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## **Human Security and Community Resilience in the Wake of Typhoon Yolanda**

**(Working Paper VI)**

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### **Introduction**

This working paper is the sixth in a series run by the ESRC/DFID funded project ‘Poverty Alleviation in the Wake of Typhoon Yolanda’<sup>1</sup>. The overarching aim of our project is to identify strategies that work in relation to poverty alleviation in post-disaster urban environments and the conditions necessary for the success and scaling up of these strategies. The Typhoon Yolanda relief efforts in the Philippines are used as a case study. The project focuses on urban population risk, vulnerability to disasters and resilience in relation to environmental shocks.

In this paper we examine the extent to which disaster relief strategies have facilitated human security post-Yolanda. Human security can be related to ‘natural’ disasters in relation to freedom from fear (of another disaster or related impacts such as crime or material of physical harm), freedom from want (the impact of the disaster in the short, medium and longer term) and freedom to live in dignity (dignity can be related to natural disasters in multiple ways including loss of livelihood and shelter). We argue that freedom from fear and want and the ability to live in dignity are intimately associated with the resilience of, and strength that can be drawn from, communities.

On 8 November 2013 super-typhoon Yolanda (international name Haiyan) hit the

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<sup>1</sup> (Ref ES/M008932/1). For further details and previous working papers see our web site: <http://www.projectyolanda.org>. Accessed 10 May 2018. .

<sup>2</sup> Although a distinction can be made within the Visayas with Eastern, Northern and Western Samar

Visayas area of the Philippines. The Visayas group of islands is home to some of the poorest provinces in the Philippines<sup>2</sup>. Official figures indicate 6,193 individuals died, 1,061 went missing and 28,689 were injured as a result of Yolanda (Official Gazette of the Republic of the Philippines, n.d.). A vast area of agricultural land was devastated and whole towns were destroyed. Total damage was estimated at US\$1,890,130,000 (National Risk Reduction and Management Council, 2014). The total number of people affected in terms of their livelihood, environmental and food security was approximately 16 million. Of this number nearly 4.4 million or 30% were displaced (NEDA, 2013). The storm tide (which is the combination of the storm surge and the tidal level below mean sea level) reached 4.5 meters high in places. The drastic and extensive impact of the disaster only fully emerged after two to three days, as transport links and communication systems were initially inoperable.

The United Nations (UN) defines disasters as ‘a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope with its own resources’ (UNISDR 2009, p. 9). From this definition it is clear that social resilience is a core concern of disaster management and that disaster relief and rehabilitation necessarily involves interaction between the community and outside agencies. The impact of ‘natural’ disasters is arguably exacerbated by the organisation of human settlements. Humans are increasingly, by accident or design, living in densely populated and highly vulnerable areas. Consequently the material damage and death toll from disasters is greater. Not because the environmental magnitude of disasters is necessarily greater but because of the increased density of human settlements in environmentally fragile areas.

The overarching objective of this working paper is to critically assess the strategies used to secure individuals and communities in the aftermath of Yolanda and the extent to which resilience has been achieved. Cosmetic adaptations that result in similar or equal but different vulnerabilities do not result in resilience. Similarly the restoration of a pre-disaster status quo does not equate to resilience if peoples and communities are still not in a position to effectively mitigate the risks that they face.

This paper draws on data gathered from selected communities in Leyte, specifically the adjacent towns of Palo, Tanauan and Tacloban City, which bore the brunt of Yolanda. All three towns sit near the head of the Leyte Gulf. A total of 800 household surveys, 13 focus group discussions (FGDs) and interviews were conducted in twenty *barangays* in the three localities. We examine post-disaster resilience in the immediate and medium term, test the extent to which the notion of 'Building Back Better' is credible, and investigate the challenges that these communities, the Philippine government and national and international aid agencies faced during the reconstruction process. We have chosen to focus on the related issues of housing and livelihood as 4.4 million people became Internally Displaced Persons (IDPs) as a result of Yolanda. For some people this situation was only temporary and for others it is still ongoing. For many IDPs and even those that have been rehoused, tensions

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<sup>2</sup> Although a distinction can be made within the Visayas with Eastern, Northern and Western Samar provinces recording higher poverty rates than Leyte (most number of poor families) and being in the top ten poorest provinces of the Philippines together with Negros Oriental in 2012 (NAPC). However, in the first half of 2014, the Eastern Visayas (Region VIII) is said to have become the poorest region in the country after Yolanda. (NSCB 2015).

remain between the provision of safe housing and access to their livelihood that tends to be linked to their communities and also the sea. As such, we examine the challenges that communities faced in the aftermath of Yolanda and how effective housing and livelihood strategies were in terms of mitigating human and community insecurity and building social resilience. We argue that resilience is a poorly understood term in relation to disaster relief. We also argue that resilience is a term that has been imposed on Yolanda survivors without a true understanding of what this means.

In the following sections of the paper we firstly illustrate the data gathering approaches used for this project followed by a conceptual discussion of human security, community resilience and poverty. The next two sections examine the vulnerabilities and approaches to risk adopted prior to and immediately after Yolanda. We examine the attitudes towards typhoons before and after the disaster in order to assess two issues; the extent to which 'risky' behavior has been modified and how far social resilience has grown. We outline the impact of the disaster, relief and rehabilitation efforts and obstacles to rehabilitation and resilience. The following two sections focus on housing and livelihood as they relate to sustainable rehabilitation, resilient communities and human security. We conclude with a discussion of the transferable lessons learned and policy implications of our findings.

