

LEARNING FROM URBAN TRANSITIONAL SETTLEMENT RESPONSE IN THE PHILIPPINES: HOUSING, LAND AND PROPERTY ISSUES

Reflections from
CRS' 2011-
2012 Post-
Tropical Storm
Washi (Sendong)
Response in
Cagayan de Oro

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INTRODUCTION

WHY URBAN HOUSING, LAND AND PROPERTY

Urban settlements are a dense concentration of people living together within a limited land area. There are many benefits in operating shelter programs in an urban environment, one of them being the amount of resources and networks that one can tap into. The work environment is complex, thus there is a vital need for humanitarian actors to coordinate, cooperate and partner with multiple stake holders. The complexity of Housing, Land and Property (HLP) issues in humanitarian responses often poses a barrier to the effective delivery of emergency and early recovery shelter operations.

PUBLICATION OVERVIEW

This publication documents Catholic Relief Services' (CRS) experience in implementing an urban transitional settlement program in response to the destruction caused by Tropical Storm "Washi" in Cagayan de Oro in the Philippines. It offers reflections and a monologue of questions to ask oneself when faced with similar urban disasters to improve future transitional settlement and land programs, especially for those who do not have access to their own land. It is a result of CRS' first-hand experience, site visits, studies of internal and external documentation, and interviews with



Covered courts used as evacuation centers
Photo by Seki Hirano/CRS.

shelter recipients, government officials and community members during the 2011–2012 response.

This paper wishes to contribute to the knowledge base addressing HLP issues in emergencies. It offers our experience from a transitional shelter and settlement program in an urban setting, which provided safe and dignified living conditions rapidly with less HLP complexities compared to permanent housing. Nevertheless, all phases of sheltering (emergency, transitional and permanent) need land, and we have learned that unless one starts to address land-use issues from day one, even for transitional settlements, they may become a bottleneck in assisting the affected.

BACKGROUND

Tropical Storm Washi, locally known as Sendong, made landfall on December 16, 2011, in Surigao del Sur province on the northeastern coast of Mindanao. The tropical storm unleashed heavy rains, which caused flash floods to a height of two story buildings and landslides across the region. The greatest impact was seen in the cities of Cagayan de Oro (CDO) and Iligan City in Region 10 (Northern Mindanao), where the flash floods struck in the early hours of the morning, giving residents little warning and killing many people as they slept. The Philippine government reported 1,470 people killed, 1,074 missing and 2,020 injured.

CRS' transitional settlement response initially focused on Cagayan de Oro City, where 228,728 people out of a population of 602,088¹ were directly affected by the flash floods. Some 18,436 houses were damaged out of which 5,801 were totally destroyed and another 12,635



Destruction left after flash floods following Tropical Storm Washi Photo by Charisse Mae Borja

partially damaged.² As of June 2012, CRS' target is to assist 1,279 households in Cagayan de Oro and 544 in Iligan City totaling 1,823 transitional shelter units.

BACKGROUND OF THE AFFECTED AREA

The Cagayan River experienced major floods only intermittently in 1916, 1952 and 2009 but without the catastrophic destruction experienced during Washi. With Cagayan de Oro's heavy growth over the decades, people gradually settled a large portion of the alluvial plains where sediment was deposited along the river banks. As a result, the flash floods destroyed a large portion of the city center of Cagayan de Oro.

² Cagayan de Oro Department of Social Welfare and Development report June 13, 2012.

Macasandig and Isla de Oro were the worst affected urban barangays (smallest administrative division). Macasandig, a mixed commercial and residential area near the city center with more than 30,000 people, was home to local food manufacturers, market vendors, store workers and local transportation employees of mixed income ranging from the poor in shanty areas to middle class in titled subdivisions and apartment buildings. The most heavily affected were the poor who resided informally in makeshift shelters along the river banks, but also many working and middle class families who were renting. Cala Cala, an area in the river delta within Macasandig with 500 families living in shanties, was completely obliterated. Macasandig's mixed zoning meant that poorer families often settled in vacant lands next to well-built middle class houses. Many high-value

¹ <http://www.cdodev.com>

houses are also found in Macasandig. The families who live in those houses have children who study at nearby high-end schools such as Corpus Christi School, Xavier University Grade School, Lourdes College Grade School, Oro Christian School and St. Mary's School, all of which accommodated many of the affected during the emergency period.

CAGAYAN DE ORO-SPECIFIC CONTEXT

Every emergency response has its own context and specificity; this response can be seen to have had many favorable conditions for a rapid and high-quality response as listed below:

- Significant national attention and resources made available.
- Engaged national and local authorities.
- Ample funding pledges from national and local private companies, individuals, government funding, international donor and NGO donations.
- The Philippines is a lower-middle³ income country with a higher level of education.
- Cagayan de Oro City and the national government agencies have organized administrative systems in place.
- The Philippines has experience in the cluster system due to recurrent natural disasters.

- Mid-scale disaster.
- No conflict or security issues in Cagayan de Oro.



Map of the affected area of Mindanao, Philippines

Even with these conditions, this case study presents the complexity and challenges faced when addressing Housing, Land and Property issues through this urban transitional settlement response and shares experience in the following:

- Locating program within the overall shelter and settlement response post-Tropical Storm Washi (Section 1.5)
- Working with the consequence of re-zoning affected area (Section 2.0)
- Understanding and working with new zoning rules such as “no-build zones” in a weak policy environment (Section 2.1)
- Acquiring land for transitional settlements (Section 3.0)
- Coordinating with local government structures and understanding city politics and administration (Section 4.0)
- Identifying, selecting and prioritizing the affected (Section 5.0)
- Adopting appropriate transitional shelter design (Section 6.0)
- Adopting appropriate transitional WASH facilities (Section 7.0)
- Setting up camp management (Section 8.0)
- Setting up efficient Procurement/Logistics/ Finance systems (Section 9.0)

³ Philippines have a high income disparity – second highest in Asia. 40 percent of the country lives on less than \$2/day. There is a wide income disparity evident in Cagayan de Oro like other Philippine cities; it was the poorest families who were the most affected by Washi.



Continued flooding hampers transportation to sites
Photo by Andrew Schafer /CRS

CRS' EMERGENCY RESPONSE

The flash flooding wiped out 80 percent of Cagayan de Oro's water supply, making water, sanitation and hygiene (WASH) a response priority among humanitarian and government agencies. CRS started its rapid response in emergency WASH, providing hygiene kits, trucking water to internally displaced people (IDP) sites and hygiene promotion activities. In the first two months, CRS managed a cash-for-work program to support communities in clearing habitable areas, neighborhood roads and drainage canals in Macasandig, which were filled with debris and silt. Many evacuees returned to rehabilitate their homes, while others were not permitted to return as they formerly lived in government declared "no-build zones"⁴ near the river. Among the most vulnerable were the poor, who could not return home as their houses were completely destroyed and as they were most likely to have lived in flood risk zones.

⁴ "No-build zones" were declared by the president and delineated by the Mineral and Geosciences Bureau. To be enforced by the city, an ordinance is required to be passed for the "no-build zone" to be official and enforceable.



Danger zone marked after flooding in Cagayan de Oro
Photo by Seki Hirano/CRS

OVERVIEW DIAGRAM OF ENTIRE SHELTER AND SETTLEMENT RESPONSE AFTER TROPICAL STORM WASHI

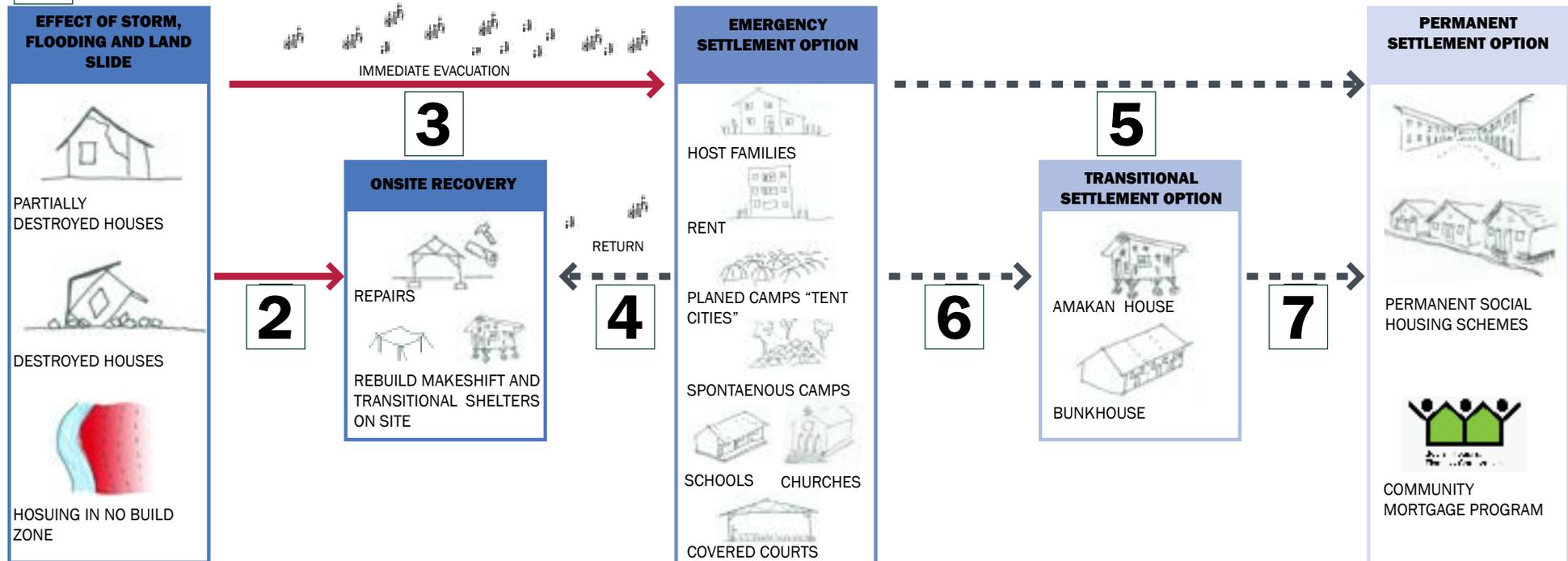
PRIOR TO TROPICAL STORM WASHI HOUSEOWNERS, RENTERS AND INFORMAL SETTLERS LIVED IN MEDIUM TO HIGH RISK FLOOD PRONE ZONES



