The Beneficiaries' Perspective on the Role of NGOs in Post-Tsunami Reconstruction in Aceh, Indonesia

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The Beneficiaries' Perspective on the Role of NGOs in Post-Tsunami Reconstruction in Aceh, Indonesia

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This thesis analyses the challenges that were faced by non-state actors in rebuilding and developing post-tsunami Aceh, Indonesia during the post tsunami reconstruction from 2004 to 2010. There are five main phases in post tsunami reconstruction in Aceh, emergency, recovery, rehabilitation, reconstruction and post developmental phase. The research focused the contribution from emergency and recovery phase and rehabilitation and reconstruction phase toward the development phase. The research investigated the roles of civil society organizations such as international non-governmental organizations and other international agencies in post disaster development. Previous research had focused mostly from the NGOs' perspective and not examined the reconstruction process in Aceh from the viewpoint of the beneficiaries.

This empirical study drew on participants in Aceh, Banda Aceh, and West Aceh. The methods applied were in-depth interviews and focus group discussions with affected communities, International Non-Governmental Organizations, and government agencies. The research found that the extent to which affected communities as beneficiaries participated in the various programs and projects had a strong effect on their capacity building in the development phase. The levels of participation also determined whether the program had been successfully carried out to ensure a smooth transition into the developmental phase. The empirical findings show, besides participation effort from the beneficiaries, the collaboration and coordination between NGOs and government agencies are a vital factor in determining effective programs outcomes. In Aceh, the combination of aid and support from international bodies such as donors and NGOs and proper coordination from government agencies (Agencies for Rehabilitation and Reconstruction) are needed to encourage higher participation level, which will empower the beneficiaries' capacity building toward community capability in the developmental phase.

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Contents

List of Abbreviations

ABRI	*Angkatan Bersenjata Republik Indonesia*
AC	Affected communities
ALNAP	Active Learning Network for Accountability and Performance
BA	Banda Aceh
BAPPEDA	Badan Perencanaan Pembangunan Daerah or Regional Development Planning Board
BAPPENAS	Badan Perencanaan Pembangunan Nasional or the National Development Planning Board
BBB	Building Back Better
BBS	Building Back Safely
BPBD	*Badan Penanggulan Bencana Daerah*
BPBN	*Badan Penanggulan Bencana Negara*
BPN	*Badan Pertanahan Negara*
BRR	*Badan Rehabilitasi dan Rekonstruksi*
Camat	Sub District Head
CB	Capacity building
CBA	Cash-based assistance
CBR	Cash-based response
CFW	Cash for work
CoLo	Confirmation of Land Ownership
CRC	Canadian Red Cross
CRS	Catholic Relief Service
CS	Civil society
DiRR	Disaster recovery and rehabilitation
DRR	Disaster risk reduction
DT	*Daerah tertinggal*
ECB	Emergency Capacity Building
ERR	Emergency response and recovery
FGD	Focus group discussion
GAM	*Gerakan Aceh Merdeka*
GTZ	German Technological Technical Cooperation
HA	Humanitarian assessment

HDI	Human development index
HDO	Health District Office
HOV	Head of village
ICF	Indonesia Canada Foundation
ICRC	International Committee of the Red Cross
IFRC	International Federation of Red Cross
INGO	International non-governmental organisations
IOM	International Organization for Migration
ISK	Information, skills and knowledge
Kecamatan	Sub District administration
KPR	*Komiter Perumahan Rakyat*
KRB	*Komiter Rumah Bantuan*
LIPI	*Lembaga Ilmu Pengetahuan Indonesia*
LOGICA	Local Governance Innovations for Communities in Aceh
LPSM	Lembaga Pengembangan Swadaya Masyarakat or Self Reliant Community Support Institution
LSM	Lembaga Swadaya Masyarakat, or Self Reliant Community Institutions
LRRD	Links between relief, rehabilitation and development
MC	Mercy Corp
MCA	Micro-credit assistance
MDTFANS	Multi-Donor Trust Fund for Aceh and North Sumatra
MSD	Multisectoral development
MTBS	*Managemen Terpadu Balita Sakit*
NA	Needs assessment
NFI	Non-food items
NGO	Non-governmental organisations
OXFAM	Oxford Committee for Famine Relief (an international NGO based in the United Kingdoms)
PDAM	*Perusahaan Daerah Air Minum*
PDR	Post-disaster reconstruction
PEMDA	Pemerintah Daerah or local administration
PHR	Permanent housing reconstruction
PLA	*Panglima Laot Aceh*
PNPM	Program Nasional Peberdayaan Masyarakat Mandiri

PUSKESMAS	Pusat Kesehatan Masyarakat or the government run health centre
PTR	Post-tsunami reconstruction
RA	Recovery assessment
Rp	Rupiah (The Indonesian currency)
RR	Reconstruction and rehabilitation
SEKDA	*Sekretariat Daerah*
SMEP	Small–medium entrepreneurship programs
TDH	*Terre Des Hommes*
TDMRC	Tsunami and Disaster Mitigation Research Centre
TEC	Tsunami Evaluation Coalition
TEWS	Tsunami early warning systems
TM	Tsunami mitigation
TNI	*Tentera Nasional Indonesia*
UMR	*Upah minimum regional* or Regional minimum wages
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees
UNDP	United Nations Development Programme
UNOCHR	United Nations Office for the Coordination of Humanitarian Affairs
US	United States
USaid	United States Agency for International Development
USC	Unity Service Coperation Foundation (an international NGO based in Canada)
WA	West Aceh
WASH	Water and sanitation and hygiene
YAKKUM	Yayasan Kristen untuk Kesihatan Umum or the Christian Foundation for Public Health
YPK	*Yayasan Pengembangan Kawasan*

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Chapter 1:
The 2004 Tsunami in Aceh and Post-Disaster Recovery

The tsunami that hit Banda Aceh (BA) and its surrounding districts on 26 December 2004 caused widespread casualties and loss of life. The population of Aceh fell from 4,271,000 to 4,031,589;[1] of the 151,976 total casualties caused by the Indian Ocean earthquake and tsunami, more than 126,195 were in Aceh, Indonesia. More than 430,000 people were displaced and most lost their families and possessions.[2] A further 517,000 lost their homes. The tsunami destroyed more than 300 km of coastline,[3] which affected other main cities, including Calang and Meulaboh in West Aceh (WA). Indeed, the seismological data indicate that the epicentre was off the west coast of Sumatra,[4] which was much closer to the cities in WA than in BA. The seismological analyses indicate that the epicentre of 2004 earthquake ruptured at the epicentre off west coast of Sumatra.[5] Despite the fact that WA was much closer to the epicentre of the earthquake, the scale of the destruction was much higher in BA than in WA.

In the first few weeks after the tsunami, a witness explained the magnitude of the damage:

> The waves are more than 30 m, and even the coconut tree did not survive the hit. In Banda Aceh, there is this massive tanker ship stranded in the middle of the city, which was swept by the tsunami waves in 2004. The location of this container ship now had more than four houses is underneath this ship and a mini memorial and museum was built surrounding the ship.[6]

Another witness who arrived to assist with relief efforts described how the 2004 tsunami in Aceh had been massive and incomparable to other disasters that the aid organisation had previously managed:

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1. Aceh Tsunami Museum, Banda Aceh, Indonesia.
2. Sue Kenny, 'Reconstruction in Aceh: Building Whose Capacity?', *Community Development Journal,* 42, no. 2 (2007): 208, doi:10.1093/cdj/bsi098.
3. Ibid., 208.
4. Kenji Satake, 'Advances in Earthquake and Tsunami Sciences and Disaster Risk Reduction Since the 2004 Indian Ocean Tsunami', *Geoscience Letter*, 1, no. 15 (2014): 3.
5. Ibid., 3.
6. Catholic Relief Service, interview by research team, Jakarta Indonesia, 13 November 2012, transcript.

> I arrived in Aceh in February 2005, three months after tsunami and stayed in Aceh for one year. It was still chaos because of the scale of the disaster itself and the large scale of affected area. It was enormous, and it's incomparable to any other disaster that ever happened in Indonesia at that time. The large scale of disaster and destruction had caused difficulty for the affected communities (ACs) to recover from the physical and traumatic experiences.[7]

A natural disaster is an unexpected and dramatic event. The scale of the loss depends on the vulnerability of the affected population, with vulnerability being understood 'as the lack of capacity to anticipate, cope with, resist and recover from the impact of a hazard' (Wisner & Blaikie,).[8] The people of Aceh were particularly vulnerable because 90 per cent of local communities in WA were financially dependent on the area's fisheries and agriculture sectors.[9] Further, in the post-developmental phase, the relocated communities that formed as a new coastal population in BA and WA lacked livelihood due to the distance from their new homes to their workplaces. These communities changed their socio-economic activities to ensure the socio-economic sustainability of their livelihoods.[10]

The local population was also particularly vulnerable due to the legacy of protracted conflict in Aceh.[11] Aceh has a volatile history of political violence that dates back to the seventeenth century. It was a centre for trading in South-East Asia before the war between the English and the Dutch dominated the region in this era. Later, when Indonesia was at war with the Netherlands from 1908–1949, Aceh was invaded and occupied continuously until the Japanese invasion in 1942.[12] Under an agreement between the Netherlands and Indonesia that was brokered by the United Nations (UN), Aceh was transferred to Indonesian control, despite having never been formally incorporated as a Dutch colonial territory.

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[7]. Oxfam, interview by research team, Jakarta, Indonesia, 16 November 2012, transcript.

[8]. Ben Wisner, Piers Blaikie, Terry Cannon and Ian Davis, *At Risk: Natural Hazards, People's Vulnerability and Disasters* (New York: Routledge, 2004),11.

[9] Zulhamsyah Imran and Masahiro Yamao, 'Toward Strengthening Social Resilience: A Case Study on Recovery of Capture Fisheries after Asia's Tsunami in Aceh, Indonesia', *International Scholarly and Scientific Research & Innovation*, 6, no. 9 (2012): 731.

[10] Krishna S. Pribadi, Dyah Kusumastuti, Saut A. H Sagala and Ramanditya Wimbardana, 'Post Disaster Housing Reconstruction in Indonesia: Review Lesson from Aceh, Yogyakarta, West Java and West Sumatera Earthquakes', in *Disaster Recovery: Used or Misused Development Opportunity*, ed. Rajib Shaw (Tokyo, Japan: Springer, 2014), 197–223.

[11]. Eric James, 'Getting Ahead of the Next Disaster: Recent Preparedness Efforts in Indonesia', *Development in Practice* 18, no. 3 (2008): 426.

[12]. Kenny, 'Reconstruction in Aceh', 208.

In 1976, the *Gerakan Aceh Merdeka* (GAM), or Free Aceh Movement, was established. This is an armed resistance group that has continued fighting for Aceh's independence from the repressive Indonesian government. Aceh had been a *Daerah Operasi Militer*, or military operation region, for more than three decades before 2004. The declaration of martial law in 2003 and 2004 signified a further deteriorating situation. A state of civil emergency made it impossible for any local or international agency to enter Aceh, let alone to operate in the region. In this sense, Aceh has experienced both human-made and natural disasters. The tsunami not only amplified the threat, it also created opportunities to address deep-seated social and economic problems.