## **Data Gathering**

Governance in the Philippines is devolved through a system of local government units (LGUs), e.g. provinces, cities and municipalities. LGUs are further sub-divided into barangays that are the smallest administrative units in the Philippines run by elected officials. This working paper is based on evidence drawn from 20 barangays of comparable size across three LGUs: eight barangays in Tacloban, six barangays in Palo and six in Tanauan. The uneven sample size across the LGUs relates to the differing size, and hence number of barangays, within each LGU. Assessing reconstruction and rehabilitation across space allowed us to compare the extent to which governance at the LGU and barangay made a difference in terms of post-disaster resilience building. This is important as community resilience building is best understood from the bottom up in order to avoid 'disaster management interventions [that] have a propensity to follow a paternalistic mode that can lead to the skewing of activities towards supply rather than demand' (Manyena, 2006, 438).

In each LGU we chose<sup>3</sup> one least affected barangay as a control, the others were coastal and most affected. We interviewed all of the captains (highest elected official) from our chosen barangays and/or in some cases also members of the barangay councils. We also interviewed all the mayors of our chosen LGUs and the vice mayors of Tacloban and Tanauan. Semi-structured interviews focused on housing, livelihood and community resilience were conducted in July 2014 (nine months post-Yolanda), October/November 2015 and August/September 2016. Focus group discussions were held in March 2016 (two years post Yolanda) and August 2016. We also conducted 800 household surveys in October/November 2015. The virtue of

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<sup>3</sup> The barangays chosen were: Tacloban: Barangays 54, 54-A, 66-A, 67, 87, 88, 89, Abucay (least affected); Palo: Cavite, Cogon, Libertad (least affected), Pawing, Salvacion, San Joaquin; and Tanauan: Bislig, Calogcog, Salvador (least affected), San Roque, Sta. Cruz, Sto. Niño.

gathering evidence over time is that we were able to monitor first hand how effectively social resilience has been established beyond the initial emergency phase of the relief operations. We were able to go back to the same communities and the same respondents to see whether their situation had improved or changed and what the primary obstacles were to their rehabilitation. We were also able to observe the shift in activity when many international aid agencies left.

The survey data and interview evidence from the barangay residents and government officials is triangulated with evidence from interviews with various, government departments, non-governmental organizations (NGOs) and international aid organizations. It is also cross-referenced with policy statements and quantitative data as they relate to the relief effort. Notwithstanding any anomalies in data gathering processes we are however aware that the devastation wrought by Yolanda means socio-economic trends measured over the periods before and after Yolanda are completely distorted by the effects of the typhoon and the consequent relief effort. Indeed it may be a number of years before the consolidated effect can be accurately measured. The following section gives a brief overview of the utility of human security as a concept and policy strategy as it relates to social resilience.

### **Human Security, Social Resilience and Poverty**

Debates over human security as a strategy and a concept invariably take the 1994 UNDP *Human Development Report* as their benchmark. This report stands alongside the canon of literature on the changing nature of security that was generated by the end of the Cold War. Numerous scholars (Buzan, 1991; Fukuyama, 1992; Huntington, 1993; Mearsheimer, 1990; Wendt, 1990) sought to make sense of the end of the bipolar system and the impact this would have on fundamental political concerns such as sovereignty, power, the state and the nature of security and the human condition.

Definitions of human security vary and the utility of human security is contested; however 'most formulations emphasize the welfare of ordinary people' (Paris, 2001). The Commission on Human Security outlines human security as 'protecting people from critical (severe) and pervasive (widespread) threats and situations. It means using processes that build on people's strengths and aspirations. It means creating political, social, environmental, economic, military and cultural systems that together give people the building blocks of survival, livelihood and dignity' (2003, p. 4). Meanwhile the UNDP defines human security as 'safety from chronic threats such as hunger, disease, and repression; and protection from sudden and hurtful disruptions in the patterns of daily lives, whether in homes, jobs or communities' (UNDP, 1994, p. 3). This definition shall be used as a point of reference for this paper. Sudden and hurtful disruptions can be caused by war and violence orchestrated by humans; however, they can equally be caused by environmental phenomenon, in this case a typhoon.

Resilience has been debated across disciplines in physical/material and social terms<sup>4</sup>. The word resilience is derived from the Latin word *resilio* meaning to leap or spring

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<sup>4</sup> For conceptual overviews of the term resilience as they relate to disaster relief see i.e. (Alexander, D. E.; Cote and Nightingale, 2012; 2013, Manyena, 2006; Mitchell and Harris, 2012; Weichselgartner and Kelman, 2014)

back. Resilience does not just relate to the ability to soak up attack or manage threats and risk, it also relates to the ability to adapt in the face of such challenges. Resilience is not just about deflecting threats and staying the same it is also about physical and social evolution. Resilience is ‘the capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience’ (Rodin, 2015, 3). We argue that human security and social resilience are intimately connected but these connections have not been explicitly explored in the existing literature. Human security relates to protection from threats, survival and the ability to withstand shocks and disruption whilst social resilience relates to the ability to both absorb and adapt to shocks.