TROPICAL STORM WASHI CREATED FLASH FLOODS



1



LOCATIONS

PLACE OF ORIGIN

EMERGENCY EVACUATION SITES

TRANSITIONAL SETTLEMENT SITES

PERMANENT SETTLEMENT SITES

Diagram by CRS



Covered courts used as evacuation centers Photo by Seki Hirano/CRS



Classrooms used as evacuation centers Photo by Seki Hirano/CRS



Transitional settlements Photo by Seki Hirano/CRS



Urban transitional settlements by CRS in Cagayan de Oro City Photo by Seki Hirano/CRS

OVERALL SHELTER AND SETTLEMENT RESPONSE POST-TROPICAL STORM WASHI

To understand the transitional settlement response in context, the following will explain the various stages of the shelter response using the numbers cited in the diagram in the overleaf.

Many people lived near the river in high-to medium-risk areas. The tenure status of these people included:

- Land and house owners (land title acquired via inheritance or through purchase)
- Land occupants (right to occupancy gained through city social housing program)
- Informal settlers (without official rights to occupy land)
- Occupants (domestic caretakers)
- Renters

1 The flash floods caused by Tropical Storm Washi destroyed a large portion of the city. In terms of effects of the storm, flooding and landslides on housing: In Cagayan de Oro City, more than 228,728 people out of a total population of 602,088⁵ were directly affected by the flash floods. Some 18,436 houses were damaged, out of which 5,801 were totally destroyed and another 12,635 partially damaged. Approximately 2,700 households in Cagayan de Oro City resided within previously established no-build zones.

Immediately after the floods, the affected populations either remained on their land outside of the No Build Zone, or moved to one of the emergency settlement options.

2 Among those who remained on their land, anecdotal evidence suggested that many informal

5 <http://www.cdodev.com>

settlers were refusing or unwilling to leave their properties in fear of land rights issues. Assessment⁶ supports these findings, with 60 percent of those remaining on their property not having formal land rights. In addition to this, the government does not offer any compensation for land owners or homeowners who are within no-build zones. Many of these properties are titled land, meaning the government has limited means of enforcing ownership unless a compulsory purchase order is passed through the government.

3 Displaced families found various emergency shelter options:

- Host families: Those with friends, families or relatives in unaffected areas who had space and

6 Rapid shelter assessment after Tropical Storm Sendong in Region 10 Philippines, Shelter Cluster Report, Feb. 2012.

capacity to welcome the affected.

- Private accommodation rental: Those who could afford to rent a property in unaffected areas organized their own accommodation.
- Planned camps/“tent cities”: The city of Cagayan de Oro, together with the national government, international⁷ and national organizations, constructed tent camps on the outskirts of the city.
- Spontaneous camps: Displaced families occupied parks and other open lands using plastic sheeting and tents as shelter. Families used public toilets and water supplies.
- Evacuation centers: Public

7 There were mainly two organizations assisting with tents: Shelter Box (Rotary Intl) and Disaster Aid. Other tents came from KOICA (Korea International Cooperation Agency) via the DSWD (Department of Social Welfare Development).



Permanent housing initiative by government. Photo by Seki Hirano/CRS.

buildings and spaces such as schools, churches and covered gymnasiums (basketball courts) were converted to evacuation centers housing displaced families in shared spaces.

Assistance came from various government agencies, national and international NGOs, and included private donations for food, water, sanitation and non-food items.

4 After the initial emergency period (two to four weeks), a portion of the displaced population returned to the place of their original homes and started to make

repairs. Shelter cluster members such as the Philippines Red Cross and the International Organization for Migration (IOM) supported this self-recovery by distributing house repair kits and materials.

5 In early January, the national and city government announced an ambitious permanent rehousing program for up to 8,599 households, targeting a completion date one year after Washi. Prior to the disaster, the city had already drafted a social relocation plan and had purchased lands for housing informal settlers in a form of “land

banking”.⁸ After Washi, this housing plan was revoked and the land reallocated for housing the Washi-affected. The city was able to jumpstart its permanent rehousing program and hand over the first 320 permanent houses in April 2012, just four months after Washi. As of August 2012, 1,000 houses have been handed over to affected families. However, despite more than 1,000 houses having been turned over, nearly all still have “phase 1” utilities, meaning electricity is available only in communal areas, and there is only one water point per cluster of houses.

⁸ Land banking is the practice of purchasing raw land with the intent to hold on to it until such a time when it is needed.

Additionally, construction on community facilities like schools, health centers, police posts and other infrastructure has not yet begun. Realistically, it is estimated that it will take two years to complete the total 8,599 houses. There are enough funding commitments to cover the housing construction. However, there are major bottlenecks regarding land availability and the time required for planning and government authorizations for new relocation sites.

Another option planned for the affected is the Community Mortgage Program run by the Social Housing Finance Corporation.

TRANSITIONAL SETTLEMENT PROGRAM

In light of these government commitments and the unfolding of the humanitarian response, which focused on immediate needs, crowded tent camps and evacuation centers were set up that did not meet basic Sphere standards for shelter. Thus CRS, together with IOM, identified shelter gaps in the humanitarian response. Given the length of time required for permanent housing construction, both agencies began transitional shelter programs in Cagayan de Oro in order to shelter the affected in a dignified manner.

AFFECTED POPULATIONS MOVEMENT

The graph shows the affected populations' settlement options over the course of the response and recovery. The first 10 months are data collected by Department of Social Welfare Development, the dotted lines indicate projected estimate at time of writing this publication.

The settlement progress timeline graph shows the number of households according to their settlement options post-disaster. After December 16, 2011, some 9,175 households evacuated from their houses. Many people took refuge in public buildings such as schools, covered courts and churches, while others took refuge in tents and makeshift shelters. Within three to four weeks, approximately two-thirds returned back to their sites or found alternative shelter solutions such as residing with host families. By

the first month into the response, desegregated information of the types of emergency shelters was collected. In the graph, one can see the proportion of households in either public buildings and schools, covered courts and churches, makeshift shelters or tents. In the first month, a majority of the affected evacuated into public buildings and schools, covered courts and churches; after a month and a half, tent cities started to be installed.

There was also a priority to clear schools of IDPs so that classes could recommence. Thus one can see the dramatic drop in numbers occupying these facilities in the fourth month. A gradual decrease in people in emergency settlement conditions was due to the transitional settlements being constructed beginning around the third month till the ninth month. Permanent housing became available starting from the sixth month.

What one can learn from this data: Transitional settlements started to be occupied three months after the disaster. This could have been even faster if there was more government backing for transitional settlements and more land made available with improvements in logistics and procurement.