1.1 Human Versus Natural Disasters

The term 'natural' has been disputed because the scale of destruction varies based on human involvement.[13] Disasters affect the poor disproportionately because their socio-economic circumstances place them in the most vulnerable living situations. Buchanan-Smith and Fabbri asserted that 'most natural disasters … are characteristic rather than accidental features of the places and societies where they occur'.[14] Countries with a low human development index (HDI) level are more vulnerable due to underdevelopment.[15] This refers to characteristics such as a lack of development or the status of being less fully developed than others. The combination of high-risk and hazardous natural disaster effects in underdeveloped countries increases the vulnerability and insecurity of affected communities (ACs). According to an International Federation of Red Cross (IFRC) report, two-thirds of deaths from natural disasters occur in countries with a low HDI level.[16]

The 2004 tsunami that devastated Aceh produced waves of only 20–30 m.[17] Conversely, the 2011 earthquake in Japan generated a tsunami height of 40 m.[18] The

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[13]. Fabien Nathan, 'Disaster and Human Security' (Paper presented at the Montreal ISA Conference, Montreal, 18 March 2004).
[14]. Margie Buchanan-Smith and Paola Fabbri, *Links Between Relief, Rehabilitation and Development in the Tsunami Response: A Review of the Debate* (London: ALNAP Overseas Development Institute, (2005), 12.
[15]. Ibid., 11.
[16]. Ibid.
[17]. Satake, 'Advances in Earthquake and Tsunami Sciences', 13. The death toll in Aceh from the 2004 tsunami was significantly higher (c. 160,000 compared to c. 18,500) than the March 2011 tsunami in Sendai Tohoku, Japan, despite the greater severity of the 2011 tsunami. The 2011 tsunami was

impact of the 9.0-magnitude earthquake in Japan generated a higher tsunami height despite being a smaller quake, as compared to the one that hit Aceh, which recorded a magnitude of 9.1. While the 2011 Sendai Tohoku tsunami is considered the worst in history (with the causal earthquake registering a magnitude of 9.0), the death toll was much smaller compared to the 2004 tsunami, at a ratio of approximately 1:8.[19]

Despite the tsunami dangers posed in both regions, Japanese coastal communities are considered less vulnerable than communities in Aceh.[20] This is likely due to Japan's tsunami mitigation (TM) technology. There are several disaster risk-reduction strategies, such as:

> Delivery of tsunami early warning messages to officials and coastal residents, making tsunami hazard maps or probabilistic hazard assessments, construction of infrastructure such as speakers to disseminate warning messages, seawalls, evacuation signs and designated evacuation areas, as well as public education.[21]

However, even Japan's advanced TM technology could not prevent the disaster.[22]

A disaster leaves in its wake both tangible and intangible losses that are caused by massive destruction. Damage to buildings and infrastructure affects the livelihood of the population. Important public infrastructure such as houses, hospitals, schools, markets and offices cannot function without electricity, telecommunications, roads, water supply, sewerage systems, ports and airports. Crops, land, livestock, fisheries,

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comparable to the 1896 Sanriku 'tsunami earthquake' and the 869 AD Jogan earthquake, both of which produced waves of around 40 m. In comparison, the death toll in the 2004 tsunami in Aceh was more than 160,000 compared to the total loss of life (18,500) in Sendai Tohoku, Japan in March 2011. The source of Tohoku earthquake was modelled as a combination of the 1868 'tsunami earthquake' and the 869 AD Jogan earthquake.

[18]. Ibid., 3.

[19]. Ibid., 1.

[20]. Ibid., 7. Japan has a recorded history of tsunamis (more than 1,000 years) dating back to the 869 AD Jogan earthquake. Further, Japan has better socio-economic conditions and an advanced tsunami warning alarm system. During the 2011 Tohoku earthquake, the Japan Meteorological Agency (JMA) managed to issue the first tsunami warning three minutes after the earthquake.

[21]. Ibid., 2.

[22]. Ibid.

factories, workshops, warehouses and storage facilities are damaged in such disasters.[23]

In addition to the visible physical impact, there are also psychological consequences of the loss and suffering, including trauma and mental and emotional stress. Cultural and historic buildings and places of worship are significant to people's identities and inheritances. Social losses have a substantial impact on the wellbeing of society as a whole. The disruptions in social services, law and order issues, and adverse effects on family and community morale can result in the immobility of local and central governments.[24]

1.2 Phases of Post-Disaster Recovery and Reconstruction

In general, there are four phases of disaster management: mitigation, preparedness, emergency response and recovery.[25] The post-disaster recovery process usually commences with the early emergency response and recovery (ERR) phase, which is followed by the reconstruction and rehabilitation (RR) phase. In this research, the outcome from these two phases is measured in the developmental phase. This phase functions as a benchmark that indicates the success level of the programs and projects that were planned and implemented during the earlier two phases.

Figure 1.1 illustrates the five phases of post-tsunami disaster management in Aceh, which begins during the fourth phase of disaster management: recovery. The first is emergency response, which is followed by recovery; this mainly involves international agencies, including government-to-government (G2G) cooperation.

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[23]. Juan Carlos Villagran de Leon (2007), ' Natural Disasters and Early Warning in The Contexts of Human Security', in *International Security, Peace, Development, and Environment,* ed. Ursula Oswald Spring, in *Encyclopedia of Life Support Systems,* vol. 4 (Paris, France: Eolss Publishers, 2007), 1-16.

[24]. United Nations Development Program, *Human Development Report 1994* (New York: United Nations Development Program), 29. Commission on Human Security, *Human Security News 2003* (New York: Commission on Human Security), 83–85. Due to this loss and disruptions to human life, the UNDP's 1994 *Human Development Report* and the Commission on Human Security explicitly identified natural disasters as a threat to human security.

[25]. Philip R. Berke, Jack Kartez and Dennis Wenger, 'Recovery after Disaster: Achieving Sustainable Development', *Disasters,* 17, no. 2 (1993): 93–109.

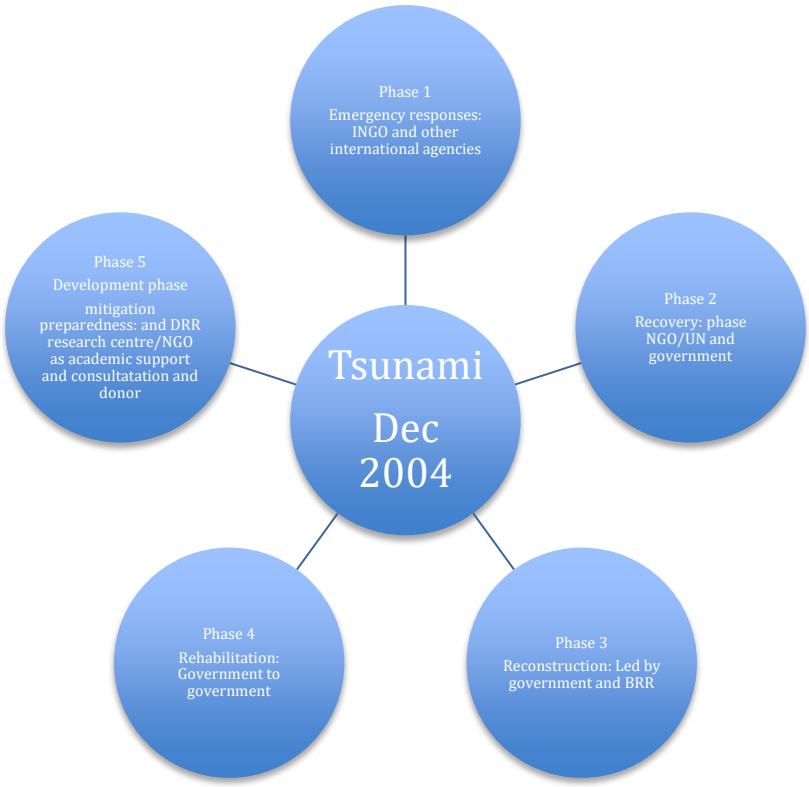

Figure 1.1: The Main Phases in the Post-Tsunami Reconstruction and Development Process in Aceh, Indonesia[26]

The third phase focuses on reconstruction, while the fourth phase manages the rehabilitation of physical infrastructure. The state government in collaboration with non-state actors, such as non-governmental organisations (NGOs) and G2G leads this phase. The fifth phase is the development phase—the final stage that integrates disaster recovery, rehabilitation and TM programs. This phase assists ACs with the transition from programs in the RR phase to sustainable livelihood and economic development. During this phase, all outcomes from the ERR and RR phases are evaluated annually and quarterly by most international agencies. The primary focus of this research is the fifth phase.

Although post-tsunami recovery has five phases, for the purposes of this research, they have been divided into three categories: ERR, RR and the developmental phase. This research will analyse the effects of the ERR and RR phases on the developmental phase. The years ranging 2009–2013 indicate the end of the second phase (the RR phase) and the beginning of the developmental phase. It is important to

[26]. Amended from Oxfam, interview by research team, Jakarta Indonesia, 16 November 2012, transcript.

note that most international agencies, especially NGOs, were operating in the RR phase from 2005 to 2009. However, most international agencies, including NGOs, continued to operate towards the end of the RR phase; the year 2009 marked the beginning of the development phase.[27] The remaining NGOs were required to move and continue their operations in other underdeveloped Indonesian provinces that were deemed to need more assistance than Aceh.

According to Berke, Kartez and Wenger, the RR phase is the least understood.[28] It is important for post-disaster activities to progress to the RR phase and achieve long-term recovery to quickly restore a sense of normalcy among ACs.[29] In traditional post-disaster reconstruction practice, the ERR phase comprises the rapid restoration of physical damage caused by the disaster. The rebuilding and restoration of basic infrastructure back to pre-disaster conditions often entailed ACs having the same vulnerabilities as they had before the disaster.[30]

Post-disaster recovery in Aceh did not follow these stages. Rather, it began with the last phase: recovery. Several factors explain why this was the case. First, Indonesia was not prepared for such a massive tsunami and did not have any disaster blueprint to help manage and support the province of Aceh in the aftermath. The national disaster management blueprint was developed at the national level only after Aceh had served as a 'developmental lab'.[31] The Aceh tsunami also served as the benchmark for Indonesian disaster management under the *Badan Penanggulan Bencana Nasional* (BPBN), which was established in 2010.[32]

Second, the fact that Aceh had been a region in conflict signified that it had been deprived of all types of development and capacity building (CB). While Aceh was known to be an earthquake-prone region, the Indonesian government had long profited from Aceh's natural resources and protective measures were not taken.[33]

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[27]. Senior lecturer and researcher from the Faculty of Agriculture, Syiah Kuala University. Interview by research team, Banda Aceh, 16 December 2012, transcript.
[28]. Berke, Kartez and Wenger, 'Recovery After Disaster', 94.
[29]. Ibid.
[30]. Ibid.
[31]. Kenny, 'Reconstruction in Aceh', 206–221.
[32]. National Disaster Management Agency.
[33]. Commandant Fauzi, interview by research team, Banda Aceh, 26 May 2013, transcript.

26 December 2017 was the thirteenth anniversary of the tsunami in Aceh. This signifies that Acehnese communities have been self-sufficient since 2009, which is approximately three years after the end of the RR phase. The end of the RR phase denotes the transition into the developmental phase, in which the communities' real challenge was to rely on their own capacities.

The relief effort following the 2004 tsunami remains the largest humanitarian operation in the world[34] and forced the Indonesian government to open Aceh to the world. On 18 May 2005, the government declared a state of civil emergency.[35] Almost 500 international agencies were involved from the beginning of the immediate humanitarian emergency operation until the RR phase in Aceh.[36] The number of international agencies in Aceh increased at the beginning of the RR phase as more funding and aid flowed through. The natural disaster's impacts had been exacerbated by existing vulnerabilities that needed to be tackled during the recovery process.

Some international agencies operated for short periods, especially those offering medical care to the wounded and sick in the aftermath of the tsunami (particularly in the ERR phase). In addition to NGOs such as the Catholic Relief Service (CRS), local NGOs, including Ambulance 118, provided medical care and assistance to the wounded and injured in the ERR phase.[37]

Meanwhile, other NGOs stayed throughout the recovery and RR phases to assist the rebuilding process by restoring the capacity and capability of ACs back to their pre-tsunami levels. Despite the crucial need for the presence of these international development agents in the RR phase, some groups were forced to shorten their presence in Aceh due to limited visa restrictions or severe political issues.[38]

Several studies have revealed that UN agencies, such as the United Nations High Commissioner for Refugees (UNHCR), were ordered by the Indonesian government to leave Aceh after a few months due to their history of human rights advocacy work. During the Acehnese period of conflict, the UNHCR had granted thousands of

[34]. Jin Sato, 'Matching Goods and People: Aid and Human Security', *Development in Practice,* 20, no. 1 (2010): 71.
[35]. Kenny, 'Reconstruction in Aceh', 208.
[36]. Ibid., 206–221.
[37]. Ambulance 118, interview by research team, Jakarta Indonesia, 18 November 2012, transcript.
[38]. Ibid.