David Chandler is one of the few authors who has integrated human security and resilience in a conceptual framework. Chandler’s work (2012) addresses the merits of military intervention and the Responsibility to Protect in post-conflict scenarios. According to Chandler discourses of human security have been hijacked in order to justify western intervention in internal conflicts. We find Chandler’s notion of bottom up human security as it relates to resilience and empowerment particularly useful. In post-disaster or post-conflict situations freedom from fear or want will not endure unless communities have some degree of agency and control over their own security. If communities and individuals do not capture control over how resilience is built and maintained then their rehabilitation will be fragile and the ability to manage risk will be limited. The down side of ‘Building Back Better’ is that those who have influence over this process are likely to build back the power structures that rendered people and communities vulnerable in the first place. ‘a resilient system is not necessarily inherently good. It may even be necessary to disband, destroy or modify a system in order to enable the presence of a system that is more desirable and resilient. Such a perspective immediately brings to the fore questions of values, power and politics’ (Mitchell and Harris, 2012, 5).

Poverty is intrinsically linked to human insecurity and is often the result of exclusion from or a discriminatory relationship with processes of development. In an attempt to operationalize human security as a reference point and objective Gary King and Christopher Murray have suggested that human security can be seen as exposure to risk and defines ‘an individual’s human security as his or her expectation of year of life without experiencing the state of generalised poverty. Population security is then an aggregation of individuals’ human security’ (2001, p. 592). If a population is non self-sustaining, which was the case after Typhoon Yolanda, then community security is aided by the provision of ‘health, education, employment, housing or pensions, which aims to maintain the equilibrium’ (Duffield, 2007, p. 189) at the aggregate level. These provisions can provide a solid basis for human ‘expectations’ and secure humans in a more sustainable way than cash handouts to individuals could ever do. However if communities are dependent on outside help for these provisions there is a danger that the equilibrium will be dictated by donor organizations, rather recipient communities. Communities will get the version of resilience that donors impose upon them rather than one that is contextually appropriate or likely to endure.

In the current human security literature the notion of freedom from fear tends to deal with some sort of human induced violent attack or repression whilst freedom from want relates to the provision of material necessities. However people also fear

environmental disasters, especially if they have previously undergone such as disaster, as they can wreak destruction on a scale seldom seen under conditions of manmade violence. The notion of resilience is of particular utility in relation to environmental disasters because of the relationship between environmental and social adaptation and change in the wake of disasters.

Environmental disasters can be creeping but they can also, as in the case of typhoons and earthquakes, be sudden and hurtful disruptions. Human security meets social resilience where communities adapt successfully in order to limit future vulnerability and risk. Rehabilitation from, and building resilience against environmental disasters is not just about freedom from want, at the individual or aggregate level, it is also about sustainable freedom from fear. A combination of both of these factors helps work towards social resilience and the freedom to live in dignity.

### **Pre and Post disaster Vulnerability**

Vulnerability and risk in relation to natural disasters are conditions that are heightened by poverty. Vulnerability and risk inform why and how poor people and communities are exposed to natural disasters. Disasters are products 'of social, political and economic environments (as distinct from the natural environment), because of the way these structure the lives of different groups of people' (Wisner, Blaikie, Cannon & Davis, 2004, 4). The poorest population tends to be the most vulnerable. The poor are likely to live in fragile housing in vulnerable localities. It is also likely that financial or material safety nets will be limited or absent. Meanwhile resilience and adaptation are complex variables that require both social and material examination. Resilience and adaptation are indicators of how people and communities cope or 'bounce back' in the aftermath of a disaster. As a simple dichotomy vulnerability and risk indicate the degree of potential exposure to disasters and resilience and adaptation are indicators of how effectively people cope in the aftermath of disaster, which is dependable on the local social, political and economic factors. 'Natural events may appear cruelly random but their impacts, who they affect and how, the degree of resilience that societies and individuals exhibit, and the trajectories of recovery, are far from random' (Rigg, Law, Grundy-Warr & Tan-Mullins, 2008, 138). If poor governance and weak accountability characterize disaster relief, then vulnerability will remain, resilience will be compromised and adaptation may be only partial or ineffective.

Urban vulnerability to natural disasters is a growing research area (Duijens & Marjin, 2014; Munslow & Dempsey, 2010; Pelling, 2007). Scholars argue that the urban poor are amongst those most exposed to environmental threats and those least able to rehabilitate themselves in the aftermath of a disaster. Rapid urbanization is often accompanied by poor urban planning. However even when building regulations exist they may be of little consequence to vulnerable shanty communities. Such communities are often built on unstable or exposed ground and experience has shown that they simply collapse in the face of environmental shocks. This has profound consequences for human security as it relates to fear, want, dignity and sudden and hurtful disruptions to homes and communities.

The population of Tacloban, designated a highly urbanized city, was just under 137,200 thousand in 1990 and just under 221,200 thousand in 2010. This equates to

an increase of nearly 38%. The population of Palo, a third class municipality, was 38,100 in 1990 and 62,727 in 2010, an increase of nearly 65% and the population of Tanauan, a second class municipality, was 38,033 in 1990 and 50,119 in 2010 an increase of nearly 32% according to national census results. Many of the population in Tacloban, Palo and Tanauan live in low lying coastal areas that are vulnerable to inundation during typhoons. Increased population growth has meant that many coastal barangays, comprised of densely packed poor communities, live right on the shore line, or even over, the water. There are also a high percentage of 'landless' dwellers in these areas. They live in these vulnerable areas because they do not have security of tenure elsewhere (Nuessner, 2014, p. 37). However this puts these communities right in the front line of the regular typhoons that roll in from the Pacific, usually between May and October.

