HHs) B: 35m <sup>2</sup> (240HHs) C: 58m <sup>2</sup> (88HHs) D: 59m <sup>2</sup> (31HHs) (The shelter size was dependent on household size)
SHELTER DENSITY	Average 5.5m <sup>2</sup> per person
DIRECT COST	A: USD 5,840 B: USD 6,030 C: USD 8,780 D: USD 8,900
PROJECT COST	USD 15,000,000
* Source: National Disaster Risk Reduction and Management Council (NDRRMC), Update 17 April 2014	
** Source: Philippines Shelter Cluster, late 2014, Analysis of Shelter Recovery	



PROJECT SUMMARY

The Anibong Resettlement Project (ARP), based in Tacloban, Philippines, supported 883 of the most vulnerable families from the Anibong community to relocate from a 'no build zone' and restore their lives and livelihoods in a safe, sustainable, and dignified community. The new community provides permanent homes connected to essential infrastructure and services, and residents were supported to obtain land titles. ARP families were engaged in every phase of creating their new community, including in site selection, settlement planning, housing design and self-governance post handover.



**8 Nov 2013** Super Typhoon Haiyan, wreaked devastation across the Philippine islands of Leyte and Samar.

- 1 Jan 2017: Land purchased.
- 2 Oct 2017: ARP plans approved by community.
- 3 Dec 2017: Construction began.
- 4 Feb 2020: First residents started moving in.
- 5 Jun 2020: Resettlement community handed over to Homeowner's Association and relevant government agencies.



The new development, which was built for families moving from Anibong, was named DREAMville by its new residents.

## CONTEXT

Tacloban City, located on Leyte Island in the Philippines, is exposed to constant geological and climate-related hazards such as earthquakes, floods and typhoons. The economy is especially vulnerable to natural hazards due to its dependency on climate-reliant activities such as agriculture and marine resources.

### SITUATION BEFORE THE TYPHOON

Before the storm, the district of Anibong, was where 2,561 households called home. Located on a strip of coastal land along the northern part of Tacloban, for generations, families informally settled along the coastline, which was mostly designated as unclassified public land (not available for private ownership or residential housing). The housing in Anibong was very dense and unsafe, and the area is subject to earthquakes, high winds, flooding, and outbreaks of fire. The majority of households living in Anibong District were dependent on their daily income to cover expenses and had very little formal savings or equity. More than 80% lived on below half of the national average income (USD 250 per month).

### SITUATION AFTER THE TYPHOON

Super Typhoon Haiyan, known locally as Yolanda, wreaked devastation across the Philippine islands of Leyte and Samar on November 8, 2013, claiming more than 6,300 lives and destroying the majority of homes as well as community infrastructure including piers, markets, water taps and septic tanks. Local shops, fishing boats, fish cages, tricycle taxis and other livelihoods equipment were also destroyed. In Tacloban, around 90% of the structures were destroyed or damaged. After Super Typhoon Haiyan, the national government enforced 'no build zone' and 'no dwell zone' policies for all housing in coastal areas. With this declaration, the Anibong community was facing forced eviction. More than a year after the storm, 14,000 households in Tacloban were still in need of permanent housing, including much of the population of Anibong whose makeshift shelters built after the typhoon were much weaker than their previous homes and were now located in a no build/dwell zone.

### PROJECT GOAL AND APPROACH

The organization initiated community meetings in the Anibong district in 2014, beginning the community consultation on resettlement, which included key informant interviews, visioning exercises, focus group discussions and a household census. Residents noted concerns over the high occurrence and strong impact of disasters, their limited means to improve their living conditions, and frustration over a feeling of disenfranchisement and a lack of understanding their rights and options. The intended outcome of the Anibong Resettlement Project (ARP) was to build a safe, sustainable, resident-governed community as a model for other low-income urban areas in the Philippines affected by crises.

## COORDINATION

Following the organization's decision to support 900 households in relocating to a safe site, a multi-stakeholder MoU between the organization, Tacloban City Office, Archdiocese of Palo and other National Agencies was signed in 2017. Throughout the design, construction and handover phases, the organization closely coordinated with the City Mayor's Office, City Housing, National Housing Authority, local water department, and local electrical company. The organization remained in close coordination with the Shelter Cluster due to the various permanent housing projects being implemented by the National Housing Authority (NHA) and other INGOs to avoid overlap of target areas, project participant lists and support services.