Acehnese people political asylum status.[39] According to a former administration officer in WA, the UNHCR led the coordination in Aceh until the Indonesian government ordered the group to leave the region at the end of the ERR phase:[40]

> At the beginning of recovery and emergency, they had a task force. They were coordinated by the UNHCR and later taken over by the UNOCHR. There were issues between UNHCR and the central government on giving refugees licence status to stay in Malaysia. So the UNHCR was evicted from Aceh within three months after the tsunami, and the UNOCHR took over.[41]

However, others were granted a longer stay provided that they had the expertise, funding availability and planned programs and projects for ACs' recoveries. The above quotation also denotes the problem of coordination in Aceh during the ERR phase. At least two UN agencies and one locally established government agency were responsible for coordination in the reconstruction phase. After the UNHCR was evicted from Aceh, the coordination responsibility was handed to the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHR), which lasted until the *Badan Rehabilitasi dan Rekonstruksi* (BRR) was established in February–April 2005.[42] Once government agencies took responsibility for coordination, mistrust began to spread among NGOs. Due to coordination problems and pressures from the media and the public, donor agencies were forced to spend immediately and produce tangible results. This pressure led them to disregard the importance of pre-program assessments. Precise post-disaster data require assessment from the beneficiaries in the ERR phase.[43]

In the immediate aftermath of a natural disaster such the Aceh tsunami, attention is naturally focused on quick recovery and post-disaster reconstruction (PDR). However, given the far-reaching societal impacts of a natural disaster and the association of the disaster with socio-economic conditions (see Section 1.1), it is important to reduce

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[39]. Fuad Mardhatillah, 'The Role and Experiences of Badan Rehabilitasi and Rekonstruksi (BRR)', in *Post-Disaster Reconstruction: Lessons from Aceh*, eds. Matthew Clarke, Ismet Fanany and Sue Kenny (Hoboken: Earthscan, 2010) 186–209.
[40]. Former head of administration in *Kec. Johan Pahlawan, Meulaboh,* BPBD Meulaboh, interview by research team, West Aceh, 13 May 2013, transcript.
[41]. Ibid.
[42]. Mardhatillah, 'The Role and Experiences of Badan Rehabilitasi dan Rekonstruksi', 186.
[43]. Philippe Régnier Bruno Neri, Stefania Scuteri and Stefano Miniati, 'From Emergency Relief to Livelihood Recovery: Lessons Learned From Post-Tsunami Experiences in Indonesia and India', *Disaster Prevention and Management: An International Journal,* 17, no. 3 (2008): 411.

vulnerabilities that place the community at ongoing risk. It is essential to engage in CB to reduce future danger in disaster-prone communities. Development is the primary means by which to tackle vulnerability. CB and participation are forms of development that need to be reinforced during reconstruction.

1.3 Building Back Better

The United Nations Development Program (UNDP) guidelines to tsunami response, known as 'characteristics of sustainable recovery', outline the primary elements of post-tsunami reconstruction (PTR), such as:

1) to improve the living conditions of ACs and sectors, going beyond the simple restoration of pre-disaster levels, with an aim to create a more sustainable livelihood for the population
2) to build local and national capacities for increased resilience, risk management and sustainable development
3) to plan for demonstrative effects that develop local and national capabilities and pilot approaches that can be factored into national development programs
4) to improve and maintain coordination for avoiding duplications and gaps and for optimising the resources available for sustainable recovery.[44]

This guideline was later interpreted into a working definition and framework known as Building Back Better (BBB). The IFRC and Red Crescent Societies were among the first to implement UNDP characteristics by adopting BBB. The IFRC claims that:

> Post-disaster recovery should not be a mere restoration of pre-existing livelihoods and infrastructure. Instead, it should be treated as an opportunity to implement better development policies which strengthen the resilience of disaster prone populations against future hazards, to build back better.[45]

[44]. Rempel, Henry. "The Challenge of Spending Tsunami Assistance Well." *Journal of the Asia Pacific Economy* 15, no. 2 (2010): 106-27.
[45]. Ibid. 107

Derived from the UNDP's 'characteristics of sustainable recovery', IFRC's BBB asserts that:

1) Recovery carried out by individual communities should be recognised and supported by the recovery process and regulatory framework. Financial resources should enable and further this spontaneous activity.
2) Recovery must be inclusive, involving both those affected directly and those affected indirectly, to provide communities with a genuine sense of ownership.
3) Recovery must be sustainable and within the local and regional authorities' capacities to maintain and address underlying causes of the devastation.
4) Recovery must be needs based, accounting for the vulnerabilities of the people and avoiding a recreation of the existing inequities.[46]

BBB disaster recovery aims for long-term development in each aspect of the process, including an emphasis on sense of ownership, building of local and national capacities and consideration of vulnerabilities, to achieve better development-based restoration. BBB was first used as a framework following the large-scale humanitarian operation and reconstruction after the 2004 Indian Ocean tsunami. Its emphasis was on addressing vulnerability to avoid its recurrence. BBB has been:

> A way to utilise the reconstruction process to improve a community's physical, social, environmental and economic conditions to create a more resilient community; where resilience is defined as 'the capacity to absorb stress or destructive forces through resistance or adaptation'; or 'the capacity to manage, or maintain certain essential functions and structures during disastrous events' or 'the capacity to recover or "bounce back" after an event'.[47]

CB was emphasised in BBB as a measure to avoid ACs reverting to vulnerability. The primary indication of programs' effectiveness and success during these phases can be measured by observing the extent to which aid, assistance and support encouraged good development practice.[48] The answers lie in the beneficiaries' level of

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[46]. Ibid.
[47]. Sandeeka Mannakkara and Suzanne Wilkinson, 'Re-Conceptualising "Building Back Better" to Improve Post-Disaster Recovery', *International Journal of Managing Projects in Business*, 7, no. 3 (2014): 1–22.
[48]. Berke, Kartez and Wenger, 'Recovery after Disaster', 97.

participation. ACs are best placed to benchmark the success of programs and projects in PDR phases through their capacity to rebound to a sustainable economic climate.

1.4 Literature on Post-Tsunami Reconstruction in Aceh

There is now a considerable body of literature on post-tsunami recovery and reconstruction in Aceh. This section reviews this literature and reveals two gaps that this thesis seeks to fill.

The first gap is in the body of knowledge regarding the beneficiaries' perspectives on the role of NGOs on PTR in Aceh. Most existing literature either examined the perspective of NGOs at an organisational level or covered only a small area of Aceh based on NGOs' operational activities during PTR. The literature also focused on the perspectives of NGO staff (local NGOs operating as partners to NGOs) on programs that were planned and implemented according to donor requirements, rather than to ACs' needs. Only a few researchers acknowledged the value of measuring satisfaction levels based on ACs' participation and feedback.

These studies usually do not reveal the beneficiaries' perspectives, knowledge or thoughts on the benefits gained by participating in PTR programs (in terms of sustaining their economic climate after PTR). Further, the literature does not provide room for beneficiaries to rate the effectiveness of NGOs as development agencies. To fill this gap, this study focused on the beneficiaries' perspectives, knowledge and satisfaction levels regarding the agencies that assisted them. In addition, this research also examines the role of NGOs in encouraging the participation of ACs in PTR programs and projects.

The second identified gap was the time frame covered by the literature. Most studies focused on the first few years of the ERR and RR phases (2005–2009).[49] The findings are limited and do not reflect the outcome of beneficiaries' participation and impact on CB. The years 2009–2010 included a transition period between RR phases, which was only the beginning of the developmental phase.

[49]. Sato, 'Matching Goods and People', 71.

The focus of the literature review was to determine the extent of the gaps in the knowledge regarding the participation of ACs in PTR programs and projects contributing to local CB. According to Masyrafah and McKeon, there were at least 19 aspects of the Aceh community that were severely damaged by the tsunami.[50] The reconstruction allocation prioritised the permanent housing reconstruction (PHR), then transport, health, governance and administration (including land), community culture and religion, education, enterprise, 'water and sanitation and hygiene' (WASH), flood control, irrigation works, fisheries, agriculture and livestock, communications, environment, other infrastructure, energy and banking and finance.[51] The list of sectors and agencies is extensive, as significant assistance and aid had landed in post-tsunami Aceh and each agency focused on their areas of expertise (depending on donors' requirements).

1.4.1 PHR Projects

PHR is the biggest program in Aceh PTR. This thesis allocated one section for PHR, as the satisfaction and the effective housing affects the other sectors discussed in Section 1.4.2. A study conducted by Meilianda et al. recommended future disaster risk reduction (DRR) programs work towards sustainable development. Among the factors that Meilianda et al. argued should be included in DRR were infrastructure and housing, economic revitalisation of the AC, mental health and psychological conditions, development, establishment and implementation of DRR programs and community preparedness towards disaster.[52] Housing and infrastructure development has been identified both in past literature and in this empirical study as the most important sector in PTR in Aceh.

Most of the literature addressed the immediate aftermath of the tsunami (2005–2009) and focused on PHR from the main stakeholders' perspectives, leaving out the beneficiries' perspectives. Steinberg studied housing RR in 2007 and emphasised how 'community-based construction' and 'contractor-based construction' encouraged

[50]. Harry Masyrafah and Jock MJA McKeon, 'Post Tsunami Aid Effectiveness in Aceh: Proliferation and Coordination in Reconstruction' (working paper 6, Wolfensohn Centre for Development, November 2008): 18.
[51]. Masyrafah and McKeon, 'Post Tsunami Aid Effectiveness in Aceh', 7.
[52] Ella Meilianda, Khairul Munadi, Azmeri, Safrida Sf, Azmeri Azmeri, Y. Direzkia, Syamsidik Syamsidik and Rina S. Oktari, 'Assessment of Post-Tsunami Disaster Recovery of Banda Aceh City of Indonesia as Window of Opportunities for Sustainable Development', *Earth and Environmental Science IOP Publishing* , 2 (2017).

different levels of community participation and had a significant impact on the degree of satisfaction among ACs in relation to the quality of their houses.[53] However, the findings revealed that most of the ACs' PHR projects were not supplied with necessities such as bathrooms and kitchenettes. Research has attributed this oversight to single sectoral planning, which did not adequately consider livelihood integration in the programs. This weakness in planning is thought to be due to a lack of interagency coordination regarding community needs.[54]

The empirical results indicate that only a few PHR projects were integrated with livelihood support programs from NGOs, such as those of Mercy Corp (MC), Oxfam and CRS. At the time, these projects did not appear adequate to generate long-term sustainable income for all ACs, especially in fisheries and agricultural sectors. Such programs only benefited some of the community in need and ACs received no help beyond housing and habitat-related infrastructure. The lack of multisectoral planning coordination between RR sectors created difficulties for ACs in maintaining their livelihood after the end of the RR phase. There is a need to update such findings.

The study by Steinberg is characteristic of another problem with the existing literature. Steinberg's research did not investigate the whole of Aceh, nor the efforts of all NGOs. His results only represent one international NGO's PHR project. Further, Oxfam-funded houses were mostly built in the west coast cities of Aceh, such as Meulaboh. As the findings did not cover all ACs in PTR, Steinberg was unable to investigate interagency coordination. [55]

PHR was the highest priority of ACs in PTR in Aceh. This also explains why a substantial amount of research focused on the most visible physical development of the reconstruction: PHR. Housing reconstruction was apparently selected as the most important aspect of the RR phase by ACs in this thesis research study. The responsibility of rebuilding and providing ACs with basic accommodation signified that housing restoration and reconstruction were transferred to these agencies. This is also a part of the downward accountability of NGOs towards beneficiaries, as

[53]. Florian Steinberg, 'Housing Reconstruction and Rehabilitation in Aceh and Nias, Indonesia–Rebuilding Lives', *Habitat International,* 31 (2007): 150–166.
[54]. Pribadi et al., 'Post Disaster Housing Reconstruction in Indonesia', 197–223.
[55]. Steinberg, 'Housing Reconstruction and Rehabilitation in Aceh and Nias', 150–166.

development agencies work to support beneficiaries moving towards a sustainable economic climate. Once PHR is delegated to NGOs and other agencies, ACs are expected to have more time for participating in other programs that are more focused on rebuilding their livelihood.

1.4.2 Other Multisectoral Sectors in Post-Tsunami Reconstruction

With the multisectoral development (MSD) framework, such as 'links between relief, rehabilitation and development' (LRRD), NGOs and agencies involved in PHR need to integrate livelihood and socio-economic aspects into the planning and implementation of their projects. This helps ensure local CB and a sustainable economic climate. However, as mentioned in the capacity vulnerability analysis, rebuilding in a manner that restores only necessary and physically damaged infrastructure will usually only result in leading ACs back to vulnerability. As the Aceh tsunami was both a human-made and natural disaster, the pre-existing, deep-rooted vulnerability issues[56] needed to be integrated into the PTR MSD.