Three days before the typhoon on 5 November 2013, the mayors of Tacloban, Palo and Tanauan gave instructions for all barangay captains to facilitate evacuation to designated evacuation centers or higher grounds by the evening of 7 November. On 7 November barangay captains and government officials were tasked with encouraging people to go to designated evacuation centers, these included churches, schools, barangay halls and the Tacloban Astrodome. Key informants noted that while some followed the warning and evacuated, others remained or decided to stay at home to guard their property. Key informants gave different reasons why some people decided to stay in their homes or leave the designated evacuation centers. Some claimed that they were not warned of the "storm surge" or they did not understand what it meant. Others claimed that people did know this but they were simply 'hard-headed'. Despite the vulnerability of their housing and coastal location poor householders were prepared to engage in 'risky' behaviour to protect their assets.

Poor households are much more likely to operate reactively, as opposed to proactively to natural disasters, even if there is a strong likelihood of disaster. If resources are short it makes sense for families to prioritise immediate need as opposed to a disaster that might never happen. It is not unusual that householders prefer to stay put in face of an impending disaster in order to safeguard their scarce possessions. However, there is 'a degree of discrimination in terms of those who live[d] and those who die[d], particularly in terms of gender and generation' (Rigg et al., 2008, p. 142). The coping strategies for many of the poor when warned of the imminent danger of a major typhoon was for the women and young children to evacuate to storm shelters whilst the men and older boys to stay put and guard their houses and scarce possessions. This also meant many of the men and older boys perished in the typhoon.

One of the reasons people refused to leave was because they underestimated the impact of the typhoon. Many did not expect the intensity of the storm surge. The high casualty rate was because people were not used to the sheer scale of typhoons such as Yolanda. In Leyte we heard the phrase 'we were used to typhoons but we did not expect the storm surge' over and over again. Emilita Montalban, the captain of Barangay 88 in Tacloban, explained to us that 'some residents did not believe how bad it would be and thought they could manage to stay as they have experienced typhoons before. They did not understand the term "storm surge"' (interview, November 10, 2015). Barangay 88 is located on a peninsula near Tacloban airport. This meant that the storm surge hit from two sides (Ramzy, 2013). More than a 1000 people are estimated to have died here. According to Gregorio Papoose V. Lantajo Jr,

the barangay captain of San Joaquin in Palo, ‘we were well-prepared for the typhoon, meaning the rain and the winds, but totally caught off-guarded by the storm surge and flooding, as we have never seen something like this before’ (interview, November 6 2015). Meanwhile Tanauan informants noted that people knew that Yolanda was possibly going to be the strongest typhoon ever experienced in the Philippines but still people did not anticipate the scale of the eventual damage. A combination of past experience and the perceived importance of safeguarding material goods meant that vulnerable householders were prepared to engage in ‘risky’ behaviour.

### **The Immediate Aftermath**

When interviewed for this project Colonel Mike Wylie of the United States Marine Corp. noted that when he first landed in Tacloban on 9 November 2013 what he saw was ‘probably the worst situation that I have ever seen, and I have spent time as a combat marine in Iraq, it literally look like an atomic bomb had gone off over the city’ (interview, November 8, 2015). The majority of the barangay captains reported that communities were in a state of complete and utter shock in the immediate aftermath of the disaster. The typhoon created a ‘sudden and hurtful disruption’ to communities in ways that might equate to a major war.

Immediately after the typhoon many areas were effectively cut off from the outside world. All lines of communication were down and even vehicles that had not been destroyed by the typhoon were useless as the roads were covered in debris. Our interview respondents reported that during this time they were forced to minister to their own injured and that food and water were scarce or non-existent.

Republic Act No. 10121, the Philippine Disaster Risk Reduction and Management Act 2010 states that LGUs are responsible for ‘preparing for, responding to, and recovering from the effects of any disaster’. The problem for the LGUs in the case of Yolanda was that those tasked as first responders were victims themselves. Government and security personnel lost their homes, possessions and relatives. Nevertheless there was criticism from the national government that the LGUs were not prepared for the disaster. The situation was further complicated by broader political factors, as in Tacloban the mayor is the nephew of Imelda Romualdez Marcos (Tacloban is her home town) and therefore part of a political dynasty that is historically opposed to the family of current Philippine president Benigno S. Aquino III.

The international community responded rapidly to Yolanda. Multiple state and non-state organizations were rapidly in evidence on the ground and US\$414.625 had been pledged in assistance (Rappler, 2013). The only rapid way into the region was via the Daniel Z. Romualdez airport in Tacloban and in order for planes to land debris had to be cleared from the runway. The runway was quickly cleared to allow C-130 military planes to land however ground to air communication was limited and planes had to use visuals to land. Over the coming days the airport soon became the site of desperate scenes as people queued for free evacuation on military flights or seats on commercial flights. Commercial flight access was limited to prop-planes.



## Housing

In order for communities to ‘bounce back’ housing is a fundamental issue. Without adequate housing communities are vulnerable and residents remain vulnerable to disruption. Resilience, as it relates to recovery from shock and stress, and the adaptation and growth of communities is fundamentally undermined if survivors are denied safe and permanent housing. The effect of Yolanda on infrastructure and housing was significant, due to the strong wind, heavy rainfall and storm surge. Our survey respondents reported that 39% of those living above the poverty threshold and 61.8% of those below the threshold spent at least some time in an emergency shelter. In coastal barangays the loss of housing stock was near total. In a needs assessment published on 17 November 2013, Plan International reported that 90% housing in coastal barangays was destroyed and 80% of total housing in Tanauan was destroyed (PLAN, 2013), most media reports cite damage in Tacloban at 80-90%.