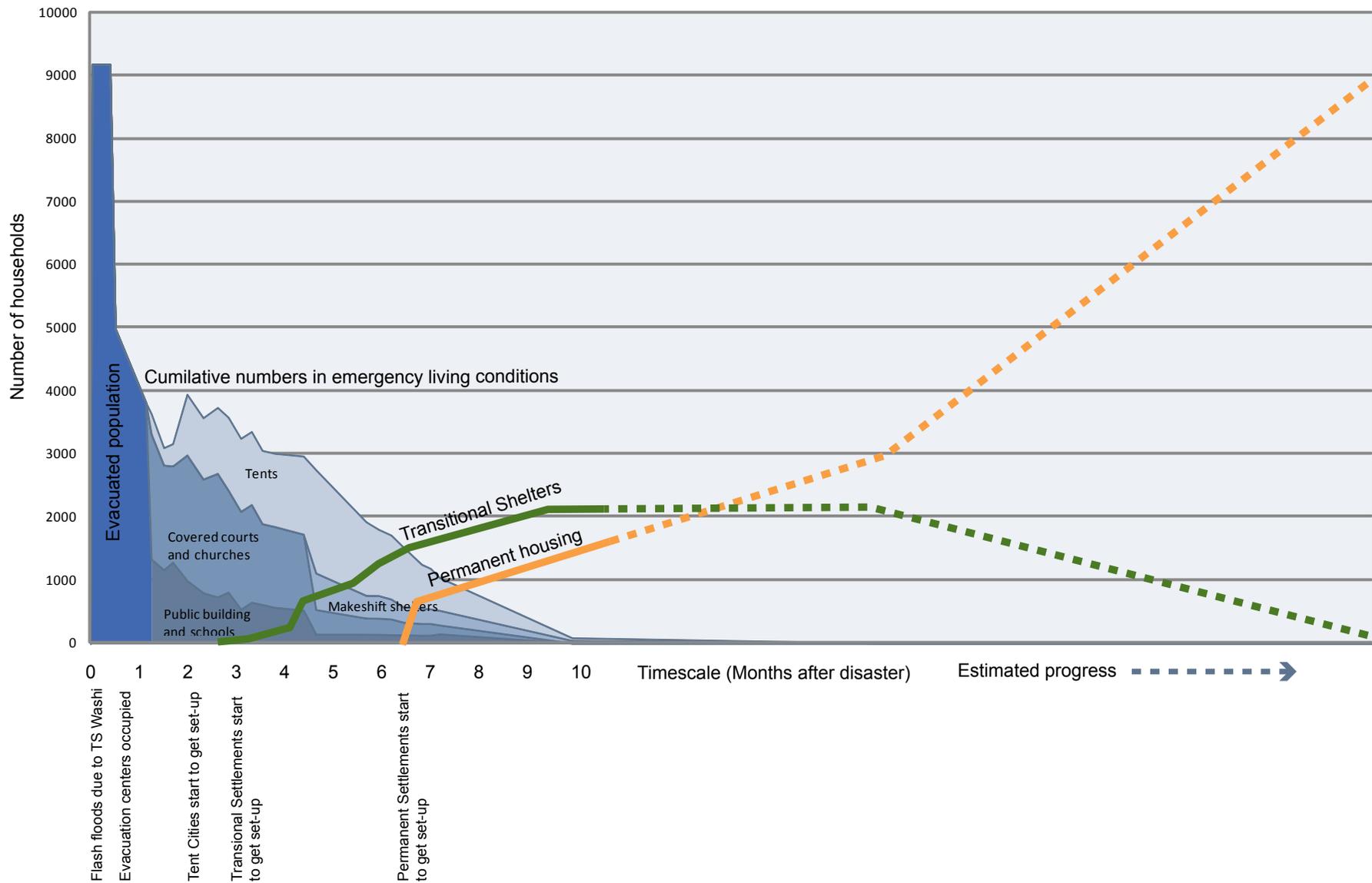
Permanent housing took six months until the first handover. This was commendable, but one must see this in context: These projects benefited from a planned social housing program, land banking by the city and high levels of political support. The continued challenge is to retain speed and quality construction to achieve the target of over 8,000 permanent houses.

Monologue

- Would the transitional settlement program complement and not duplicate the efforts of the emergency response and planned permanent housing?
- How long would the permanent housing project take to complete? (This should include public utilities and sanitation services since this will impact occupancy rates.)
- How many permanent housing units are required and committed?
- How long would it take to find suitable land for relocation sites?
- Are there enough funding commitments to realize the permanent housing project?
- How long can the affected population cope with living in emergency shelter conditions in a dignified manner?
- How can one identify negative coping mechanisms to sub-standard living conditions?
- Should there be a way to track self-recovery numbers and information on how the affected are coping?
- Is there a need for a transitional settlement program? What criteria would be used to determine this?

Reflections

- Recognize challenges in gaining government support for the need for transitional solutions once leaders have committed to permanent housing.
- We must understand that urban shelter also needs to include access to utilities (water, electricity) and sanitation (sewage, solid waste disposal) services.
- The government was willing to allocate land for tent cities but reluctant to give land for transitional shelters.
- We must understand the reasons why the affected populations lived where they did.
- We must understand what is planned by the authorities for permanent housing projects and how the beneficiary selections are made.
- We must understand the distances people are willing to travel to get to work, schools, health facilities, etc., when relocating populations.



Graph showing household numbers according to settlement options after Washi in Cagayan de Oro Graph by CRS

URBAN TRANSITIONAL SETTLEMENT PROGRAM

CAGAYAN DE ORO EXPERIENCE

In Cagayan de Oro, CRS and IOM launched a transitional settlement program to house affected people in a safe and dignified living environment while they await places within the permanent housing program. CRS' program aims to provide more than 1,300 shelters and IOM's program 905 shelters.

However, the concept of transitional settlement did not gain political support at the beginning of the response for the following reasons: The national government and the city mayor had committed to re-housing the entire affected population within a year. Some questioned the reason for duplicating resources in comparison to a two-step process of emergency to permanent housing. Though the government's commitment was formidable, there was no contingency plan in case it took longer than a year to build permanent shelters. (In past disasters in the Philippines⁹, it took more than a year to build houses and relocate thousands of families to permanent shelters.) Even if construction was finished within a year's time, people would have had to wait in cramped evacuation centers or stay in dilapidated tents before they could be transferred.

The question of why one should implement a three-phase sheltering process (emergency –transitional – permanent) in comparison to a two-step process (emergency – permanent) remains a valid question. Below are some points for debate:

- An emergency tent costs between US\$800 and US\$1,000. Tents are quick to erect once a shipment arrives or if there are stockpiles.

⁹ Typhoon Frank (2008) in Visayas and Bicol; mudflow from the Mayon Volcano in Bicol (2007); landslides in Southern Leyte (2006).

In a tropical climate, generic tents are not the most suitable shelter solution. Many occupants interviewed claim that they cannot stay in their tents due to the high temperatures inside during the day, so they only come back in the evening to sleep.

- CRS' transitional shelter (T-shelter) design costs US\$410 using local material and labor, excluding water and sanitation (WASH) facilities and site preparation works. The T-shelters were designed to suit the local climate and inspired by traditional architecture. The materials can be moved and/or used to extend or improve future permanent houses.
- Permanent housing is the durable and long-term solution to relocating families. It costs approximate US\$2,400¹⁰ excluding site works and infrastructure. Permanent construction works, which necessitate resolving Housing, Land and Property issues, take time.
- CRS' shelter strategy sought to provide dignified shelter for those living in emergency conditions within a relatively short period of time. The shelter materials are re-useable for the benefit of the beneficiary.

There have been two groups of affected populations targeted by the transitional settlements response.

¹⁰ In the Philippines, the average construction cost for concrete permanent house of 18 sq m = 80,000-100,00 PHP = US\$2,400.

SAFE RETURN/ONSITE RECONSTRUCTION

Affected households with totally destroyed houses who lived in low- to medium-risk zones were offered a transitional shelter to be rebuilt in their original neighborhood. The on-site shelter differed in design and process compared to the shelters in relocation sites. The column foundations were made deeper, and the structure was raised higher to be above normal flood levels. WASH facilities were organized within community groups, and elevated permanent septic tanks were constructed. When carrying out hygiene promotion in the community, CRS included the whole community, CRS shelter recipients and non- shelter recipients, as hygiene depends upon the entire community being involved.

RELOCATION SITES

For families who are unable to return to original sites either because they are declared "no-build zones" or out of personal preference, they were offered a place at the new transitional shelter location. Nearly all families in relocation sites were selected from evacuation centers for two reasons:

1. To quickly decongest crowded evacuation centers and schools.
2. To empty schools from evacuees, as their presence prevented classes from recommencing. Schools were finally opened in May 2012.

SITE PLANNING NEW RELOCATION SITES

No. Sites	Owner of land
4	Church lands
7	Private landowners
1	University (private)
2	City government land
3	Barangay government land

“The importance of thinking holistic transitional settlement”

Planning a transitional settlement includes temporary use of land to erect shelters and construct communal infrastructures such as water and sanitation facilities, electricity, drainage, paths and communal areas. In Cagayan de Oro, CRS had 17 transitional shelter relocation sites for IDP relocation, and the sources of land were as follows:

1. Land was negotiated on a case-by-case basis, mainly by the Church and CRS. The concept for transitional shelters was developed with a clear strategy: To donate the transitional shelters to those in need and to limit the damage to the land. To achieve this, the shelters were designed to be moveable (were able to be disassembled) and were built with construction techniques that are temporary in nature (as described in detail in the transitional shelter design chapter).
2. Communal infrastructure works, such as drainage and septic tanks, are less moveable and unavoidably affect the land. Thus, CRS took a different approach and opted to negotiate with the land owners for such infrastructure to be either donated to the land owners when the IDPs vacate the site or for the infrastructure to be dismantled and land cleared prior to return, depending on landowner preference.