One study measured the level of satisfaction among 30 per cent (361 out of 1,222) of the recipients of Oxfam-funded houses in Aceh.[57] However, this represents only a small portion of the thousands of houses constructed by various agencies in Aceh. Further, the results only represent one international NGO's PHR; Oxfam-funded houses were mostly built in the west coast cities of Aceh, such as Meulaboh. As such, these findings only represent a small sample of the community and are not representative of ACs as a whole. Further, there were no data regarding interagency coordination in PHR.

MSD is an important factor that affects the beneficiaries' socio-economic climate in the post-developmental phase. Findings from Meilianda also emphasise the importance of integrating all sectors to build disaster resilience among the communities in Aceh. Reports from the Tsunami Evaluation Coalition (TEC) tried to examine the LRRD as a framework that could not only integrate all the sectors in PTR, but that could also help coordinate all the programs parallel from the ERR phase to

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[56]. James, 'Getting Ahead of the Next Disaster', 426.
[57]. Emily Christensen Rand, Seki Hirano and Ilan Kelman, 'Post-Tsunami Housing Resident Satisfaction in Aceh', *International Development Planning Review*, 33, no. 2 (2011): 187.

the RR phase. The TEC also examined the effects of treating each phase in PTR as an individual phase, without any link to development and its effects on the long-term development of Aceh.[58] However, the period during which this evaluation occurred was too early. It was conducted from mid-2005 until the end of 2006 and was later updated annually.[59] During those early years of the ERR phase, NGOs' PTR programs had just began in Aceh. The evaluation needed to be a closely monitored process in which ample time was provided to NGOs and beneficiaries to plan, implement and achieve significant outcomes. It is important that LRRD reports consider time frames carefully. The report should address the size of the transition gaps between PTR phases and the impact that completed work has had on socio-economic wellbeing and development.

Matsumaru, Nagami and Takeya highlighted that supplying houses to tsunami victims was the highest priority, while restoration of physical and social infrastructure, such as transportation networks, was given a lower priority and could not keep pace with PHR.[60] There was no clear plan for the restoration of public transport services within cities and suburbs in Aceh. They also emphasised the government's responsibility to provide public transportation and to integrate it with housing relocation plans. Further, residents were not given any choice in their new permanent settlement location, signifying that livelihood aspects had not been considered.

Public transportation was one of the multisectoral planning areas that was neglected as part of the public infrastructure development plan in Aceh. Most relocated communities had no choice other than to adapt to the new settlement and they often found it difficult to return to their previous job or source of income due to transportation issues. Some were forced to abandon their new house, or their job. Most chose to travel the distance between their new home and workplace, spending 50–80 per cent of their daily income on fuel and transportation costs.[61] Public

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[58]. Ian Christoplos, *Links Between Relief, Rehabilitation, and Development in Tsunami Response: A Synthesis of Initial Findings* (London: ALNAP Overseas Development Institute, 2006): 3.
[59]. Ibid.
[60]. Ryo Matsumaru, Kozo Nagami and Kimio Takeya, 'Reconstruction of the Aceh Region Following the 2004 Indian Ocean Tsunami Disaster: A Transportation Perspective', *International Association of Traffic and Safety Sciences,* 36, no. 17 (2012).
[61]. Former INGO/consultant, interview by research team, Banda Aceh, 15 December 2012, transcript.

infrastructure such as transportation is still poor in Aceh, which was another important factor that determines the job and source of income selection in PTR phases.

In some cases, these communities were relocated further from their pre-tsunami sources of income and were required to travel quite a distance, or to acquire a new set of knowledge and skills to continue working. This is one of many examples that indicate the lack of multisectoral coordination in RR in Aceh. The findings of this research concur that housing reconstruction was the most significant aspect affecting the livelihood of the affected population. The study also confirms that the lack of integration of other sectors in PHR, such as transportation, had a dire impact on the socio-economic development and general wellbeing of ACs in the development phase.[62]

Land rights or land usage is another sector that is closely related to PHR in Aceh. In the ERR phase, the initial rehabilitation and reconstruction plan had sought to prevent any construction of new houses 500 m from the coastline.[63] According to Syamsidik et al, Aceh did not have any institutional capacity or disaster-related policies in place prior to the 2004 tsunami.[64] This literature also indicates that institutional changes in Aceh after the 2004 tsunami are related to DRR and that the existence of such regulation promises a resilient community against disaster. The land use and land rights in Aceh had a dire impact on the ACs' socio-economic sustainability. There are two main factors highlighted by Syamsidik et al: first, the strong connection between the ACs and land use and, second, the strong social capital and social homogeneity. As proven by many other disasters, land use types have strong connections with the ACs' livelihood and socio-economic climate.[65] Land use in Aceh is mostly designated to house reconstruction, paddy fields, aquaculture ponds, farmland and coastal vegetation.[66] At times, the passive participation of ACs in issues related to the land sector reduces their chance to exercise their rights to gain knowledge. In the

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[62]. Pribadi et al., 'Post Disaster Housing Reconstruction in Indonesia', 197–223.
[63]. R. S. O. Syamsidik, Khairul Munadi, Suhada Arief and Inayah Zhiaul Fajri, 'Changes in Coastal Land Use and the Reason For Selecting Places to Live In Banda Aceh 10 Years After the 2004 Indian Ocean Tsunami', *Natural Hazards,* 88 (2017): 1503.
[64]. I. R. Syamsidik, Suhada Arief, Khairul Munadi and Ella Melianda, 'Disaster Risk Reduction Policies and Regulations in Aceh after the 2004 Indian Ocean Tsunami', *AIWEST-DR 2016* (IOP Publishing, 2016): 2.
[65]. M. F. Syamsidik, Eldina Fatimah and Afri Fitrayansyah, 'Coastal Land Use Changes Around the Ulee Lheue Bay of Aceh During the 10-year 2004 Indian Ocean Tsunami Recovery Process', *International Journal Disaster Risk Science*, 10 (2017).
[66]. Ibid., 11.

beginning of recovery, the external intervention of the NGO's assistance in the land sector was required.[67] However, the NGOs adopted a direct approach to assisting their beneficiaries during the ERR phase due to a lack of institutional capacity and disaster-related policies in Aceh, which has repercussions for future DRR planning and socio-economic sustainability.

Delays in integrating multisectoral planning support caused problems relating to accessing basic facilities, such as WASH, transportation (especially for flood-prone areas) and other infrastructure necessary for ACs to maintain a stable income. Mardiatno and Jujun reported that the contaminated saline water after the 2004 tsunami could still be used for household and domestic use, but that it was not suitable for drinking.[68] The empirical findings of this research concur with this literature, whereby further investigation demonstrates that WASH was an important component of MSD that affected the PHR occupant's livelihood. Sayed Murtadza et al explained that the vegetation in Aceh was converted to palm oil trees and paddy fields from coconut trees, vegetables, fruit trees, paddies and natural swamp vegetation after the 2004 tsunami, due to changes in Aceh's groundwater salinity.[69] Such changes in water quality did not only affect the types of crop plantation, but also the socio-economic climate of the ACs in Aceh. This research highlights the importance of needs assessment (NA) in including inputs from such studies before determining funding for better AC livelihood sustainability.

The socio-economic aspect is another important MSD component that needs to be adopted in PHR planning. There are two types of main socio-economic activities in Aceh: the fisheries sector and the entrepreneurship sector. The ACs in Aceh are mainly coastal communities that rely heavily on the fisheries sector. Enterpeneurship was a rather new sector introduced by NGOs as a solution for marketing the fisheries sector and other small entrepreneurship activities, such as baking and tailoring. Most NGOs chose to assist the ACs in the fisheries sector, which led to overfishing. The selection of boats and fishing equipment without proper NA is considered the main

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[67]. Ibid., 10.

[68]. D. Mardiatno and S. Jujun, 'Tsunami Impact on Soil and Groundwater Condition', *Geophysical Research Abstracts*, *European Geoscience Union*, 8 (2006): 58–60.

[69]. Sayed Murtadha, Ismail Yusof, Rosmadi Fauzi and Ichwana Ramli, 'Analysis of Groundwater Quality for Irrigation Purposes in Shallow Aquifers: A Case Study from West Aceh, Indonesia', *Singapore Journal of Tropical Geography*, 38 (2017): 185–200.

problem affecting the socio-economic sustainability of the fishing communities in Aceh.

Sulaiman demonstrated how the increased use of trawls has created conflict between traditional fisheries and trawl fisherman when the fisheries stock decreases drastically.[70] Mini trawl fisheries affect the fish production. Evidently, the use of trawls has increased after the 2004 tsunami due to a variety of aid provided by international agencies and NGOs for tsunami victims in Aceh. This research indicates that the lack of local NA in determining the suitability of fisheries facilities according to the needs of the ACs was among the main causes of such conflicts.[71]

Besides fisheries, brackish water ponds that were used for aquaculture activities had a significant effect and contribution to coastal communities and AC livelihoods in Aceh. The 2004 tsunami seriously distrupted AC livelihood; it destroyed 20,000 ha of ponds and 70,000 ha of agricultural land.[72] As highlighted by Fahmi et al, Ujong Pancu, a district in Aceh Besar largely known for its vast mangrove forest area and aquaculture land use, was totally demolished by the 2004 tsunami.[73] The area had approximately 149 ha of ponds before the tsunami and only 19 per cent, or 28 ha, was recovered. There were some factors that contributed to the slow recovery of these ponds, including minimum facilities, conflict over land ownership along the coastline and the brackish water salinity environment that was between 0.5–17.0 ppt, which was below the required water environment of 25 ppt and higher.[74] Due to such issues impeding the recovery of the ponds, the farmers explained that they had to look for other types of jobs, such as fishing or construction work, to continue their livelihoods. Further investigation and the empirical findings of this study in Ujong Pancu demonstrate that the issue had a long-term implication for AC livelihood sustainabilities.

Tsunami mitigation was a crucial sector of DRR that had an impact on the livelihood sustainabilities of the ACs in Aceh. Ecosystem-based DRR has been globally

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[70]. Sulaiman, 'A Settlement Model of Trawl Conflict in West Aceh', *Kanun Jurnal Ilmu Hukum*, 59, no. XV (2013): 99–113.
[71] Ibid., 112.
[72]. M Fahmi, S. Syamsidik, E. Fatimah and M. Al'ala, 'A Decade Process of Coastal Land Use Changes in Peukan Bada-Aceh After the 2004 Indian Ocean Tsunami', *OIP Conference* 56, (2017): 1–7.
[73]. Ibid., 2.
[74]. Ibid., 5.

recognised as both a sustainable approach to reducing the risk of disasters, while also helping to improve the ACs' livelihoods and socio-economic climate.[75] Coastal vegetation is well known for providing significant support as a natural barrier against disasters. Coastal vegetation, such as mangrove, in the 2004 tsunami seriously affected the sustainability and livelihood of the ACs.[76] For example, Onrizal and Mansor highlighted the importance of mangrove plantations in facing catastrophes such as the 2004 tsunami.

According to them, before the tsunami, the mangrove and littoral forest buffer zones (greenbelt) were converted to aquaculture ponds. This research compared the recovery of mangrove plantations after the tsunami, with the findings demonstrating that the recovery level of mangroves after the tsunami were lower compared to before the 2004 tsunami.[77] Mangrove plantations were among the worst damaged by the tsunami.[78] This study highlighted the importance of TM as part of the DRR in Aceh in facing future catastrophes. The selection of vegetation and the effect on the socio-economic climate was among the issues raised by previous literature. However, most of the previous research studied coastal vegetation issues from a geological perspective and lab-based research. This thesis's empirical study focused on the ACs' views and perspectives on their participation in mangrove plantations and the challenges they faced. Most lab-based research found in the literature focused more on the geological perspective regarding how coastal vegetation helps reduce the impact of disasters on coastal farming. This research attempted to fill the gap by demonstrating how the participation and involvement of ACs in coastal vegetation plantations such as mangrove plantations helped them understand the importance and effect of DRR integration on their livelihood sustainability.