In the immediate aftermath of the disaster people remained in evacuation shelters. Many also resorted to living in heavily damaged but still standing concrete structures such as schools. Those that could move in with family members, although immediate after the disaster mobility were limited. The weather added to the discomfort of the survivors as it continued to rain for days. The mayor of Palo, Remedios Petilla, recalls that she told survivors arriving at the Municipal Hall in Palo ‘just put anything over your heads so that you can at least have shelter, until we can get you something sturdier’ (interview, November 13, 2015).

In the aftermath of a disaster it is obviously important to respond to the immediate needs of the victims. Food, water, shelter and medical supplies are primary concerns. On 13 November ‘2000 jerry cans, 1400 hygiene kits 600 mosquito nets, 1176 kitchen items, 1400 plastic sheets 1400 blankets and 1900 sleeping mats’ (UNHCR 2013) were delivered by truck to Tacloban and on 14 November hundreds of family sized tents arrived by air. The distribution of goods was hampered by security concerns, blocked roads and a lack of available fuel. Nevertheless tent cities sprang up fairly quickly. The government moved relatively quickly to build bunkhouses as a means of accommodating those stuck in evacuation centers. The tents donated by international aid agencies were not popular as they were hot, cramped, uncomfortable and a fire risk. Many of the barangay officials that we spoke to also reported that local schools were inhabited by a number of families; however conditions were cramped and there was a lack of privacy. Some respondents reported that even when the children returned to school after the disaster, typically after two or three months, families were still living in the classrooms.

Shortly after Yolanda a verbal directive from president Noynoy Aquino ordered that no houses were to be built in a zone reaching 40 meters from the sea. A corresponding Department of Environment and Natural Resources (DENR) driven directive was subsequently brought into law in March 2014 as House Resolution No. 947. The ‘no dwell zone’ is problematic for a number of reasons, not least because height above sea level, not distance from the sea, is a better indicator of safe ground. The 40-meter demarcation line is effectively meaningless. It is also problematic because responsibility for the administration of the 40 meter no-dwell was essential devolved to LGUs. Vilma Orca for Catholic Relief Services (CRS, 2014) (whose project was active in Magallanes, Tacloban) reported to us that: ‘there is no clear definition of

what the no dwell zone is. There is some debate of 40 meters, the City Government then said 20 meters, and then the DPWD put up markers' (interview, July 29, 2014). Meanwhile in Tanauan the LGU decided that the no dwell zone would be 50 meters. Vice mayor Flores told us that the reasoning for that was so that more people would qualify for relocation to permanent housing.

This no build zone was apparently designed to stop people rebuilding in the danger zone and the idea was that they would be prioritised for relocation to safe housing. However the construction of permanent, or even transitional housing, has been painfully slow. This has left the local government with no choice than to tolerate rebuilding in the no build zone as they are unable to come up with a practical alternative. This is has been a particular problem in Tacloban. We saw for ourselves houses that had been rebuilt well within the no dwell zone and even over the sea. Vice Mayor of Tacloban, Jerry Yaokasin, confirmed to us (interview 31 August 2016) that Tacloban City Hall had given up trying to stop rebuilding in the no dwell zone as there was simply nowhere else available for people to. Despite millions of dollars in disaster relief funding and the best efforts of a host of governmental and non-governmental relief agencies people remain in vulnerable housing with extreme exposure to the sea. Coastal dwellers have 'bounced back' as they have rebuilt their houses but these communities are not resilient as they are unable to mitigate future risks and remain vulnerable. Whilst the locals are cognizant of the risks that they face there is also little or nothing that they can do about it apart from getting out of harms way when the next typhoon comes. Barangay captains in Tacloban told us that they had no idea when alternative housing would become available for their residents and some even told us that 'building back better' had taken place as they had been given a new barangay hall or a baseball pitch (interview Malinao, 19 August 2016).

People in Leyte who lost their houses in the no dwell zone are excluded from receiving the DSWD funded Emergency Shelter Assistance (ESA) of 30,000 PHP for a totally destroyed house and 10,000 PHP for a partially destroyed house. NGOs and INGOs were restricted by the LGUs from assisting rebuilding in these zones, but this policy was subsequently abandoned. In some barangays in Palo, the residents only received this funding in May 2015, nearly two years after the disaster (interview with Cavite residents, November 9 2015). In Tanauan, some barangay captains reported that ESA beneficiaries got PhP 10,000 in cash only and PhP 20,000 worth of vouchers for housing materials. Others did not get anything though qualified (City Government of Tacloban, 2014). Catholic Relief Services (CRS) subsequently reported that this 'unsupported reconstruction was being undertaken without adequate materials or expertise' in the no dwell zone (CRS, 2015).