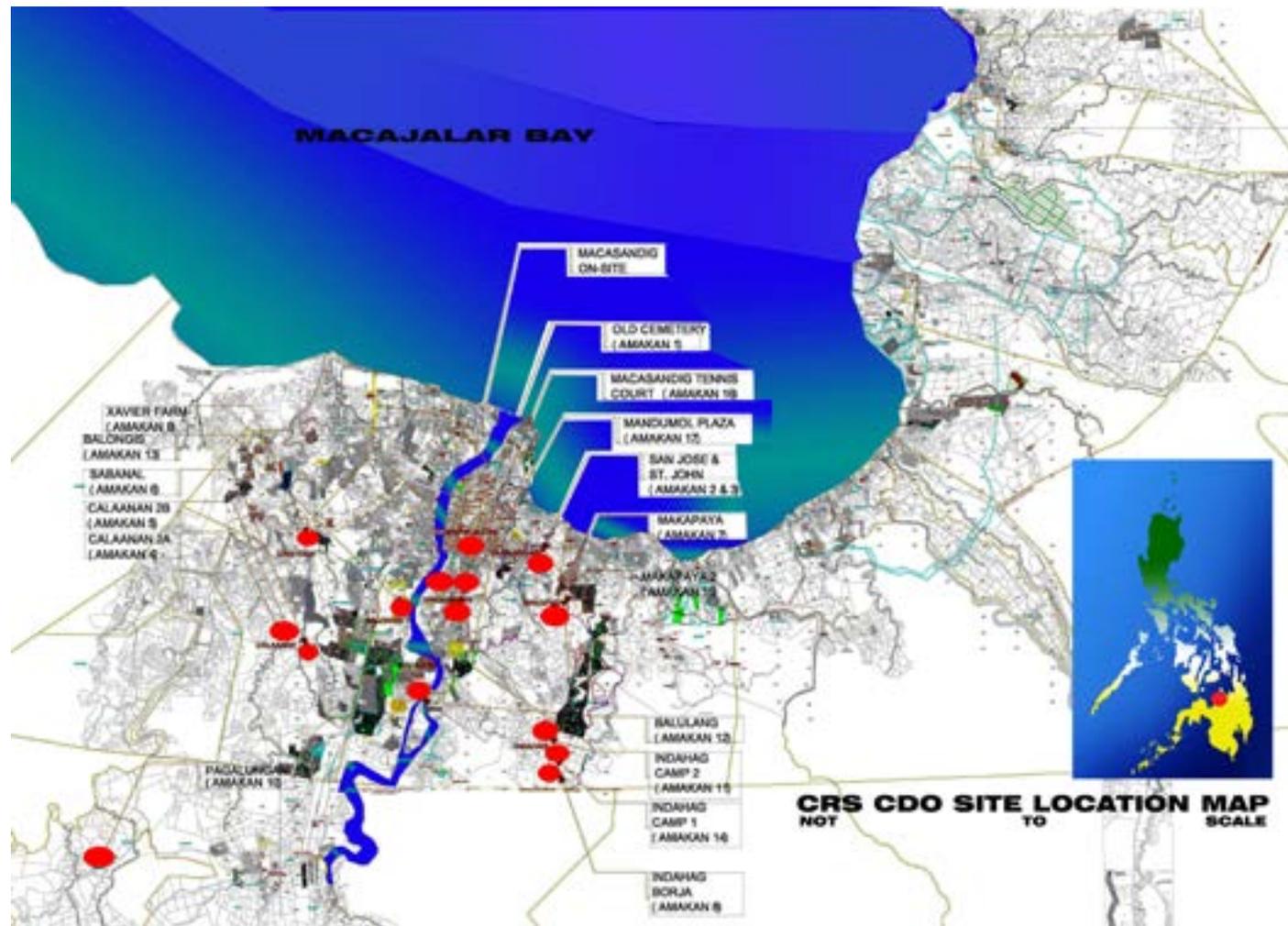
Reflections

- There was an emphasis on WASH-shelter integration from the beginning of the program. Site infrastructure, such as drainage/land leveling, is essential and must be considered at the beginning.
- Further concepts need to be developed for transitional communal infrastructure, such as transitional drainage and transitional septic tank solutions.
- Operation and maintenance procedures need to be developed.

Monologue

- What is the frequency of a similar scale of disaster occurring? Is it seasonal or once every 20 years or 100 years? Is there a shift in pattern affected by climate change?
- Where can we access credible knowledge on this?
- Can we informatively lay out the risks to the population? Can we advocate to the government to enact policies that are based on these risks?
- Can we ask the population to make their own decision to either stay or relocate according to the information available?
- Can we create a system that would support both options (remain in place of origin or relocate)?
- How urgent is it for the affected population to be out of emergency living conditions? What are the climatic, economic, protection and cultural acceptability issues which determine this?

Amakan No.	Site Name		No. Complete
1	Old Cemetery	Archdiocese	67
2	St. John Vianney Seminary	Archdiocese	36
3	San Jose Seminary	Archdiocese	50
4	Calaanan 2A	City government	30
5	Calaanan 2B	City government	53
6	Sabanal	Private landowner	144
7	Makapaya - Phase I	Private landowner (cooperative of market vendors)	85
	Makapaya - Phase II	Private landowner (cooperative of market vendors)	30
8	XU Farm - Phase 1A	Xavier University	229
9	Indahag - Borja	Private landowner	78
10	Pagalungon	Homeowner land (rural barangays)	23
11	On-Site/Relocation Balulang	Return area; homeowner land	44
12	On-Site/Balongis	Return area; homeowner land	36
13	On-Site Macasandig	Return area; homeowner land	194
14	Indahag Camp 2	Archdiocese	68
15	Indahag Camp 1	Barangay land	26
16	Mandumol Public Plaza	Barangay land	56
17	Macasandig Tennis Court	Barangay land	22
18	Mandulog (Iligan)	City government	63
Total			1,334



Map indicating locations of CRS' transitional settlement sites Map by Charisse Mae Borja

In recent years, there was a flood in 2009 but the last recorded typhoon in the area had been in 1920. People came to occupy the river delta area's high-risk area through a city initiative called "Piso Piso," a social settlement program¹¹ that enabled low income households to make a daily rental payment of one peso (US\$0.02) to live in the city center, close to jobs, education and public facilities. After the devastating Washi flash floods destroyed a major portion of this city, President Aquino and the Mines and Geosciences Bureau (MGB) declared a "no-build zone", renouncing all islands on the river and the area of Cala Cala and Isla de Oro as open space and not for habitation. However, although this was declared by the president, under Philippine local governance code, the national government relies on the city enforce it. The City of Cagayan de Oro has the jurisdiction for enforcement, and while the City Planning office and police are restricting building, the City Council has yet to pass a local ordinance for a no-build zone. In practice in Cagayan de Oro, the no-build zone has been largely respected as people are afraid of the risks, though in Iligan City, people are reoccupying the no-build zone.

11 The city's "Piso Piso" program allowed population to formally occupy but they built their own shelters, usually make shift shelters.

ILL-DEFINED "NO-BUILD ZONES"

City hazard maps, city spatial plans and a comprehensive land use plan for the years 2000-2010 existed prior to Washi. These need updating and new legislation, however, to adapt to circumstances brought about by the flash flood, like safety, zoning of buildable areas, effective land use and population increase. Following Washi, the City Planning Departments' zoning map for Macasandig delineates the flood zone into different categories of no-build zone, high-risk zone and medium-risk zone. When one compares the risk zoning together with the contour lines and the barangay boundaries, one can see that it is partly a politically defined map and perhaps not fully coordinated by the City Planning office. Another factor is the Water Code¹² from the Department of

12 The Water Code of the Philippines Presidential Decree, No. 1067 December 31, 1976: "Article 51. The banks of rivers and streams and the shores of the seas and lakes throughout their entire length and within a zone of three (3) meters in urban areas, twenty (20) meters in agricultural areas and forty (40) meters in forest areas, along their margins are subject to the easement of public use in the interest of recreation, navigation, floatage, fishing and salvage. No person shall be allowed to stay in this zone longer than what is necessary for recreation, navigation, floatage, fishing or salvage or to build structures of any kind."

the Environment and Natural Resources (DENR) that declares a public easement within 20m from the river in rural areas and 3m for urban areas, restricting any settlement. These guidelines are not intended to interpret the flood risks, though some organizations did follow this code to build semi-permanent housing.

Implementing a settlement program according to this map and the code has been a challenge. The authorities did not physically delineate the danger zones. Thus when one stands on a site, it is difficult to ascertain whether a site is no-build, high-risk or medium-risk. This has a profound effect on the affected population's future; it determines whether one would remain on site and rebuild their home or be forced to relocate.



Flood risk zoning map produced by City Planning Department

Not only had there been ambiguity on the exact delineation of the zones, but an ambiguity in conditions connected to the zoning. The City Planning Department's map indicated the "no-build zone," but no official statement had been made on the state of the "high-risk zone". Thus CRS encountered significant push-back from the Office of Civil Defense (OCD) after we shared plans to build transitional shelters in high-risk zones. Given this strong objection from the OCD, CRS opted to respect the department's views and limited transitional shelter support to medium-risk areas for onsite return and offered those in high-risk area the opportunity to join the list to relocate. It is unclear if families from high-risk areas will be eligible to relocate to permanent housing settlements.