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[75]. Annisa Triyanti, Yvonne Walz, Muhammad Aris Marfai, Fabrice Renaud and Riyanti Djalante, 'Ecosystem-Based Disaster Risk Reduction in Indonesia: Unfolding Challenges and Oppurtunities', in *Disaster Risk Reduction in Indonesia: Progress, Challenges and Issues*, ed. (New York, NY: Springer, 2017), 444–514.

[76]. J. C. L. Bayas, 'Influence of Coastal Vegetation on the 2004 Tsunami Wave Impact in West Aceh', *National Academy of Sciences of the United States of America,* 108, no. 46 (2011): 18612–7.

[77]. Onrizal Onrizal and Mashhor Mansor, 'A Decade of Mangrove Recovery at Affected Area by the 2004 Tsunami Along Coast of Banda Aceh City' (paper presented at the Friendly City 4: From Research to Implementation for Better Sustainability, IOP Publishing, 2018).

[78]. Dewi Susiloningtyas, Tuty Handayani, Naila Amalia and Arum Ira Nadhira, 'Spatial Analysis on School Environment Characteristics in Mangrove Management Based on Local Wisdom' (paper presented at the IOP Conference Series, 2017).

The discussion on related literature to the sectors studied in this research reveals a significant missing link and perhaps a gap in the previous literature. Livelihood aspects had been neglected in the housing reconstruction program and in other sectors, which had a direct effect on the socio-economic sustainability of the ACs. The discussion demonstrates how the absence of sectoral developments in the RR phase caused a lack of integrated development. Further, there was a lack of integration in the DRR projects that were aimed at CB. The inclusion of knowledge gathered from consultations with ACs through NA would have resulted in better progress towards achieving the long-term, socio-economic and livelihood goals of aid beneficiaries. However, the lack of multisectoral planning coordination during PTR created obstacles for ACs trying to continue with their lives. [79]

Empirical studies indicated that the programs that were coordinated through solid local partnerships were constantly evaluated, usually within three to six months from the implementation date. [80] All 'work in progress' was included in the evaluation process. This matches the TEC's claims that the tsunami LRRD project constituted a learning process for the international agencies involved. [81] However, to derive conclusions from the TEC report regarding projects deemed a 'work in progress' would produce ineffective NGO programs with no benefits for the beneficiaries of PTR programs and projects.[82]

Research by Kenny et al suggested that the level of participation in each phase of PTR in Aceh materially affected the accumulation of community CB and empowerment in the developmental phase. [83] In most cases, the literature does not discuss the effectiveness of NGO work from the perspective of beneficiaries. The following section discusses the effect and importance of participation in relation to CB in Aceh.

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[79]. Former INGO/consultant, interview by research team, Banda Aceh, 15 December 2012, transcript.
[80]. Ibid.
[81]. Buchanan-Smith and Fabbri, *Links Between Relief, Rehabilitation and Development*, 4.
[82]. Sato, 'Matching Goods and People', 71.
[83]. Matthew Clarke, Ismet Fanany and Sue Kenny, 'Reconstruction through Participatory Practice? In *Post Disaster Reconstruction: Lesson from Aceh*, eds. Matthew Clarke, Ismet Fanany and Sue Kenny (Hoboken: Earthscan, 2010), 79–104.

1.5 Literature on Participation and Impact on Capacity Building in Post-Tsunami Reconstruction in Aceh

This research primarily analysed participation levels during PTR in Aceh (2004-2009) and the impact of this on CB in the development phase (2010–2013). Currently, very little has been written on the development stage after this five-year period from the beneficiaries' perspectives.[84] A review of past research on RR in Aceh indicates that there is a crucial need to further investigate development during the RR phase.[85] In addition, there has been no specific research that focused on 2009 onwards or discussed how the RR period has contributed to supporting local communities to manage the transition between the RR and development phases.

According to Sadiqi, there are at least nine factors that constitute fundamental barriers for active community participation in PDR projects.[86] Sadiqi's study indicates that community capacity plays a crucial role in establishing the level of community engagement in decision-making and reconstruction. The statistical analysis also strongly suggests that the outcome of PDR projects may be affected by a lack of community participation.[87]

This research focuses on the impact of participation in programs during PTR and the effect that this has on CB for ACs in Aceh. Therefore, these reports and studies were useful for identifying factors that impede participation levels and for identifying mechanisms that encourage participation in integrated LRRD frameworks. TEC reports also provided suggestions for effective LRRD working structures, which incorporated entire important stakeholders, including beneficiaries. This research reveals that focusing on the development phase was crucial for measuring the effectiveness of the CB process in Aceh. This is because most international and

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[84]. Buchanan-Smith and Fabbri, *Links Between Relief, Rehabilitation and Development*, 4.
[85]. Christoplos, *Links Between Relief, Rehabilitation, and Development,* 4.
[86]. Zabihullah Sadiqi, Bambang Trigunarsyah and Vaughan Coffey, 'Community Participation in Post-Disaster Reconstruction', *Municipal Engineer*, 169, no. ME3 (2015): 85. Among the list were: opaque reconstruction processes, sponsors' desire for hasty reconstruction, small community capacity and commitment, gender-related issues, lack of competency within NGOs, inherent difficulties and weaknesses within communities, slow land acquisition processes, government policy and practice, and a lack of adequate security.
[87]. Ibid., 184.

national agencies left the region after the RR phase ended in 2009, leaving the community to govern itself.

It was intended that local communities would progress towards a sustainable life that was generated by their capacity as a community. Capacity was meant to be ensured by knowledge and skill transfer programs, known as 'training of the trainer' programs.[88] They were also expected to function well as a community without international supervision and observation. Local government and governing bodies had a major role in taking over the initiatives of NGOs; however, the handover process did not proceed as planned, mainly due to the incapability and inadequacy of human resources capital within the local government. Sadly, the lack of institutional infrastructure and human resource development, which was crucial for CB, had repercussions on the creation of a sustainable economic climate in the developmental phase.

To measure the contribution of the RR phase to community CB, and ACs' level of participation in the programs, the RR phase was studied. This is because it plays a major role in, and has a profound impact on, ACs' transition to the development phase. Their level and type of involvement in participation in these phases contribute equally to their CB, both in individual empowerment and community resilience. Cleaver suggested that such evidence and analysis were necessary to determine what would encourage participation to help protect ACs' needs and interests:

> Further empirical evidence and analysis are required of whether and how the structures of participatory projects include/protect/secure the interests of the poor people. What exactly are the linkages between participation of poor individuals and furthering their social and economic rights? Understanding this requires analysis of competent communities and 'successful' participatory projects that focus on process, on power dynamics, on patterns of inclusion and exclusion.[89]

Communities' participation in programs and projects as a part of PTR represents the empowerment of the individual as part of community CB. The process and level of

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[88]. Catholic Relief Service, interview by research team, Jakarta Indonesia, 13 November 2012, transcript.

[89]. Frances Cleaver, 'Institutions, Agency and the Limitations of Participatory Approaches to Development', in *Participation: The New Tyranny?,* eds. Bill Cooke and Uma Kothari (London: Zed Books, 2001), 54.

beneficiaries' participation depend on the NGOs' programs and projects. Figure 2.1 (see Chapter 2) explains the link between the type of participation and its impact on CB by analysing the level of inclusion of a clear agenda, the actor in control, the level of consultation with locals, planning and the targeted recipients of RR programs.

The dangers of NGOs designing the implementation of programs include the potential to discourage participation and create dependency on foreign development agencies, distancing communities from sustainability, and ownership of the development process.[90] The combination of NGOs dominating the agenda and the failure of development agencies to encourage genuine participation would affect the CB of the ACs.[91]

When it comes to actors controlling the programs and projects, participation types (such as partnership and ownership) promise equal control between funding bodies and local authorities.[92] Nevertheless, the clashes between 'dividing the control' or maintaining 'internal coherence and manage relationship "upward" with donor' seem causal in compromising full participation in programs that were intended to be based on 'people planning' to benefit ACs in the development phase.[93]

Past research on Aceh indicated that the level of participation in different phases of PTR contributed to community CB and empowerment in the developmental phase. Kenny Sue suggested that further empirical research on participation-focused approach was critical for successful CB.[94] Table 2.1 (see Chapter 2) explains the types of participation that are ordinarily used in humanitarian operations in post-disaster or conflict community building. Early analysis shows the practice in Aceh throughout recovery, rehabilitation and reconstruction phases has fallen under

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[90]. Stan Burkey, *People First: A Guide to Self-Reliant Participatory Rural Development* (London: Zed Books, 1993), 35. The danger that participation induced from the outside will only lead the poor from one form of dependency to another. This is hardly the goal of self-reliant development.
[91]. Senior lecturer and researcher at Syiah Kuala University, interview by research team, Banda Aceh, 16 December 2012, transcript.
[92]. Catriona Byrne, *Participation by Crisis Affected Populations in Humanitarian Action: A Handbook for Practitioners* (London: ALNAP, Overseas Development Institute, 2003), 22. Divided equally between external and internal stakeholders based on the partnership. Control is redistributed through careful negotiation between people and power holders.
[93]. Ibid., 22.
[94]. Kenny, 'Reconstruction Through Participatory Practice?', 79–104.

manipulation and consultation types of participation.[95] Under this type of participation, NGOs integrate CB elements into programs. However, findings from CB literature demonstrate the need for further research to measure the impact of participation among the beneficiaries in the developmental phase:[96]

> Participatory approaches stress solidarity within communities; processes of conflict, and negotiation, inclusion and exclusion are occasionally acknowledged but little investigated.[97]

People's participation is interpreted as a healthy social structuring process. However, the level of inclusion and exclusion of human knowledge in people planning requires more empirical data to determine how different levels of participation affect beneficiaries' CB. Most literature did not explore how beneficiaries perceived the efforts of NGOs. It is not clear how effective the local population considered the efforts of the NGOs to be.

1.6 Objectives of This Thesis

This thesis will seek to build on the existing literature in two principle ways. First, it will focus on the period 2004–2010 which includes the ERR and RR phases. This study was conducted between 2012-2013, during the developmental phase when most international and national agencies had departed the region, leaving the community to govern itself, regardless of its capacity to do so. Second, the thesis will consider the impact of the NGOs' relief efforts from the perspective of the beneficiaries. In particular, it will consider the work of the NGOs on CB, addressing the following research questions:

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[95]. See Table 2.1 for types of participation in humanitarian operations.
[96]. Kenny, 'Reconstruction Through Participatory Practice?', 79–104.
[97]. Cleaver, 'Institutions, Agency and the Limitations of Participatory Approaches to Development', 46.

1) How did the participation of local beneficiaries in PTR programs and projects in Aceh designed and implemented by NGOs affect capacity building?
2) To what extent did local communities' engagements in post-tsunami reconstruction reduce vulnerability in the post-developmental phase.
3) To what extent did local communities consider that the work of NGOs had reduced their levels of vulnerability in mid- to long-term reconstruction and development?

There is a practical dimension to this research. Finding ways to better draw on local knowledge and involve local communities in the reconstruction process can make programs more efficient and suited to the needs of ACs.

1.7 Thesis Outline

Chapter 1 introduced the issue to be investigated and outlined the research questions. Chapter 2 will present the analytical framework and methodology used in this thesis. Subsequent chapters will examine various aspects of the developmental phase of PDR in Aceh and, in particular, how effective the work of the NGOs was from the perspective of beneficiaries. The sectors to be investigated are medical, health care and psychological (see Chapters 3 and 4), socio-economic development (see Chapter 5), PHR (see Chapter 6), land rights and ownership (see Chapter 7) and TM and DRR programs (see Chapter 8).

1.8 Conclusion

Chapter 1 explained the issue to which this thesis is a response; despite PDR and reconstruction in Aceh being the biggest such effort in the world to date, the vast majority of literature examines only the immediate aftermath of the tsunami and does so from the perspective of NGOs rather than beneficiaries. This thesis seeks to fill these gaps in the literature. Chapter 2 will outline how the research was conducted.