In the 4 November 2015 News Release the National Housing Authority declared that 'the government infrastructure projects in areas hit by Typhoon Yolanda on November 8, 2013 are on track' (2015, 4 November) and that they had delivered '12, 635 ready for occupancy housing units and 8, 820 more housing units to be completed before the end of 2015'. They also reported that this housing would benefit from community facilities, water and power lines. Meanwhile figures given to us by Ted Jopson, of the Community Affairs Office of the City Housing and Community Development Office Tacloban indicated that 954 temporary shelters have been built by NGOs and 915 bunkhouses had been built by the NHA. The table below shows the figures for permanent housing as of November 2015:

**Figure 1: Permanent Housing Completed Tacloban City, 28 October 2015**

	Target Units	Completed	Occupied	Vacant
National Housing Association	13062	297	77	220
INGO/NGO Projects	15731	853	512	101

**Source: City Housing and Community Development Office**

Jopson explained that the city government relocation strategy involved moving people as a bloc from the coastal barangays to permanent relocation sites. He also explained that teachers would move to new schools and stay with the same children (interview, November 11, 2015). However there are a number of obstacles to this, not least the length of time that residents have been stuck in temporary accommodation and the slow and piecemeal approach to the permanent housing. Jopson outlined a number of problems with contractors including a lack of skilled craftsmen, a lack of materials, contractors selling contracts that they had been awarded to other contractors and contractors being unwilling to bid for schemes that involved building in remote areas as no allowance was given for transport costs. There have also been a number of problems in securing suitable building lots and the downloading of funds from the national government.

This is particularly true of Barangay 88, Tacloban as the entire peninsula has been designated a no dwell zone. Nevertheless Ricardo Benitez, captain of Barangay 91 (Abucay, least affected in Tacloban), where there are a number of NGO/INGO and government built transitional shelters reported that the people living in the bunkhouses would rather stay there than move to permanent shelter in the north as it was too remote and ‘their livelihood would be affected and the school is too far away’ (interview, November 13, 2015).

In Palo, the housing situation is less dire than in Tacloban, due to the smaller population and the lower density per square meter. Most of the houses have been rebuilt by non-governmental agencies, such as CRS, and Oxfam. The national or local government has had very little or no role in the rebuilding process. In Palo most of the transitional houses are considered to be permanent houses, and there are no plans to further build permanent houses. This is because many of the residents of the transitional houses considered them better quality than their pre-disaster houses, as they are equipped with proper toilets and septic tanks, electricity and communal taps. Although not all houses have electricity due to the cost, they are connected to the grid. In terms of location, it is extremely difficult to convince the villagers to build away from the danger coastal zone. According to mayor Petilla ‘it is hard to convince people to move away from the sea, even though we promised them a docking spot for their fishing boats’ (interview, November 13, 2015). This is because the new housing location is two or three kilometers from the sea which makes it inconvenient to travel to the sea. The fishermen also prefer to be close to their boats for security reasons.

In Tanauan, houses outside the no-build zone were slowly rebuilt with the assistance not only of the government but also NGOs, international aid agencies and private

companies. Some were given roofing materials to rebuild homes (e.g. from Oxfam and Green Mindanao). In Barangay Sto. Niño, about 150 families qualified for housing from UN Habitat but not all the houses could be built because residents do not have their own land. This is prerequisite for building the houses. If land tenure is not secure then the landowner could come along later and claim the house on his land. For those in the no-build zones in Bislig, San Roque, Sta. Cruz, and Sto. Niño, there were already designated beneficiaries for resettlement but not all of them have been transferred to the resettlement areas. At the time of writing they still reside in the no-build zones. Some NGOs and private sector groups that encourage actual work, or 'sweat equity' in building resettlement areas as the beneficiaries' contribution to their new homes. The Peninsula Hotel Group and Gawad Kalinga, a Philippine NGO that specialises in providing housing and livelihood opportunities all over the country, adopted this practice when building new homes in barangay San Roque.

In all three LGUs a number of resettlement areas have been built, mostly with nongovernment and international support. However not everyone has moved to these areas either because there are problems in terms of determining and awarding houses to beneficiaries or the new houses are still insufficient. In the Tacloban resettlement areas, beneficiaries complain of insufficient facilities like water and medical care, in-house toilets and the cost of the journey to their places of livelihood. However these issues are less problematic in Palo and Tanauan as safe resettlement areas have been sourced that are not so far from the residents original communities. In general the new housing is much more robust than the housing in the original coastal communities. Roofs are made of solid steel and walls and floors are made of concrete. Interviews conducted in August 2016 indicated that no residents that have transferred to permanent housing have returned to their original homes. Nevertheless some fisherfolk do stay overnight in their original homes a few nights a week so that they can fish. At the weekends they return to their families in the northern barangays. Lack of livelihood options is a key concern in the resettlement areas.

## **Livelihood**

The loss of tangible assets such as land, equipment (e.g. tools, boats), livestock, crops and manpower from the household has a significant effect on human security and the ability to 'bounce back'. As noted earlier this alters risk assessment, as people feared impoverishment more than the physical threat of the typhoon. In the recovery stage, if rehabilitation involves relocation at the cost of livelihood then one threat to well-being is simply replaced with another. This poses particular challenges for rehabilitation practitioners and policy makers more broadly in the face of rising sea levels and the increased incidence of extreme weather events.

Our survey respondents indicated that 86.7% of those living above the poverty threshold and 92.4% of those living below it had their livelihood affected by Typhoon Yolanda. In the longer term 43.9% of those living above the poverty threshold and 53.7% of those below it felt that sourcing livelihood was more difficult in the time period since Yolanda. Before typhoon Yolanda, most residents in the urban areas under investigation were engaged in the manufacturing and services sector, such as working in factories, and as sellers and traders and other labour based jobs. However less than half of our survey respondents living below the poverty threshold relied on salaries for their income, 33.2% ran small businesses, 4.3% received financial

assistance of some sort 1.9% lived off a pension with 18.3% citing ‘other’ sources of income.