In order to clarify this issue, an ordinance is required to be passed via the city council and enforced. There is a political and economic complexity connected to making such policies. The land owners have official land titles, and any city decision for mandatory relocation will come with compulsory purchase, which can become a large bill for the city and have a large effect on the city's economic activities. These risk zones cover a large portion of the city, approximately half of the commercial center of the city. Such important and politically sensitive decisions are difficult to make, and some speculate that no decisions will be made until elections have passed.

The City Planning Department is conducting an economic impact study exploring two options to mitigate some of the hazards: 1) to invest in large scale disaster management systems such as dikes, and 2) to relocate populations, which comes with the need for compensation to home/land owners and has an enormous impact on a city's economy and lifestyle. Post-

Washi, the City Planning Department's activities include:

- Further hazard studies and updating the danger zone map.
- Updating the Comprehensive Land Use planning document.
- Comparative study of the implication of making the danger zone a no-build zone vs. investing in flood prevention infrastructure such as dikes and dredging.

LAND VALUES

Land is a precious commodity in an urban setting, and particularly after a disaster, the land value fluctuates in line with supply and demand. In Cagayan de Oro, land value changed enormously according to the renewed collective consciousness to risks. The table indicates the effect Washi has had on the real estate value of the city.

	Prior to Washi	Post Washi
No-build zone	1,500 peso/m ²	No value, not permitted to return
High-risk zone	4-5,000 peso/m ²	Lost value, cannot sell
Medium-risk zone	4-5,000 peso/m ²	Lost value, cannot sell
Outside danger zone	2-2,500 peso/m ²	Increased value of 1,000 peso (US\$24)/m ²

Monologue

- Can the affected population make their own decisions whether to live with the risks or relocate?
- Is there a need for an enforced rezoning of the affected area?
- What is the process required to make such decisions?
- Who or which city department would have such decision-making positions?
- How long would it take for the local government to clarify rezoning of affected areas?
- How should stakeholders weigh hazard risks against the right to adequate housing against the right to security of tenure? What is the humanitarian community's obligation and position?

Reflections

- Need for a coordinated policy and map on the danger zone, coordination between City Planning, Water, Civil Defense and Mines and Geosciences departments.
- Need for the city to make a clear and decisive endorsed statement on the nature of the zoning, even if it would be temporary.

ACQUIRING LAND FOR TRANSITIONAL SETTLEMENTS, STEP BY STEP

Step 1. Prepare a strategy on land acquisition

Tackling questions similar to those raised in this interview with Joseph Curry, country representative for CRS Philippines, could help start preparation for the acquisition of land for transitional settlements.

Were there large, medium or small parcels of land within or in the outskirts of the city that could be used for transitional settlements?

There were limited land parcels within the city. Three of the Church's parcels and two barangay lands (Mandumol, Macasandig covered court) were considered within the city. Others were on the outskirts. On the outskirts, the government first allocated around 21 hectares of its own city land in Calaanan. The city land was first given for tents, then permanent shelter and some for transitional settlements. The city gave CRS around 1 hectare and other parcels to IOM for bunkhouses, though the majority was set aside for tents and permanent housing. However, there was reluctance from the city government to give land for transitional settlements. While the shelter cluster explained that transitional settlements are temporary, the city saw the possibility of squatting. The city government did not want to be in a position where it would have to evict people later if people failed to vacate.

Was there willingness from the land owners to donate or allocate land for temporary occupation?

There was willingness, but also a strong reluctance. In the Philippines, landowners are not well protected from squatters once they occupy the land. The landowners who gave land were generous in taking a degree of risk. In some cases, it was the Archbishop

who helped to persuade; in other cases, it was the city government or a local political leader. In all cases, we have been very clear to the IDPs that they have a limited time of one year to stay at the site. We know that this will be renewed in many cases. In most cases, private landowners were approached by either the city government, Archdiocese or through the Parish to temporarily donate land.

Could you think of any specific information which could help release land?

I'm not sure if there is any type of information to help convince land owners. Much of the advocacy is based on personal persuasion by the bishop, a local leader/ politician or CRS. Head of office in Cagayan de Oro, met with many land owners and did some strong persuading to assure them about the temporary nature of the shelters.

What were the main conditions you looked for when searching for appropriate land for a transitional settlement?

Key conditions include:

- Clear ownership of land.
- Rent-free donation of the land for supporting Washi affected population.
- The land owner's clear understanding of the purpose of transitional settlements and its nature of use.
- Appropriate land with no flooding or landslide risk with good drainage.
- Access to road.

- Access to water (either groundwater or pipe connection).
- Access to electricity.
- Distance from the city. The transportation cost affects the IDPs' decision to go to the relocation area; many declined to go to distant sites with other agencies.
- Landowner willing to allow use for up to two years.

One reason why we approached private land owners was that we felt confident that there was a longer-term permanent shelter program in place by the government. The government was very quick to promise thousands of houses to victims. The first construction started in January, and the government got to work on it. So seeing this gave us the confidence that there would be a way to get the IDPs transferred into permanent homes. If that commitment wasn't there, I would not have felt comfortable asking private land owners to



Building transitional settlements on land in the outskirts of the city Photo by Charisse Mae Borja

donate land temporarily. I would have limited our assistance to government land and church land where the Church felt comfortable to donate.

Why did CRS not wish to pay rent for temporary land use?

We don't have the funding to pay the rent. We also felt that this was really the responsibility of the city government and local community to offer land for relocation, which are their assets. The Church played a role in setting an example with the donation of the first three plots, the city government followed and offered parcels. We didn't feel that an NGO should be paying for what should be the government's role.

What is the process that needs to be followed to use the land? What type of permissions from owners, authorities and communities?

The permissions depended on the landowner. Most private landowners required a memorandum of agreement with CRS or the Diocese, which we also wanted so that the IDPs would not be evicted at some later point. In all cases, we agreed that we would clear the land of shelters at the end of the period.

Step 2. Identify, research and approach major land owners

Questions:

- Who owns the land in the city? Are there any main land owners in the city? Is there any land owned by private, public or faith based organizations?

- Are there certain types of land each of them own?
- Are there any protocols in initiating dialogue with any of the land owners?

CRS Philippines experience:

Owner	Request protocols	Challenges
City of Cagayan de Oro	Request to mayor	Reservations of the mayor and other city officials to the idea of transitional settlements; Availability of the mayor for meetings; The city's preference for permanent shelter; Gaining information on available land; Land tended to be agricultural land, which requires much infrastructure development.
Private	Identify land and approach individual owners	Land is owned for investment and capital returns are important; concerns of landowners that shelter recipients would not leave.
Church	Request to Archbishop	Availability of Church-owned land on a temporary basis.

Step 3. Identify and survey potential sites

Questions:

- Is there clear ownership of land?

- Where is the land? How big are the parcels and how many transitional shelters can they accommodate?
- Are there any natural hazards?
- Is there road access for delivery of materials?
- Are they in a suitable location? Is there an existing community nearby?
- Are they in a near or far location from the place of origin?
- Is there existing water and electrical sources for connection nearby?
- Are the host communities willing to take new households into the area?
- Are there public facilities nearby (i.e., schools, health centers and markets)?

CRS Philippines experience:

- Watch out for unsuitable land allocation by authorities
- Analyze locations (distance from city), suitability, land availability, land ownership, transport routes, land purchase issues, clarity of local jurisdiction/who to get authorization from.
- Follow closely the zoning debates and mapping of "danger" zones.
- Accepting no-build zones was difficult at the beginning, but after five months it was widely accepted.

Be clear on what clearance is required for transitional settlements. All potential sites should be evaluated by the agency on geo-sciences for hazard assessment. In the Philippines it is the office of the Minerals and Geo-Sciences Bureau (MGB) of the Department of Environment and Natural Resources who issues permissions, though for building temporary shelter a site development permit is not required. However, if the site is planned as a future permanent settlement, the permission is required. Some sites offered to CRS for transitional settlements were lands that are subject to land acquisition processes like the Community Mortgage Program (CMP) and the national housing project under the National Housing Authority (NHA), which are required to get clearance from MGB. Thus, CRS experienced some challenges where sites could never be assessed due to MGB's heavy workload, and in some cases, we had disputes on the rejected applications.

Step 4. Enter negotiations for IDP occupation

Questions:

- Can we determine the length of occupation of the site? Is it weeks, months, years or is it connected to an event (i.e., when the IDPs are offered a permanent housing unit or when it is deemed safe for them to return to their houses)?
- Who is the target population (i.e., affected by the disaster)?
- Who will select the incoming population: CRS, community, land owners, etc.?
- What is the agreed occupation density?
- What is the physical design? Are any components considered permanent installations or

detrimental to future land use (i.e., risk of land contamination, septic tanks or any chemicals hazards)?