### SITE IDENTIFICATION

The land for the resettlement community was purchased by the organization in 2017. The resettlement site is located in Tacloban City, in the barangay (neighborhood) of Bagacay, 4.5 miles from Anibong district. The site is located close to the city centre and has access to public transportation. As the land is further from the sea, the organization supported fishermen to have access to new trades such as vending, farming and transportation.

### TARGETING

To ensure a transparent selection process, the project team assisted the barangay community bodies to form Barangay Selection Committees (BSC) that were responsible for overseeing the selection process. The BSC consisted of members from the Anibong district community body, the shelter committees of the original barangays, and representatives from various groups, including youth, senior citizens, Persons with Disabilities, women, and religious groups. Based on the agreed-upon criteria, the BSC publicly posted a list of project participants for feedback from the community and validated any feedback collected to finalize the list.



Families were engaged in meetings on settlement planning, so that they were able to help shape their new community.

## COMMUNITY ENGAGEMENT

ARP families were involved in each aspect of the design phase including developing project participant selection criteria, resettlement site location, the community plan, housing designs, and electing their self-governed Homeowner's Association (HOA) leaders. Project participants selected who their new neighbors would be using social network analysis. The families emphasized that the housing designs should be strong enough to endure major disasters as well as accounting for the specific needs of Persons with Disabilities and the elderly.

## HOUSING DESIGNS

Four main housing designs (2x single story typologies, 2x two story typologies) were developed and offered to families based on family size and their specific needs. The shelters for Persons with Disabilities and elderly people were located on larger plots of land that would allow families to build ramps if needed. Homes were designed and built as earthquake-resistant houses and in compliance with the latest National Structural Code of the Philippines, revised to cope with Haiyan gust windspeed of up to 268kmph.

## COMMUNITY LEVEL INTERVENTIONS

Consultation and participatory activities were undertaken to understand the spatial planning context, and the settlement plan was developed with consideration and integration of amenities, housing and infrastructure. The organization donated part of the land to the Department of Education for the construction of a permanent school and to the host barangay for the construction of a basketball court and public market – facilities that would benefit both the new community and neighboring communities.

The project aimed to take a holistic, integrated and sustainable approach, with dedicated teams supporting in relation to livelihoods, land tenure, HOA establishment and training, DRR and Social and Behavior Change Communication training, and the organization's Savings and Internal Lending mechanism.



Housing construction was carried out by local contractors, with oversight and quality control from the organization's construction team.

## SECURITY OF TENURE

The project supported households to obtain their own land title through one of three different routes (grant, cash payment or loan program). The average cost per plot was USD 1,200.

- The organization assisted 750 households in securing loans through an affordable housing program with low interest rates and minimal monthly payments based on each family's monthly earning. The loans can be repaid over 10-30 years, with a monthly payment starting at USD 10 per month.
- 80 households were able to pay the amount in full to purchase their plot directly.
- 53 households were granted their plot by the organization.

## CONSTRUCTION PROCESS

Through a bidding procurement methodology, the organization hired 30 local construction contractors to complete the site development, house construction, drainage, water and sanitation systems, road network and community facilities. Hiring multiple small contractors for construction proved to be an effective and flexible modality for delivering construction. The organization's technical team of engineers, architects, and foreman closely monitored the quality and progress of the construction. Construction materials were sourced locally.

The project originally planned to use a community-driven construction approach, whereby the ARP families would be responsible for constructing their own homes. This approach was initially planned because of an assumption that involving families in the process of building their own homes would increase the sense of ownership and community. However, the organization conducted a risk analysis that showed this approach would be too costly in terms of time and budget requirements. Given the scale of the project, and the many logistical challenges of coordinating and organizing over 800 households to build their own homes on the same site to meet safety and quality standards, the community-driven construction approach was deemed unrealistic. The organization shifted to a contractor-led approach to ensure the quality, budget and timing of the construction could be maintained.

## HANDOVER

Upon completion, handovers were carried out with residents, the HOA, Tacloban City Government, Electrical and water companies and the host barangay. The community elected HOA is comprised of leaders from each of the established community based organizations, which were intentionally formed to represent the needs of specific groups, including the community's women, elderly individuals, youth, construction workers, fisherfolks, and Persons with Disabilities. The purposeful inclusion of vulnerable groups ensures their voices, special interests and needs are heard and met. Over half of the leaders elected are women.



## MAIN CHALLENGES

**Land Tenure.** The land tenure process was very complex and required significant time and human resources to complete. The documentation, timelines and fee requirements originally provided by each government unit were not consistently followed by the government bodies. As the timelines for the land tenure process extended beyond the project end date, a loan company was hired and pro-bono law firm identified, to provide land title support after the project ended.