High employment was in evidence in the Eastern Visayas, both before and after Yolanda. According to the Department of Labor and Employment unemployment went down from 5.6% in 2014 to 5.3 % in 2015. Meanwhile the rate of underemployment reduced from 32.4% in 2014 to 26% in 2015 (Philippines News Agency 2016). Underemployment is when a person is employed but his labour is under utilised in terms of hours worked, skills used and compensation paid. However the respondents in the barangays under investigation gave far higher rates of employment and underemployment than official figures record. For instance officials in Tacloban in Barangay 55-A reported that less than half of their residents were employed and Barangay 66-A officials said that between 40 and 60% of residents were in need of livelihood. Whilst these figures were somewhat speculative they do give an idea of the scale of the problem and the wide divergence with official accounting. The lack of livelihood options, after the disaster inevitably further marginalised the urban poor in the recovery stage. The high level of non-salary income amongst the poor is also indicative that livelihood schemes and entrepreneurial training are extremely important. Our interviewees repeatedly cited lack of livelihood as a source of insecurity for Yolanda survivors.

In the immediate aftermath of the typhoon tools and equipment and sanitation products were among the first items to be distributed to the residents. Relief goods of this type helped residents to cope with the trauma and insecurity that was evident in the immediate aftermath. During and after the immediate rescue and recovery, the area saw an influx of numerous state and non-state actors, ranging from municipal government from the area and beyond (such as Davao), local and international NGOs. The non-exhaustive list below details the various actors involved in the post rescue and recovery activities that relates to livelihood issues such as cash for work programs, and equipment and livelihood programs.

**Figure 2: Donations by Organization**

Name of organisations	Activities
Dept. of Social Welfare and Development (DSWD) (regional, provincial and municipal)	Cash for work; national KALAHI-CIDDS livelihood program for barangays
Bureau of Fisheries and Aquatic Resources (BFAR)	Boats
WedPro	Livelihood programme
Dept. of labor and Employment (DOLE)	Cash for work
CONCERN/ CECI	Livelihood programme
ACF	Livelihood for fisherfolk
Oxfam	Livelihood programme and cash for work
Dept. of Interior and Local Governments (DENR)	Boats
US government	Livelihood programmes
Ministry without Borders	Boats
Magsaysay transport	Boats
Tzu Chi	Cash for work

UNDP	Cash for work
USAID	Start up funds for sari-sari stores and food stalls

**Collated from focus group and barangay official interview responses.**

As observed in the table, we can classify livelihood initiatives as mainly: cash for work, livelihood programs that supplement or replace equipment for existing or previous livelihoods and livelihood transformation programs provided training and education. Cash for work initiatives are the easiest way to provide temporary livelihood and income options in the immediate aftermath of a disaster, where permanent job opportunities are still very limited due to destroyed infrastructures and buildings. People were offered substantial amounts of cash, in exchange for labour during the rebuilding process. These people are ‘employed’ to clear debris from their own areas and rebuild public infrastructures, such as wells, pipelines, roads and public buildings. Many people we spoke to praised the Tzu Chi organization for their cash for work initiatives and also noted that this process helped build collective community spirit. However more than one barangay captain observed that whilst some people worked for their cash others did not bother and just turned up when the money was being distributed.

Overall cash for work beneficial as a temporary income generator. However, in the mid-term recovery phase, there were numerous agencies that handed out free cash without any need to contribute labour to the projects. This created a competition between the different aid agencies, as people naturally took the free cash rather than work for it. Free cash also created a dependence mentality, as people began to rely on further donations to sustain them. According to one barangay captain: ‘too much help is not good for my people. They are spoiling my people by giving out money without any conditions, and people became lazy and dependent on free money’. In the longer term resilience cannot be built on dole outs.

Aid allocation is never neutral due to the volume of goods available for distribution at any one time. The allocation of goods often reflects the administrative limitations and preferences of the donors. Sometimes donors made little or no attempt to assess need and coordinate the allocation of goods. In other instances attempts were made to coordinate with local government departments. Frequently governmental and non-governmental donors were reliant on barangay captains for lists of beneficiaries qualified (in terms of age and residency etc.) to receive relief funding and goods. In some cases this led to allegations of favouritism, qualified beneficiaries being left off lists and unqualified beneficiaries making the lists. One of our interviewees even noted that, for him, barangay captains were the most important politicians of all, as they had control over the daily conditions of existence of the people in their communities. This is a crucial point in terms of building social resilience – if local level community leaders manipulate relief efforts then material and social resilience will be undermined. Paternalistic relief intervention is best countered by bottom up resilience building, but that is not to say that power relations within communities are not also problematic.