- Should there be an agreement on whether to leave WASH infrastructure after IDP relocate to permanent sites
- Should there be an agreement on conditions of occupancy (i.e., limiting anti-social behavior, managing specific conditions [e.g., don't cut coconuts])?

CRS' Philippines experience:

All land owners were concerned with protracted occupancy and wanted guarantees about when occupants would leave. In order to agree to a temporary use of land and to protect both parties, CRS made agreements that were for an initial six-month period, extendable in six month increments. Site plans, shelter and WASH facility designs were always presented to the land owners prior to the start of construction. It was essential that the designs were seen as temporary, able to be relocated or demounted with limited effect to the land. For example, aspects such as shallow foundations were preferred by the land owners as they can be easily removed.

Additionally, CRS' agreement with shelter recipients is that individual families own the shelter and are responsible for taking it with them when they relocate to permanent housing. This policy was decided upon for two reasons:

1. To give ownership of the shelter; and to allow shelter recipients to re-use materials or to sell them and get the income.

2. To prevent informal settlements, avoiding having new families move in after the original occupants have vacated.

Starting with initial negotiations, it was made clear that the shelter recipients would be chosen objectively according to project design. Land owners often made requests as to which evacuation center's IDPs would benefit from a particular transitional housing site. CRS worked through the camp coordination and camp management cluster group to select shelter recipients.

Step 5. Gain agreements; sign MOUs and agreements

Questions:

- What form of agreement is most appropriate?
- Who should we seek endorsement from?

CRS Philippines experience:

Owner	Type of Agreement	Endorsed by
City of Cagayan de Oro	Verbal agreement for temporary use. Other conditions included requests for certain shelter recipients or, in one case, early closure of the site in order for the land to be used for permanent shelter.	Mayor
Private	Written MoA between the Archdiocese of Cagayan de Oro and the landowner with terms and conditions.	Land owner
Church	Verbal agreement after request of Archbishop.	Archbishop

When making agreements important issues to cover are:

Project documents. The land of the land owner shall be used exclusively for the purpose of building transitional shelters; inclusive of toilets, bathing cubicles, hand washing stations, clothes washing area, and cooking area; and according to the goal and objectives as set forth in the attached project design

Period of agreement. The project shall be implemented by CRS. The Land will be used for a period of six months, renewable in six-month increments,

Safety. It is the responsibility of CRS to comply with all applicable laws, ordinances, rules, regulations and orders of any public authority having jurisdiction over the safety of persons or property or to protect them from damage, injury or loss.

Injury or damage. It is understood that the personnel/workmen hired, engaged or contracted in connection with this project including employees of CRS or its donors shall not hold the land owner responsible for personal injury or damage caused or sustained by said personnel/workmen.

Sale, transfer and mortgage. The land owner agrees that the subject land shall not be sold, transferred or mortgaged to parties outside of this agreement until such time as permanent housing is available for shelter recipients residing in transitional shelters built on the land.

Site preparation. All site preparation, including construction of access road and necessary culverts and

brush clearing shall be the responsibility of CRS. Large trees will not be removed from the land during site preparation.

Utility connection. Provision of metered water and electrical connection will be the sole responsibility of CRS.

Drainage and WASH facilities. Proper drainage and WASH facilities are the sole responsibility of CRS. Drainage will be designed and tested before construction, to ensure suitable run-off of water. All latrines constructed will have properly sealed septic tanks.

Step 6. Ensure presence of utilities (electricity and water supply)

Questions:

- Are there existing infrastructures on site? Can they be extended or expanded to cater for the IDPs?
- Are there piped water, rainwater drainage, sewage and electricity routes near the site? If yes, how easy would it be to connect to the existing system? If no, what would it take to connect to the nearest connection points or to make temporary on-site systems (i.e., water trucking and septic tanks)?
- What is the cost for site development, leveling drainage compaction, etc.?

CRS' Philippines experience:

Delays were caused by slow infrastructure installation. A thorough site investigation followed by a strategy and an agreement must be in place for electrical and water facilities. If utilities did not exist nearby, CRS did not consider the site as a viable option for transitional settlement.

This strategy was made from our experiences from one of the sites in Makapaya. This site did not have utilities connections even though CRS planned for the connections. Delays in installation from the city and private utilities companies meant alternative arrangements (trucked water and generator for communal areas) needed to be made.

Try negotiating free water and/or electricity for the IDPs as an in-kind donation from the local government or utility company. In Cagayan de Oro, CRS successfully negotiated for the city government to provide installation and to cover usage of water and electricity for two months. However, after the initial seven relocation sites following this agreement, the city would no longer shoulder this cost for new sites.



Clean water supply and taps installed at transitional settlement sites
Photo by Jennifer Hardy/CRS

CITY POLITICS AND ADMINISTRATION

The City of Cagayan de Oro is subdivided into 80 barangays where a chairman is elected to govern each barangay. Furthermore, the city is divided into two districts—West and East—with a congressman elected for each. The entire city is under the responsibility of the mayor. With land occupancy issues, one cannot escape politics and power. In order to effectively navigate the system, research, local knowledge and contacts are essential. CRS found that constant advocacy and relationship building were required to cultivate willingness for land usage.

Issues linked to administrative boundaries determined some of the population movements after Washi. Moving affected populations out of evacuation centers meant the creation of temporary tent cities, transitional settlements and permanent housing sites. In Cagayan de Oro, choosing or accepting relocation was influenced by geo-political alliance. For example, CRS experienced a few instances where an affected household living in an evacuation center declined an offer to move to a transitional settlement because they had already been promised permanent shelters in their district by local political leaders, and they had been instructed to wait; the movement proposed by CRS would have relocated them to a different voting district. Also, from the leaders' point of view, the movement of populations across electoral boundaries could impact voting in elections. Thus, one can see political interests at work when mass movements of populations are planned within a city.

COORDINATING WITH LOCAL GOVERNMENT STRUCTURES

When working in an urban environment, a close working relationship with the local government is essential. Humanitarian organizations cannot work in a vacuum, thus a good relationship with the various departments is essential. In Cagayan de Oro, the UN Cluster system helped to establish working relationships between NGOs and the government agencies, and strengthen communication between the government agencies. Shelter settlements required close coordination between agencies charged with land, social welfare, water, electricity, and health. The following are the main city departments CRS coordinated with for the program:

- Mayor's Office
- City Administrator
- City Social Welfare and Development (CSWD)
- Department of Social Welfare and Development (DSWD)
- City Planning Department
- City Engineer Office
- City Health Office (CHO)
- Estate Management Division (EMD)
- City Water District

Monologue

- What are the local politics? Who are major land owners?
- Which local authority departments are the ones we must coordinate with and are these the same departments that are decision makers?
- What type of local government support can you seek and rely upon?

Reflections

- CRS found that the roles and responsibilities of each government department are intertwined in a complex web of bureaucracy difficult to understand by outsiders.
- CRS should have hired a government liaison officer who knows the system and can move things forward and negotiate at the start of the response.

IDENTIFYING, SELECTING AND PRIORITIZING THE AFFECTED

CRS experienced the following challenges in identifying, selecting and prioritizing the Washi affected and most vulnerable households for transitional settlement assistance. CRS has learned that such a process does not exist in a ideal vacuum; many stakeholders' interests are at play and we must work within this complex context.

IDENTIFYING

Politics can dictate movements of families. City government officials, local politicians and Church officials often had different priorities of families to be moved. Additionally, each of these groups were concerned with different levels of validity in status of IDPs and different geographic areas of the city. For example, the Camp Coordination Camp Management (CCCM) cluster had to conduct additional community-based consultations to validate potential beneficiary status.

Determining whether an informal settler actually lost their house to Washi. Informal settlers do not have official land or house tenure papers. Thus it was difficult to qualify whether they had lost their home to Washi or if they had lived elsewhere. Also, there were many cases of "opportunists" who had a standing house outside the affected areas. These individuals worked around the system to be included into the shelter recipients list. Again, community-based consultations were required to validate beneficiary status.

Identifying shelter recipients for on-site shelter support. CRS conducted a community mapping process

by visiting a potential beneficiary's former housing location, verifying the damage and/or lack of shelter, interviewing neighbors and verifying lists of names with barangay captains and community leaders. However, this became more challenging as time passed since many families had rebuilt, and it was difficult to ascertain who was actually affected. An additional targeting criteria is necessary for this scenario, or to put a strict timeframe on when we continue to consider new shelter recipients.

Informal settlers on the banks of the river who returned to their sites Photo by Seki Hirano/CRS



SELECTING

Keeping community structures intact by selecting specific areas. CRS set out to assist all categories of the people who required shelter assistance in a specific barangay of Macasandig that was most affected. The initial strategy included onsite shelter support and transitional settlements in a relocation site. The initial aim was to work with a specific barangay and to keep the community structure intact as much as possible. This was not always possible, as site locations varied, as did the timing and number of shelters in each site. Simultaneously, the evacuation centers that

were prioritized at a given time were not always the best match for the relocation site available at that time. However, even given the obstacles, CRS was able to move communities intact in most cases.