**Weather.** Unexpected non-stop daily rainfall (during the dry season) hindered the site development works. Heavy equipment was idling and access road condition to the site became unpassable causing delays on the delivery of construction materials. Due to prolonging delays during this period, the organization decided to start the housing construction while the site development works were still on-going.

**Labor and material shortages.** Because of the Government's "build build build" project, many experienced contractors were working on government projects, resulting in shortages of construction manpower and supply of construction materials in the city and nearby provinces. Splitting contracts into smaller values proved to be more manageable in terms of materials and labour acquisition.

**Quality Control.** Most of the local contractors struggled with reaching the organization's Quality Assurance and Quality Control (QAQC) requirements. To ensure the quality control of the local contractors, the organization's construction team comprised of eight full time engineers/architects, five foremen and Shelter Technical Advisors providing oversight, who continuously mentored, monitored and supervised the compliance with QAQC requirements.

**Contractor Management.** Some contractors pulled out before completing their contractual obligation. The organization was able to manage the situation by amicable contract termination by communicating with the contractors about the contractual obligations, timelines and implications of breaking contract.

**Procurement System.** The bidding processes required more time than expected. Instead of redoing the bid process for every batches of contractors, the organization transitioned to offering smaller value contracts to existing contractors who had demonstrated quality performance by using the rates obtained during the competitive bidding process.

## WIDER IMPACTS

The project **engaged over 1,650 skilled and non-skilled workers in employment** through construction contractors.

The prioritization of accessing the local market stimulated the local economy, created livelihood opportunity and built the capacity of local laborers by increasing their knowledge on build back safer construction techniques.

The establishment of the Homeowner's Association (HOA) enables the community to be resident-governed. The project provided **support on land tenure, enabling all households to obtain their own land title**. As a requirement of the land title process, the organization supported the families in navigating the government agencies to obtain national IDs, tax identification numbers, birth certificates, and marriage certificates. For many, this was the first time they held a **nationally recognized ID and official documents which allows them to qualify for government subsidy programs**.



Local workers were engaged through small construction contractors for the Site Development of DREAMville and were supervised by the organization's technical team.



There were four main typologies of house design, with size of each family determining the size of home that they would move into.

## STRENGTHS, WEAKNESSES AND LESSONS LEARNED

### STRENGTHS

- ✓ **Durability of shelter solutions.** The project provided permanent housing in a safer location, as part of an integrated resettlement program.
- ✓ **Security of tenure.** Households were supported to obtain land title through three different routes (grant, cash payment or loan program).
- ✓ **Strong community engagement in settlement planning.** Community participation in the design of their new community and plot matching using social network analysis enabled the community to maintain existing social fabric.
- ✓ **Training and capacity building.** The organization trained, mentored and coached the HOA in community estate management.
- ✓ **Integrated approach.** The project took an integrated approach, with a strong focus on social cohesion and the longer-term sustainability and resilience of the community.

### WEAKNESSES

- × **Implementing a large scale, multi-sector housing project without a pilot.** Having no experience of undertaking similar projects previously, the organization would have benefited from piloting housing construction to help to improve program design and plan for more realistic timelines and costs.
- × **Rainwater harvesting design.** The original design of overhead household tanks had a fault which caused the tanks to leak. The design was revised before the families moved in, but caused a time delay and budget increase due to the reconstruction.
- × **Lack of early coordination with the local water department** during the design phase led to the need for costly revisions to the water system to meet local regulations. This was necessary to ensure a water connection to the water company and handover of the water system.
- × **The time needed for the project implementation was underestimated.** The amount of time needed for implementation should have been analyzed better and should have included adequate contingency time for unforeseen circumstances.



Plot matching and social network analysis ensured that the existing social fabric was maintained.



The project supported households to obtain their land title through either grants, cash payment, or loan.

### LESSONS LEARNED

- **The need to pilot.** Construction of the 883 houses was happening so quickly, it did not allow for the project to revise housing designs when a problem was identified. Piloting housing designs would have remedied this challenge.
- **Importance of government buy-in.** Coordination with government from start to finish allowed for problems to be avoided or addressed and allowed for smooth handover of the resettlement community. However, the risk remains that a lack of government sense of ownership of the development could impact the community's future inclusion into government support services and could impact infrastructure repairs and maintenance of components such as the drainage system, slope protection and water system.
- **Securing land title is a very complex process** and requires a significant amount of time and staff resources to complete.
- **Transition support.** A fixed period of continued livelihood, community management, land tenure support, and repair of minor construction issues after families had moved in would have enabled smoother transition in handing the development over to residents.