We found numerous examples of duplicated aid, especially boats for fisherfolk. In this instance, fishermen tend to be favoured recipients of equipment and aid. In some cases across the three localities, one fisherman could be given up to three boats (with

others not receiving even one), by different donors (interviews with Lantajo, November 6, 2015; Montalban, November 10, 2015; Villanueva, November 11, 2015). This is because boat donations make good headlines and positive public relations for the donor agencies, which could encourage more donations to that particular agency. Similar instances of duplicating boat donations were also found in Thailand in the aftermath of Boxing Day Tsunami 2004 (Tan-Mullins, 2007). Poorly planned over-generosity often results in greater competition among the fisherfolk, as boats were also given to non-fishers. The increase in fishing activity depletes the fishery resources and threatens the sustainability of livelihoods. Alternatively boats are accepted but lie unused and are simply a waste of much needed resources. Many respondents in Leyte also indicated that there was too much focus on helping the fishermen, but very little on the farmers, factory workers and people working in the informal sector. It definitely looks better on the front page when boats are handed out to people, instead of seeds.

An effective and important initiative could be a livelihood transformation programme. How could new opportunities be offered to the survivors, capitalizing on the resources available in the region, and how could local communities 'build back better' through new ways of doing things? In many of the barangays we visited, locals proposed livelihood alternatives that would actually be sustainable even when external assistance stops. We heard suggestions utilizing the local resources such as sand and cement factories, bakery and sewing and other forms of cooperatives. However, there are limited funds allocated for these projects, as most funding agencies have pulled out with only a number of agencies active in the region. The communities depend on the government for support and disbursement of funds for these long-term projects. But money has been slow in coming, due to bureaucratic red tape and broader political issues. This is a stark contrast to the immediate aftermath of the disaster when the Philippines was inundated with aid donations from the international community (Cabigao & Charmaine, 2015; Rappler, 2013)

## **Conclusion**

The communities assessed in paper were still undergoing rehabilitation and rebuilding nearly three years after Typhoon Yolanda. In the aftermath of Yolanda INGOs and NGOs were extremely active, but as of November 2015, many of these aid agencies had pulled out from the region and aid dried up. The withdrawal of these aid agencies left people worse off than before as the drying up of material provision and employment prospects coincided with their exit. The sheer volume of aid that initially inundated Yolanda affected areas contributed to a dependence mentality in various communities. Significant free handouts, and a lack of other viable options created expectations of further assistance. Many of the interviewees we spoke to, are extremely concerned as rehabilitation processes are now left in the hands of the government, whom they consider to be the least active actor in the rebuilding process.

The Philippine government was largely reliant on INGO and NGO support in the immediate aftermath of the Yolanda. This was also true in the medium-term. Many temporary and permanent houses were built by international aid agencies and the private sector. The government has big plans to build the Tacloban North Relocated Community, but delays in the bureaucratic processes of fund disbursement from national to local government has prolonged the process. As a result, communities

were left in the lurch due to poor coordination and governance.

The experience of Palo, Tacloban and Tanauan in the three years since Yolanda has been that many individuals and communities still experience vulnerabilities. A lack of sustainable livelihood, inadequate and unsafe housing, the inadequate provision of utilities such as water and electricity and incomplete infrastructures such as roads and drainage continue to threaten human security. This is a particular problem in Tacloban because of the remote location of the northern barangays and lack of piped water in the permanent shelters. The capacity to protect themselves, their families and communities from future disasters and day-to-day safety issues remains tenuous in many cases. Whilst survivors have received a lot of assistance, many of these interventions, whether from government or nongovernment entities, have yet to build on improving their adaptive capacities to reduce vulnerabilities and risks. Resilience remains an aspiration rather than a sustainable reality.

Genuine resilience should be rights-based, with the goal of improving adaptive capacities and addressing and reducing vulnerabilities and risks. Resilience should also operate on a positive trajectory. The experience of disaster should also lead to future effectiveness in mitigation, response and adaptation. Different government agencies should come together, now that many aid agencies have left, and work with local communities to enhance their ability to rebuild their communities, in the process sustainably developing their security, dignity, resilience. It is only through coordination and active participation by state agencies and local communities that they will be able to 'Build Back Better' and become truly secure.

Disasters compromise the physical security of people and communities. 'The patterns of their daily lives' may be fundamentally affected for an extended period of time. This is certainly true of those who lose their homes, schools and livelihood as a result of disaster. Overall our respondents reported that NGOs and INGOs responded faster than the national government and were commended for meeting immediate needs; however they were also criticised for allocating aid to those that did not really need it. Aid agencies sometimes gave what they wanted to (supply side) rather than what communities needed (demand side). Whilst this is understandable in the immediate chaotic aftermath of a disaster, the longer-term outcome may be a lack of social resilience.

In the barangays that we assessed the notion of *bayanihan* (helping one another) was repeatedly cited and it was clear that resilience was intimately related to community cohesion. Consequently relief and rehabilitation strategies that are mindful of local socio-cultural norms as they relate to risk and resilience are more likely to succeed. This is particularly true of poor communities where social, as opposed to material, capital can facilitate mutual support networks. Consequently 'Building Back Better' must mean resilient communities as well as housing and infrastructure.

Resilience must be about bouncing 'forward' rather than bouncing 'back'. Social resilience is about adaptation as well as rehabilitation. If humans and communities cannot adapt then they remain at risk. As we have identified this relates to human settlements and livelihood. Resilience should incorporate human security and strong communities and can be directly related to freedom from want, freedom from fear and the ability to live in dignity at both the individual and aggregate level. If resilience is



just used as a self-congratulatory sound bite by governments and relief agencies then it becomes effectively meaningless. A systematic mapping of resilience as it relates to the principles of human security could help aid agencies and governments identify policy shortcomings and become more reflective about what disaster relief could and should achieve.

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