Not able to select affected in high-risk zones. CRS chose the most affected area to operate in, with a view to support the residents of the specific area who had completely destroyed shelters and met the targeting criteria. This area (Macasandig) included all the different danger zone levels: “no-build”, “high-risk” and “medium-risk”. However, city officials objected to any shelter support in the high-risk zones.

Shortage of transitional shelter providers. CRS and IOM were the only two transitional shelter providers for this response. This lack of transitional shelter providers responding to the overwhelming needs granted limited selection choice. There was pressure from many sides (government officials, church leaders, camp managers, other NGOs) to prioritize certain evacuation centers or certain specific shelter recipients.

PRIORITIZING

Closing evacuation centers. The government prioritized closing evacuation centers over assisting community-based IDPs. The reasons cited were the capacity to handle only a certain number of caseloads, expense associated

with managing evacuation centers, and deteriorating condition of WASH facilities and/or tents in evacuation centers.

Clearing schools. The education cluster advocated for transferring IDPs living in tents on school grounds to address protection concerns associated with having IDPs near students. Schools were able to transfer nearly all IDPs by June and return normalcy to schools.

Previous house owners. The city prioritized those who previously owned a house for the permanent housing program.

Renters and squatters. These groups are the last ones on the list for permanent housing; there is even a certain ambiguity of whether they would be granted a permanent home.

Returnees. Those who opted to return to their places of origin became the last priority in the permanent housing waiting list. The risk to those still living in the heavily affected areas near the river is higher than those who have already evacuated to safer locations, given not only their location in risky areas but also that monsoon season is underway and the shelters they were able to rebuild, in most cases, are made of very light materials.

Monologue

- Are you putting a clear and verifiable selection criterion in place?
- Can we easily verify the shelter recipients according to the set criterion?
- Is there a time limit involved in registration?
- With whom do we need to coordinate the beneficiary selection list?
- What scale of coverage are we aiming for, and are different actors covering the others?
- Are we targeting specific geographical areas or are we going to cover the whole city?
- Are there any zoning issues that will affect our program?
- Have we understood the different stakeholders’ interests (city, education, cluster, etc.)?
- Who is being targeted for the permanent housing program? Will a certain set of people be left out? What is the strategy for renters, squatters and/or returnees?

Reflections

- As a humanitarian agency, CRS always strives to serve the most vulnerable population. Did we reach the right people in this response?
- It would not have been possible to prioritize all the vulnerable groups (single headed HH, elderly, persons with disabilities, etc.) for relocation. However, we were able to accommodate special requests that came from different parishes for certain IDPs who had higher vulnerabilities.
- CRS partnered with Handicap International to retrofit a few of our shelters and some WASH facilities where disabled IDP shelter recipients were identified. CRS added a seated-type toilet per cluster of four toilets, which are easier for the disabled and elderly to use. After surveys, CRS found that the community accepted the seated toilet and the design was used in subsequent sites.
- In terms of the shelter design, CRS should have created an alternative design, or a design for retrofitting for persons with disabilities. CRS should have made it our responsibility to do this, and written into the budget a certain number of modified shelters and modified WASH facilities.

TRANSITIONAL SHELTER DESIGN

For the physical design of the transitional shelters, it was essential that the shelters were moveable and made minimal impact to the nature of the land and was economical. CRS worked with a local architect and local engineers to design an adapted amakan house at a cost of US\$400 per unit. This amakan house is an icon of Philippine culture as it represents the Filipino value of “Bayanihan”, which refers to a spirit of communal unity or effort to achieve a particular objective. The amakan house is inspired from the traditional Filipino house called the “Bahay Kubo” (Nipa hut). It is an indigenous house made from locally sourced materials and is ideally suited to rural traditions and cultures. The house is predominantly made of amakan (bamboo or palm oil leaf weave; CRS used palm) for the walls and coco lumber, which is durable and inexpensive, for the structural frames.

Traditionally, the amakan would use thatched “Nipa” leaves for the roof. In this context, galvanized corrugated iron sheets have been used. Flooring was constructed from ¾-inch plywood boards instead of the traditional bamboo slats, which would have increased labor cost and would have taken longer to construct. The design considered the standard dimensions of plywood boards to limit cuts and additional labor costs. The shelter is built on stilts to protect the dwellers from flooding, vermin and other elements. Having a shelter off the ground gives excellent ventilation to the interior, and the space below can be utilized as a storage area, livestock pens or granary. At one of the sites called the “Old Cemetery”, CRS experienced an interesting cultural/religious advantage to this design. Though the graves had been exhumed decades ago, at this site the shelter recipients wished to live “off the ground”, and this design was a perfect solution for this issue. The roof is a single pitch rather than a typical double-pitched roof

arrangement. Shelters positioned next to each other are able to share the same drainage channel, therefore halving the drainage channel needs.

During the early phase of the project, government and donors made pledges for a permanent housing program but the actual scale was not confirmed. Renters and sharers would be a final priority after homeowners, and it was not well known how many renters and sharers would qualify for the government’s permanent shelters. This scenario created concern that transitional settlements would become permanent. For private land owners, transitional shelters with light concrete flooring or foundations created worry that land owners would have difficulty recovering their property. Elevated amakan transitional shelters, however, are not built into the ground and are more temporary in nature. The transitional shelter design would allow people to dismantle and move their shelters later to a permitted land area if, in fact, they were not able to get a permanent house from the government. CRS gave donation certificates to each family giving them ownership of the amakan structure and clearly communicating that the transitional settlements would need to be vacated at a future time. At such a time, if families did not have permanent houses, they will be required to dismantle and move their T-shelters to a permitted land outside of the no-build zone.

In the case of the IOM bunkhouses, these models do have concrete flooring and are meant to be handed over to the landowner or city government after the project.

Monologue

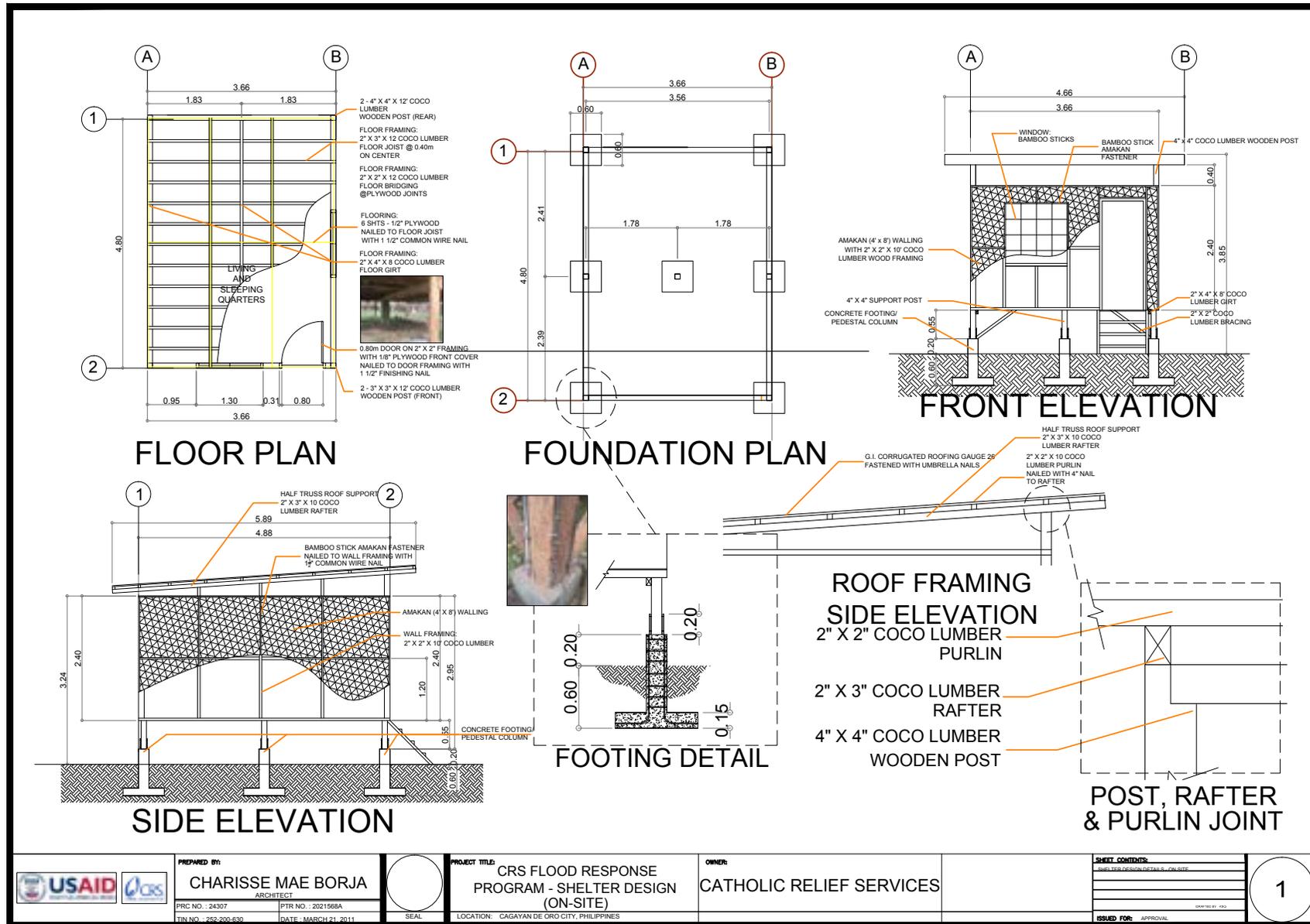
- Are the following issues critical to address? Culturally appropriate, re-locatability, speed of construction, economical, flexibility, upgradeable.
- Is it important for the design to limit effects on the land?
- Is the perception of permanence an issue? Does the shelter have to look temporary in nature?