Chapter 2:
Conducting the Research

Chapter 1 introduced the issue addressed by this thesis: the massive recovery and reconstruction effort that took place following the 2004 tsunami in Aceh, Indonesia. Exploring the effectiveness of this effort can increase knowledge of how future reconstruction efforts could be improved. In particular, this thesis seeks to examine the period between 2010 and 2013, well after the end of ERR and RR phase. This is the period during which early recovery and RR phase merged with the development stage. Studying this period offers an opportunity to examine how well initial reconstruction efforts fostered development and reduced the future vulnerability of the Acehnese population. Further, this research seeks to examine the extent to which the local community had the opportunity to provide meaningful input for planning.

This chapter will explain how the research was conducted. First, it will set out a conceptual map to answer these questions. Second, it will describe the fieldwork conducted to address the research questions posed in Chapter 1.

2.1 An Analytical Framework through which to Investigate Participation in Post-Disaster Reconstruction in Aceh

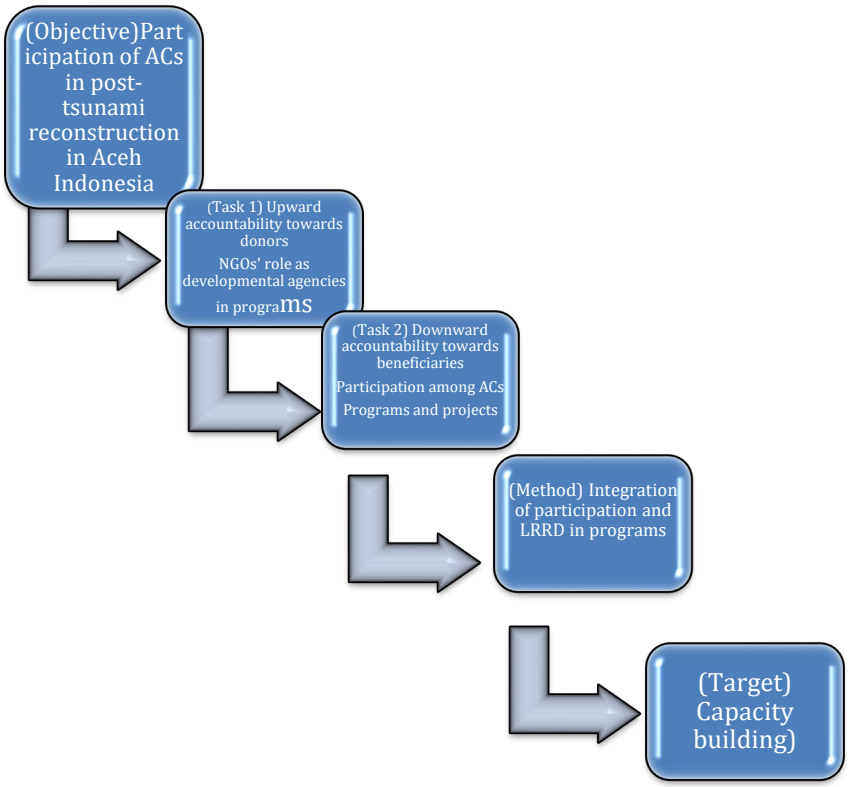

Figure 2.1: The Analytical Framework Elucidating the Relationship between the Role of Non-Governmental Organisations and the Participation of Beneficiaries towards Capacity Building

Contemporary literature agrees that community participation is the key requirement for the successful delivery of PDR projects. International funding authorities, governments, NGOs, contractors and ACs all agree that planning and executing reconstruction projects without the meaningful participation of ACs jeopardises the successful implementation of those projects:[98] 'There is a strong consensus in the disaster recovery literature that public participation is essential for a "good" recovery.'[99] According to Schneider and Libercier:

> The concept of participation has been given different meanings in different situations … Increasingly, however, it is accepted that genuine participation

[98]. Sadiqi, 'Community Participation in Post-Disaster Reconstruction', 185.
[99]. Ibid.

should embody some form of empowerment of the population, especially participation in decision-making.[100]

Participation can mean different things in different situations, but at its core, it leads to CB and the empowerment of people. 'Participation of people is another name of empowerment of individuals, a concept of which many are still ill at ease. This can be a delicate matter of the external agent.'[101] Participation, in turn, fosters self-reliance, which should be the ultimate aim of any development program. According to Byrne, participation is 'first and foremost a state of mind, according to which members of affected populations are at the heart of the humanitarian action, as social actors, with insights on their situation, and with competencies, energy, and ideas of their own'.[102]

Table 2.1: Types of Participation in Humanitarian Operations

Type of participation	Description
Passive participation	The affected population is informed of what is going to happen or what has occurred. While this is a fundamental right of the people concerned, it is not one that is always respected.
Participation in the supply of information	The affected population provides information in response to questions, but it does not influence the process since survey results are not shared and accuracy is not verified.
Participation through material incentive	The affected population supplies some of the materials and labour needed to operationalise an intervention, in exchange for payment in cash or kind from the aid organisation.
Participation includes supply of materials, cash or labour	The affected population provides some of the materials, capital and labour needed to operationalise an intervention. This includes cost-recovery mechanisms.
Interactive	The affected population participates in the analysis of needs and participation in program conception and has decision-making powers.

[100]. Hartmut Schneider and Marie-Helene Libercier, 'Introduction and Summary', *Participatory Development from Advocacy to Action* (Paris: OECD, 1995), 9–16.
[101]. Ibid.
[102]. Byrne, *Participation by Crisis Affected Populations*, 20.

Local initiatives	The affected population takes the initiative, acting independently of external organisations or institutions. Although it may call on external bodies to support its initiatives, the project is conceived and run by the community; it is the aid organisation that participates in the population's projects.

Sources: Byrne, Catriona, *Participation by Crisis Affected Populations in Humanitarian Action: A Handbook for Practitioners*.[103]

Achieving such participation is not as straightforward as it may seem. 'Too often, it is simply assumed that communities will be willing and able to participate in the recovery process and that recovery authorities will welcome, encourage, and enable this participation,[104] yet this not always the case.'[105] Stakeholders other than ACs must take responsibility for participation. 'Participation is not something to be imposed but rather, the product of what you want to do and what the affected population wants to do, and what is possible in a given context.'[106]

There can be a tendency for 'passive participation', which involves ACs being informed of plans that have already been developed by INGOs and donors. This aligns with the manipulation and consultation type of participation. According to Connor,[107] the agenda and the actors in these two types of participation are usually external. The program usually focuses on 'what is missing' in the communities and is followed by a manipulative agenda such as 'information gathering'. Local ACs are consulted so NGOs have evidence of local involvement in programs and projects. At this stage of participation, the program might not have been discussed with ACs, which means that local knowledge and capacity will not have been integrated into the planning stages.

[103]. The information in the table is adapted from Byrne, *Participation by Crisis Affected Populations*, 22.
[104]. Coghlan, 2004; Norman, 2004; Philips, 2004; Vallance, 2011b in Robert Love & Suzanne Vallance, 'The Role of Communities in Post-Disaster Recovery Planning: A Diamond Harbour Case Study', *Lincoln Planning Review*, 5, no. 1–2 (2013): 3–9.
[105]. Robert Love & Suzanne Vallance, 'The Role of Communities in Post-Disaster Recovery Planning: A Diamond Harbour Case Study', *Lincoln Planning Review*, 5, no. 1–2 (2013): 3–9.
[106]. Byrne, *Participation by Crisis Affected Populations in Humanitarian Action*, 20.
[107]. Desmond M. Connor, 'A New Ladder of Citizen Participation', *National Civic Review,* 77, no.3 (1988): 249–257.

This type of participation usually requires ACs to respond to plans and strategies designed externally. To adapt to the external ideas, ACs need to understand new information to narrow the knowledge gap between the local and foreign agents. This top-down approach usually fails to encourage genuine participation from locals due to cultural barriers. The information gathering process is merely a token gesture to ensure ACs feel they have participated in the reconstruction efforts. This is also known as the rhetoric of grass-roots participation, in which local ACs are included in the process but there is no guarantee their input will be integrated into plans. [108]

In contrast to passive participation, 'consultative participation' usually involves the inclusion of ACs in meetings as evidence of consultation and a legitimate step towards their full participation. The informing is usually not combined with other modes of participation. This participation does not offer any assurance that people's knowledge, ideas and perspectives will be taken into consideration and implemented into the programs. Examples of this method include attitude surveys, neighbourhood meetings and public hearings.

Participation is measured by meeting attendance, questionnaire response rates and the amount of printed information taken home by community members. Therefore, ACs (the recipients of the program) assume they have participated in the participation process. The power holders (e.g., INGOs, NGOs and donors) establish evidence that they have followed the required process of involving 'those people'. [109] However, in this case, the people were not offered genuine choice.

According to Byrne, passive participation is a direct result of the top-down approach (external actor and agenda), which relates directly to the lack of participation affecting CB in communities.[110] Based on usual practice, this approach is dominated by third-party actors and the agenda and decision-making are determined externally, making it least likely to encourage local participation.

However, given a genuine participatory role in practice, ACs can tackle pre-existing vulnerability issues from within. External factors, such as assistance, aid, donor, actor

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[108]. Byrne, *Participation by Crisis Affected Populations*, 20.
[109]. Ibid.
[110]. Ibid., 56.

and agenda, only work when combined with local knowledge to build capacity in the community.[111]

2.2 Participation, Capacity and Vulnerability Analysis

Participation is defined as 'the engagement of affected population in one or more phases of the project cycle; assessment; design; implementation; monitoring; and evaluation' in humanitarian action.[112] As described earlier, the participation of ACs in PTR was crucial to encouraging CB to benefit ACs in the development phase. The inclusion of beneficiaries as part of post-disaster planning and programming stages is usually only by initial consultation with the surviving communities. This all depends on the scale of the catastrophe. However, the inclusion of local communities as part of programs and projects is likely to produce a better overall outcome.[113]

Effective PTR encourages a high level of local participation and ownership. Greater participation will result in stronger community ownership of the program, which assists with sustainability in the developmental phase. Active participation in programs and projects will be reflected in the developmental stage. Development is not only externally driven and reliant on expert technical and economic intervention. It also involves respecting, listening to and working with local people. Under the developmental paradigm, the promise of empowerment for local populations starts with the establishment of a method for participatory development.

Reconstruction from below is an NGO intervention that is implemented in a bottom-up fashion, reaching beyond state institutions. This kind of reconstruction is becoming mainstream in NGOs' interventions in post-war and post-disaster communities.[114] The question of why it goes beyond the state explains many challenges facing NGOs that have led reconstruction in top-bottom approaches. The most common issue was the ongoing mistrust between state and non-state stakeholders.

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[111]. Ibid., 135. The lesson seems to be that passive forms of participation—ritual forms of participation imposed from the top-down—invariably fail. Genuine participation enables the poor to tackle the poverty process from the inside. External assistance can only facilitate the effectiveness of their efforts. There is a humanitarian response in which the human aspect has been lost.
[112]. Byrne, *Participation by Crisis Affected Populations*, 20.
[113]. Beneficiary, interview by research team, Banda Aceh, 14 December 2012, BA 28, transcript.
[114]. Dorothea Hilhorst, Ian Christoplos and Gemma Van Harr, 'Reconstruction "From Below": A New Magic Bullet or Shooting From the Hip? *Third World Quarterly,* 31, no. 7 (2010): 1107–24.

As illustrated in Figure 2.2, reconstruction in Aceh also encompassed the need to rebuild and rehabilitate the dual complexity of post-disaster and post-conflict communities. The double complexity refers to the recovery of socio-economic conditions of both tsunami-affected and conflict-affected communities in 'fragile' states.[115] It is an integrated process designed to reactivate development and construct a peaceful state. Here, development was perceived as an important part of peace under the notion as qouted by Hilhorst that 'No peace without development and no development without peace'. [116] The primary purpose of reconstruction is to ensure that the benefit, such as transfer of information, skills and knowledge (ISK) from programs and projects, can be sustained in the developmental phase. This also means that to ensure state, societies and economies do not relapse into vulnerability, socio-economic stability must be transformed to promote a sustainable economic climate.

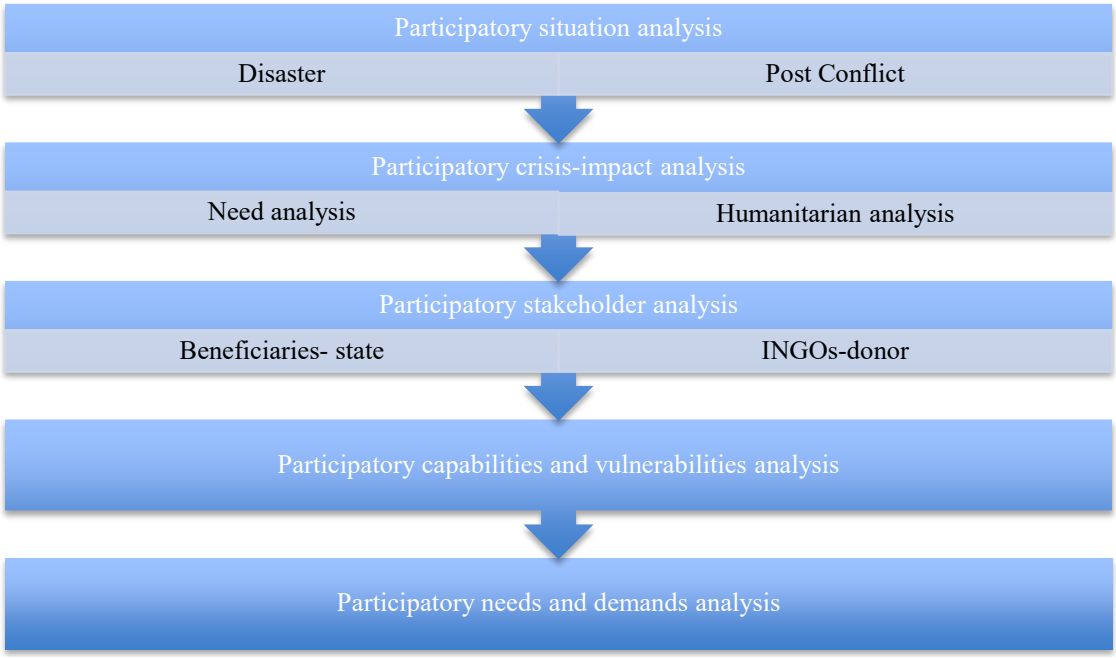

Figure 2.2: Suggested Participatory-Based Analysis before Planning and Implementation of Post-Tsunami Reconstruction Programs and Projects
Sources: Byrne, *Participation by Crisis Affected Populations in Humanitarian Action: A Handbook for Practitioners,*[117]

In PTR phases in Aceh, there were two major themes of reconstruction and transformation: BBB and 'building back safely' (BBS). The top-bottom

[115]. Paul Zeccola, 'Linking Disasters in Aceh: Human Security, Conflict and the 2004 Indian Ocean Tsunami', in *Human Security and Natural Disasters*, eds. Christopher Hobson, Paul Bacon and Robin Cameron (London and New York: Routledge, 2014), 127–139.
[116]. Hilhorst et al., 'Reconstruction "From Below" ', 1107–24.
[117]. Byrne, *Participation by Crisis Affected Populations*, 92–93.

reconstruction led by the BRR only plans to build, but offers no socio-economic support to transform the community. Reconstruction is limited to the physical rebuilding of facilities without multisectoral support for the local communities' sustainable economic development. BRR left Aceh with no futher planning to support ACs in the transition to the development phase. This was perhaps due to its short-lived mandated authority. [118] Issues raised by beneficiaries in relation to BRR projects include a lack of focus on socio-economic development (i.e., continuity of livelihood), institution building and essential service provision.[119]

The term 'development from below' is more aligned with NGOs' planning and programs. However, further discussion is needed to examine the extent to which this new alternative for reconstruction can be embraced by NGOs in PTR programs and planning. First, it is valuable to explore the link between development and the importance of participation. The relevance of this link to NGOs (as primary advocates of the 'development from below' approach in the case of Aceh) is also worthy of discussion.[120]

Development intervention is closely associated with the primacy of local needs over development models, endogenous processes and participative decision-making, which means putting people first. It is largely considered a learning process for both NGOs and their beneficiaries. The term 'below' refers to starting activities at the local level, rather than planning programs at NGOs' headquarters without local consultation. The focus on local also means that ACs are the first element of the development process. Hillhorst et al, defined this process as bringing 'empirically grounded and context specific policies to the endogenous development and the promotion of local ownership'.[121] Building on spontaneous rather than engineered processes is 'inclusive in respecting state actors'. [122] Mostly, interventions for development must have a local focus and avoid an independent and spontaneous process of reconstruction.

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[118]. Mardhatillah, 'The Role and Experiences of Badan Rehabilitasi dan Rekonstruksi', 186–209.
[119] Ibid,.
[120]. Buchanan-Smith and Fabbri, *Links Between Relief, Rehabilitation and Development*, 26.
[121]. Dorothea Hillhorst, *The Real World of NGOs: Discourses, Diversity and Development* (London & New York: Zed Books, 2003), 1109.
[122]. Paul Harvey, *Toward Good Humanitarian Government: The Role of the Affected State in Disaster Response* (London: Overseas Development Institute, 2009), 29.
[122]. Zeccola, 'Linking Disasters in Aceh', 127.

It is important for NGOs to encourage local participation in the planning stage. This helps ACs plan and determine the program according to their needs, rather than including beneficiaries only at the implementation stage. It is best that recipients adopt some sense of ownership when undertaking a program to determine what will best suit the communities' needs. Program planning based on viable CB activities is crucial to encourage local participation. Local communities' existing expertise, knowledge and skills should be considered pre-existing assets to be incorporated into NGOs' planning processes.

From the CB perspective, programs should be constructed to ensure the community and individuals respond better to social change. In this context, CB is viewed as means to a specified end: development. CB 'can refer to distinct approaches, strategies, and methodologies used to improve the performance of individuals, groups, and organisations to carry out particular functions'.[123]

CB is also important because it generates an ongoing process that is necessary for all human endeavours. NGOs need to encourage a sense of ownership and legitimacy for locals involved in PTR programs to build their capacity. The second dimension of CB concerns the object of the process. This could be anything from individuals, groups (such as villagers), organisations (such as NGOs), sectors (such as business), government and civil society, or nations.[124] Human capacity is the central subject of development.[125] Emphasising CB could protect against natural hazards (e.g., tsunamis) and reduce ACs' vulnerability.

There are four main considerations of CB: as a means to particular end; the object of CB; the different methodologies of CB; and the purpose of the CB. Kenny proposed a fifth way of understanding CB:

> Critical to understanding the many forms of capacity building is the way in which programs are conceptualized, developed and implemented. Thus the fifth way of understanding capacity building concerns whether capacity is top-down or bottom-up. The top down approach aims to improve people's

[123]. Ismet Fanany, Rebecca Fanany and Sue Kenny, 'Capacity Building in Indonesia: Building What Capacity?', in *Challenging Capacity Building: Comparative Perspectives*, eds. Sue Kenny and Matthew Clarke (New York: Palgrave Macmillan, 2010), 157.
[124]. Ibid.
[125]. R. I. Rotberg, 'Failed States, Weak States: Cause and Indicators', in *State Failure and State Weakness in a Time of Terror*, ed. R. I. Rotberg (Washington: Brookings Institution Press, 2003), 1–28.

> capacity to carry out preordained functions and objectives more effectively and efficiently.[126]

Kenny also suggested that using CB for external intervention, such as INGOs' post-disaster programs, is a form of outside interference. 'Capacity building activities can be used by both donors/sponsors and beneficiaries of programs as a path to legitimacy.'[127]

Considering the relationship between NGOs, state and beneficiaries, CB is achievable through greater participation and input from local stakeholders. This may seem quite complicated. However, it will benefit communities and the state in the future when they need to rely on their capacity in the developmental phase. Therefore, coordination and collaboration between NGOs and local state stakeholders will help enhance program outcomes. Executed effectively, this should benefit beneficiaries and assist them to transform existing programs and projects into sustainable long-term development initiatives.

Conversely, the exclusion of local and national stakeholders from planning and implementation phases treats ACs as passive objects, rather than active subjects, of the program. When beneficiaries are perceived as passive aid recipients, they will only benefit from the program in the short term.

The causal relationship between vulnerability and underdevelopment is best addressed by the inclusion of LRRD in PTR. Only proper participatory practice, such as ownership and legitimacy of ACs, will help develop local CB. LRRD was developed through the efforts of international humanitarian organisations, especially multimandated agencies, as part of bridging the gap between short-term humanitarian assistance and long-term development cooperation in post-disaster and post-conflict emergencies. LRRD's primary concern was involvement 'with integrating short-term perspectives and meeting immediate needs, with longer-term perspectives in support of development process'.[128] It is a unique term coined to analyse the inclusion of developmental measures in humanitarian emergencies from the earliest phase (relief

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126. Kenny, 'Capacity Building in Indonesia', 159.
127. Ibid., 158.
128. Buchanan-Smith and Fabbri, *Links Between Relief, Rehabilitation and Development*, 4.

efforts).[129] Emphasising the tangible outcomes of development in the development phase is difficult. Therefore, development efforts must begin during initial relief efforts. LRRD also accentuates the importance of focusing on the perspectives of those receiving the aid: the beneficiaries and ACs.[130]

Some emergencies fell into both categories (post-disaster and post-conflict), in which ACs required the same focus on development as on building their capacities as communities to avoid dependence on foreign aid. Only the post-disaster aspect will be explored in this thesis. But the historical part of the case studies focused heavily on post-conflict emergencies and it is impossible to separate the two. Thus, the inclusion of detail on Aceh's historical conflict helps contextualise the hurdles faced by international humanitarian agencies in their developmental work in Aceh. The discourse for post-disaster emergencies took a different direction when the primary focus was reducing disaster risk through development. This focus is enshrined in most aspects of INGOs work in Aceh. The best way to differentiate between post-conflict and PDR is the inclusion of DRR as another critical component to increasing development in LRRD-based PTR.[131] However, this depends on the quality and outcome of the contextual assessment, known as needs NA, conducted in the early phase of emergency relief and humanitarian assistance. The evaluation of the effects of disasters help NGOs to understand which aspects of local capacity could be improved in PTR through greater community participation.

In Aceh, stakeholders were left to identify the needs of ACs. This process should determine who is responsible for mitigating the devastating effects of disasters and how it should be done. Coordination between various stakeholders and agencies from government and NGOs is crucial to lead efficient PTR.

This is especially true in low- and low-middle income countries with rapid economic growth.[132] Rapid economic growth also refers to rapid urbanisation and high-density population growth in urban areas. Economic growth heightens the risk and exposure

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[129]. Ibid., 6.
[130]. Ibid., 17.
[131]. Ibid., 9–10.
[131]. Zeccola, 'Linking Disasters in Aceh', 127–39.
[132]. Peter McCawley and Sisira Jayasuriya, *The Asian Tsunami Aid and Reconstruction After a Disaster* (Cheltenham UK: Edward Elgar Publishing, 2010), 12.

of the population to hazardous living conditions and damages CB processes. Low- and middle-low income countries are continuously developing. They generally have a high-density population, which is a significant disaster risk. According to McCawley and Jayasuriya, 'Developing countries in Asia are particularly exposed to risks from natural disaster'.[133]

A risk is a probability of damages inflicted by one or several hazards in a vulnerable human community. Risk is also a combination of the hazardous effects of disasters and the vulnerability of the population. Thus, disaster is a realised risk that disrupts the functioning of a society or population to the extent that it cannot cope using its own resources.[134] The combination of hazards, vulnerability and risk are an indication of inadequate disaster mitigation plans from state authorities in disaster-prone regions such as Aceh. From a CB perspective, the integration of DRR, LRRD and active AC participation in a long-term developmental plan is the only solution to avoid returning to vulnerability. Further, it will ensure a sustainable economy in post-disaster ACs.

Most natural disasters occur in countries with medium and low HDIs. This shows the importance of reducing vulnerabilities among ACs as a disaster mitigation measure. According to an IFRC report, two-thirds of deaths from natural disasters occur in countries with a low HDI. In this context, the HDI indicates a link between vulnerability and underdevelopment as the leading cause of increased risk. Fabbri stated 'most natural disasters … are characteristic rather than accidental features of the places and societies where they occur'.[135] The combination of high risk and hazardous effects of natural disasters in underdeveloped countries somehow increases the vulnerability and insecurity of ACs.