Reflections

- The following design parameters were important:
- **Culturally appropriate:** Allows families more privacy, uses local materials, protection from rain and heat.
- **Re-locatable:** A shelter can be carried from one place to another by 20 persons or can be easily dismantled and re-erected in another location.
- **Speed of construction:** The shelter can be constructed in approximately two to three days.
- **Economical:** Total shelter cost, including all labor and materials, is approximately 17,000 PHP (US\$410).
- **Flexibility:** Versions of the model can be applied to relocated families and those returning to original sites.
- **Upgradeable:** Shelter can be easily upgraded into permanent homes, or dismantled and moved if necessary.



Moveable! Transitional shelters being moved by 20 people Photo by Charisse Mae Borja



	PREPARED BY: CHARISSE MAE BORJA ARCHITECT		PROJECT TITLE: CRS FLOOD RESPONSE PROGRAM - SHELTER DESIGN (ON-SITE)	OWNER: CATHOLIC RELIEF SERVICES	SHEET CONTENTS: SHEET DESIGN DETAILS - CA SITE	
	PRC NO. : 24307 PTR NO. : 2021568A TRN NO. : 282-200-530		DATE : MARCH 21, 2011			

Architectural construction details of onsite transitional shelters by Charisse Mae Borja

TRANSITIONAL WASH FACILITIES

In order to design WASH facilities for transitional sites, CRS considered several factors:

- The facilities needed to provide the highest possible protection for the population's environmental health.
- The population were expected to spend up to two years in the transition site, so a high level of service was planned.
- Extra effort was placed on improving "ownership" of facilities to ensure higher possible levels of hygiene by dispersing facilities around the transition site and allocating each set of facilities to a small group of households.

In order to fully integrate shelter and WASH, each transitional site needed to have a unique design or site plan. For every 10 households a WASH area was provided that consisted of two latrines, two showers, laundry space and 1,250 liters of water storage. In addition, the integrated site plan included site drainage for rainwater (very important in tropical climates) and drainage for waste water, solid waste disposal, access roads and paths, kitchen areas and electricity supply.

The latrines and showers were built as a single block on a concrete slab; the superstructure was built of CGI sheeting on a wooden frame. One lesson learned is that high gauge CGI is more robust and lasts longer. Include floor drain in latrines.

Initially, two latrines emptied into a single uPVC septic tank of 1m³, with an expectation of a need for regular emptying. This septic tank was selected because of the speed with which it could be installed, the comparative ease of removing the tank after the camp closed

and, in the Philippines, the low cost of the tank. CRS learned that each latrine needs to have one septic tank. Ventilation pipes should rise above the eaves of the transitional shelter to prevent odors.

Certain services for the transitional sites needed to be managed by the site as a whole, necessitating a committee. These services were: periodic emptying of septic tanks, supply of water for domestic purposes, and the removal of solid waste and refuse. For other services such as WASH facilities, clusters of 10 households were informed prior to moving into the site so that they could self-select, as much as possible, with whom they wanted to share.



Local architect and engineer who designed and monitored construction
Photo by CRS.

Monologue

- Does the budget include WASH site preparation and water source development?
- Should we consider water source development in transitory sites? Drilling for newly established sites? Is improving pipe water development the responsibility of the council?

Reflections

- One site plan must integrate shelter, access, facilities and drainage before construction starts.
- Explore the levels of service that can be relied upon. In the Philippines there was a high level of services from the relevant authorities to actually supply water and electricity, to empty septic tanks and to collect solid waste.
- Enlist a fair amount of discussion around using squat latrines or sitting latrines. In either case, CRS supplied ceramic bowls for hygiene reasons. It appears that different people had different preferences.
- Ensure there are funds available to return the site to its original condition.

CAMP MANAGEMENT

A camp manager post was created by the Department of Social Welfare and Development (DSWD) at all transitional settlement sites. The role of the camp manager was to be the connection between the NGOs, DSWD and the IDP populations. The camp manager is responsible for ensuring the smooth

running of the camp, addressing issues when they arise, disseminating and collecting information, and keeping track of the population, their needs and their movements.

Rules and regulations were created for the IDPs.

Cagayan de Oro: Rules and Regulations in Transitional Relocation Sites

1. The transitional shelters at the relocation site are for free use by shelter recipients and their families. Transitional shelters cannot be sold, mortgaged or leased to third parties.
2. Cleanliness in the house and surroundings shall be maintained at all times.
3. Proper hygiene and sanitation shall be observed, especially in the use of bathrooms and comfort rooms. Public urination and defecation are strictly prohibited.
4. Drugs and alcohol are strictly prohibited.
5. Drunkenness and making trouble are strictly prohibited.
6. The transitional relocation site is a No Smoking and No Gambling area.
7. Domestic quarrel is discouraged, but if it happens, the parties are advised not to make noise so as not to disturb the neighborhood. Quarrelling in public among residents is also prohibited.
8. Videoke singing, if necessary, during special occasions, like birthday, etc., shall be until 8:00 in the evening only.
9. All criminal activities like murder, robbery, physical injuries and other crimes punishable by existing laws shall be reported to the police.
10. All residents shall police themselves and assist the association's officers in the compliance of the policies and rules & regulations of the transitional relocation site.
11. Repeated failure on the part of the members of the community to comply with the policies and rules & regulations can be a ground for the entire community to be expelled from the transitional relocation site, after proper investigation and upon the recommendation of the camp manager hired and assigned by DSWD.

Monologue

- Who will be the camp managers?
- When rules are broken, should there be any penalty?
- How strict should the rules be? How should shelter recipients be permitted to adopt rules to their own camp?
- Whose job is it to enforce the rules?



Camp coordination/camp management posts set-up at each settlement by the Department of Social Welfare and Development (DSWD) Photo by Seki Hirano/CRS.

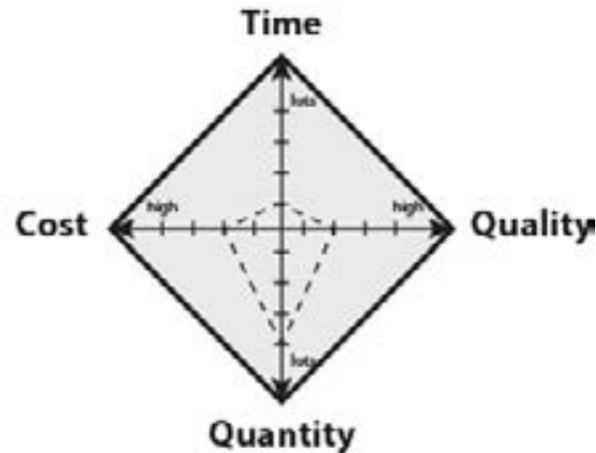
PROCUREMENT, LOGISTICS AND FINANCE

CAGAYAN DE ORO EXPERIENCE

The effectiveness of a transitional settlement program heavily relies upon the timeliness of response, cost efficiency, quality of outcomes and quantity of shelter recipients assisted. Thus the logistics, procurement and financial systems are crucial to the outcome of the program. In this response, locally and regionally procured material were ordered at a massive scale and systems had to be put in place. After a tropical storm in the rainy season, drying timber is an issue, and limited road access affected the delivery time and costs. The photo, below, shows one truck with the volume of coconut lumber required for 28 transitional shelters. For CRS to reach its target of 1,800 shelters, this would amount to 75 truckloads of timber.



Volume of timber required to construct 28 transitional shelters Photo by CRS



Web diagram comparing essential factors of construction programs diagram by Annika Grafweg



Arial view of a city built along the estuary of a river Photo by Seki Hirano/CRS

Reflections

- Once vendors were identified, clearly explain the exact material needs in terms of quality, quantity and timeliness.
- A rapid response is key for implementing a transitional settlement program. Logistics, procurement and financial systems need to be established as soon as possible.
- When procuring construction material in such quantity, we learned not to limit the number of suppliers.
- Quality control of goods is essential. Do not be afraid to reject below-quality deliveries.
- Environmental issues: Although coconut trees are fast-growing compared to hard woods, it still is a large quantity of timber to use and does have an environmental effect.

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Cover photo (front): Urban transitional settlements by CRS in Cagayan de Oro City Photo by Seki Hirano/CRS.

Cover photo (back): Lady washing clothes in the transitional settlement Photo by Jennifer Hardy /CRS.

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