In addition to vulnerability and underdevelopment, urbanisation is regarded as a primary contributing factor when the affected area is located in marginal and hazard-prone areas, such as flood plains and unprotected coastlines. Rapid urbanisation is identified as the primary factor contributing towards underdevelopment in the case of disaster-prone regions, which equally increases risk and vulnerability level.

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[133]. Nathan, 'Disaster and Human Security', 1–5.
[134]. Buchanan-Smith and Fabbri, 'Links Between Relief, Rehabilitation and Development,' 8.
[134]. Zeccola, 'Linking Disasters in Aceh,' 127–139.
[135]. Buchanan-Smith and Fabbri, 'Links Between Relief, Rehabilitation and Development,' 11.

2.3 Non-Governmental Organisations

To understand the importance of all stakeholders working together for the common good of beneficiaries, it is important to understand NGOs and their role as developmental agencies. The relationship between NGOs, beneficiaries and the state influences NGOs' effectiveness in humanitarian operations and as developmental agents. Although the terms are often used interchangeably, NGOs and civil society (CS) are not the same:

> Civil society refers to all people, activities, relationships and formal and informal groups that are not a part of the process of government. It includes an array of civil societies organizations of which INGOs involved in the development and humanitarian work constitute a subgroup, together with all other non-governmental groupings such as social movements, networks, and even virtual groups.[136]

The terms of NGO, or INGO, covers many different organisations and agencies, from locally based to global (i.e., legally recognised entities that pursue a public purpose). NGOs are organisations with memberships in more than one country.[137]

2.3.1 Non-Governmental Organisations' Relations with Government in Bottom-Up Reconstruction

NGOs have a long history in many parts of the world as CS organisations that function as active lobby groups to influence the state or government. Many have advocated for official status in decision-making bodies, which they currently do not possess. If this status were granted, it would be of great benefit. NGOs can influence national governments, multilateral institutions, international cooperation and societies. Simmons has listed the many ways INGOs shape agendas:

> They influence agendas, forcing leaders, policy makers, and publics to pay greater attention to various topics. They help negotiate outcomes, designing treaties and facilities agreement. They confer legitimacy, promoting or restricting public support for issues and institutions. They can contribute to

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[136]. Roger C. Riddell, 'NGOs in Development and the Impacts of Discrete NGO Development Interventions', in *Does Foriegn Aid Really Work?* (Oxford: Oxford University Press, 2007) 259–286. Civil society is a much broader term that includes INGOs and a wide range of other types of associations that are defined in different continents.

[137]. P. J. Simmons, 'Learning to Live with NGOs', *Foreign Policy*, 1, no. 112 (1998): 82–96.

implement solutions and push government and other actors to abide by their commitments.[138]

The pertinent question is whether NGOs' major influence on world affairs is good or bad? There are two different sides to NGOs' influence. First, they play a significant role to empower the poor. This effort to influence government policy for the benefit of the people is also a part of their downward accountability to their beneficiaries. Historically, NGOs have been able to affect the decisions of powerful governments. Additionally, NGOs have compelled weaker states to modify their behaviour significantly.[139] This shift of decision-making power from state to non-state actors at an international level may enhance the ability of NGOs to address pressing needs at a local level. Further, NGOs have recorded prominent growth through their participation in and around large UN conferences in the 1980s and 1990s, expanding their access to UN bodies.[140]

Caution and resentment towards NGOs is prevalent in some governments, especially governments struggling to build effective state institutions. These governments see little value in encouraging NGOs, fearing their dominance in decision-making. However, this could also be a problem, especially in weaker states or authoritarian states where states have more control over non-states actors. NGOs might even be accused of challenging state authority.[141]

As a result of this grass-roots mistrust, some states refuse to award NGOs a place at the intergovernmental table. It is suggested that weak states and authoritarian governments that strictly limit the activities of NGOs should adapt a more coherent and effective policy to allow NGOs to contribute to development planning according to their specialty. Therefore, as a non-state actor that operates within states, NGOs are bound by state boundaries, territories, laws and regulations, administrative bureaucracies, which usually affects their operations, funding, collaboration and their effectiveness in pursuing their ideas and objectives.[142]

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[138]. Riddell, *Does Foreign Aid Really Work?* 259–86.
[139]. Ibid.
[140]. Ibid.
[141]. Hans Holmen and Magnus Jirstrom, 'Look Who's Talking! Second Thoughts About NGOs as Representing Civil Society', *Journal of Asian and African Studies,* 44 (2009), 429.
[142]. Simmons, 'Learning to Live with NGOs', 82–96.

Second, NGOs' influence is perceived as a challenge to governments when the organisation has direct communication with beneficiaries and oversees local and national apparatus. For example INGOs in Aceh prefer a direct approach to their targeted beneficiaries without involving state apparatus or partnership with local NGOs. However, INGOs are usually required to collaborate with local NGOs. Most local agencies lack a strong administrative structure, financial transparency and funding sources, which is partly due to mutual mistrust between local NGOs and the state.[143]

In addition to their complicated relationship with the state, NGOs face many other challenges in aligning their non-profit interests with state interests, including dealing with issues such as accountability, space and funding. NGOs are highly accountable in their role as mediator between a state and its people. They hold upward accountability to donors, lateral accountability to the state and downward accountability to beneficiaries. The link between accountability affecting NGOs' role in development will be explained in Section 2.3.2.

NGOs usually focus exclusively on humanitarian issues and need to safeguard themselves against indulging in any matters that conflict with political or state interests. This limited capacity prevents NGOs from undertaking large-scale endeavours. In addition, NGOs are categorised as special-interest groups, whose objectives are narrowly defined, causing divided opinion among communities. Alternatively, they can also distort public opinion with false or inaccurate information, lose their sense of purpose by growing larger and more bureaucratic or lose their organisational autonomy by increasingly relying on state funding.

Due to these limitations, most NGOs choose to meet their downward accountability by applying a direct approach (see Task 2 in Table 2.1). The direct approach by NGOs to reach their beneficiaries in post-disaster situations may result in better development for local communities. This means an increased preference for beneficiaries' interests, due to the direct supervision of financial and program progress, which prevents the misuse of funds and corruption in local government ranks. However, it ultimately creates additional problems of increasing complexity.

[143]. Ibid.

Removing local governing apparatus will create a gap between NGOs and their beneficiaries. It is best to search for the best modus operandi to tackle mistrust issues with clarity and greater transparency. Coordination and collaboration between NGOs and state stakeholders result in additional advantages for beneficiaries.

There are two approaches suggested by the Active Learning Network for Accountability and Performance (ALNAP) for engaging with ACs: direct participation and indirect participation. Direct participation happens when:

> Members of the affected population participate as individuals in the various phases of an aid program, such as by attending focus groups organized by your organization, supplying labor for project implementation, voting or partaking in decision-making, and by suggesting ideas for interventions.[144]

Conversely, indirect participation (or participation by representation) happens when:

> Structures that represent or develop within the affected population (like Community Based Organisations and village committees) participate in humanitarian interventions by, for example, organizing discussion fora, surveying villagers and selecting members of the affected population to be assisted.[145]

2.3.2 Non-Governmental Organisations' Role as Developmental Agencies

NGOs are also known for their consultative contribution, which is linked closely to their important inclusion in the UN. This contribution builds a complementary and supportive relationship between NGOs and leading CS associations, such as the UN and states. NGOs' partnerships with the UN are necessary to help implement mandates and support UN humanitarian, developmental and environmental programs. These include activities such as electoral assistance, famine relief, post-conflict reconstruction, demining operations and monitoring treaty compliance.

States are recognised as sovereign entities in international systems, with legitimate rights and powers to exercise legal control over other entities (including non-state actors such as CS organisations) to ensure that their operations do not jeopardise state interests. While the state is recognised as the sole security provider in international

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[144]. Byrne, 'Participation by Crisis Affected Populations in Humanitarian Action', 29.
[145]. Ibid., 29–30.

systems, NGOs and other CS organisations play an important role. They help the state fill existing gaps in state administration and bureaucracy:

> [An] NGO usually is expected to speed up development, to safe guard environment, to contribute to poverty reduction, the emancipation, enforce human rights and bring democracy to countries under an autocratic regime. The problem arises when their ability is insufficient, and the expectation is high on giving a voice to the poor.[146]

NGOs carry a tremendous responsibility to fulfil expectations of donors, beneficiaries and, sometimes, states.[147] While NGOs are expected to speed up the development process, they also require ample time to structure, plan and implement the programs that benefit beneficiaries. The duty of juggling the interests of all stakeholders in PDR is cumbersome and painstaking. NGOs have to oversee the role of states in some cases to ensure their reputations are not jeopardised by a lack of clarity, high levels of bureaucracy and government corruption when the programs are directly coordinated by government agencies. In addition to beneficiaries' interests, NGOs need to align with donors' and funders' policies and objectives to ensure the continuous flow of funding. The challenges include planning and implementing effective programs to improve communities, while also considering the best interests of other stakeholders, such as the state and donors. This is an important factor in the choice between encouraging direct or indirect participation among ACs.

Social forces within states contribute equally to development projects in different ways: as consultants, advocates or humanitarians. This social responsibility often leads to NGOs being labelled 'silent actors' that help states overcome issues resulting from the prioritisation of other factors over human interests.[148]

This raises controversial questions relating to how NGOs collaborate with states to achieve greater participation from beneficiaries to improve CB. How can NGOs exercise influence given their lack of resources and coercive enforcement capabilities? Further, to what extent can state control over NGOs' operations and

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[146]. Hans Holmen and Magnus Jirstrom, 'Look Who's Talking! Second Thoughts About NGOs as Representing Civil Society', *Journal of Asian and African Studies,* 44 (2009), 429.
[147]. McCawley, *The Asian Tsunami Aid and Reconstruction after a Disaster*, 17.
[148]. States, as primary security providers, usually focus on the safety and integrity of their territory. However, sometimes neglecting or prioritising state interests can have dire effects on individuals. This emphasises the importance of CB to ensure personal development and wellbeing.

levels of legitimacy, capability and accountability affect NGOs' role in development? NGOs are usually legitimised by their structures, procedures, purposes and the credentials and charisma of their members. At times, these can be 'pushing' or 'pulling factors' that affect NGOs' roles. [149]

State power and authority will change NGOs' roles as development agencies in cases in which state policies can affect NGO operations, funding, administration, capabilities and ability to reach beneficiaries. Thus, the role of NGOs as non-profit and non-interest organisations can be limited. This will not only affect the quality of long-term development programs, but also NGOs' reputations, and ultimately the quality of their operations. NGOs play a complicated role as the mediator between relevant stakeholders (such as the state, beneficiaries and international donors and funders), which places them in a difficult situation. They need to account for the best interests of all stakeholders to integrate long-term development plans from the RR phase.

The failure to sustain and integrate long-term development in PTR becomes apparent in the developmental phase. This phase is the real benchmark to measure the effectiveness of the entire PDR phase. NGOs (at the 'giving' end) and governments (at the 'receiving' end) should be able to integrate long-term developmental policies through the transfer of ISK via programs such as ToT. Coordination and collaboration among these actors will help empower people, the local government and local NGOs. NGOs' programs usually contain handover blueprints to enable the local government to sustain the programs. [150]

Given adequate resources, space and funding, NGOs are known for their humanitarian and advocacy roles in post-disaster recovery. In post-disaster and post-conflict areas, NGOs are responsible for helping fulfil people's basic needs as part of immediate recovery efforts. Further, they assist in advocating ACs' political and economic interests in the midst of conflict. Conflict has a greater impact on ACs after a disaster.

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[149]. McCawley, *The Asian Tsunami Aid and Reconstruction after a Disaster*, 17.
[150]. Pribadi et al., 'Post Disaster Housing Reconstruction in Indonesia', 197–223.

In this context, NGOs improve CB by providing advocacy to support the peace process.[151]

However, past literature does not fully explore the respective roles of state or non-state actors in post-disasters areas (especially in the developmental phase). It is important to study the coordination and collaboration between state and non-state actors to understand their impact on the success and failure of NGOs' programs. Further, it is necessary to examine how time, funding, capabilities, abilities and space affect their performance. NGOs' role in CB helps emancipate their beneficiaries in PDR, and has an impact in the developmental phase.

2.4 The Relationship between Relief, Rehabilitation and Development

This research drew on a framework known as LRRD. This was developed by Brusset (see Figure 2.3).

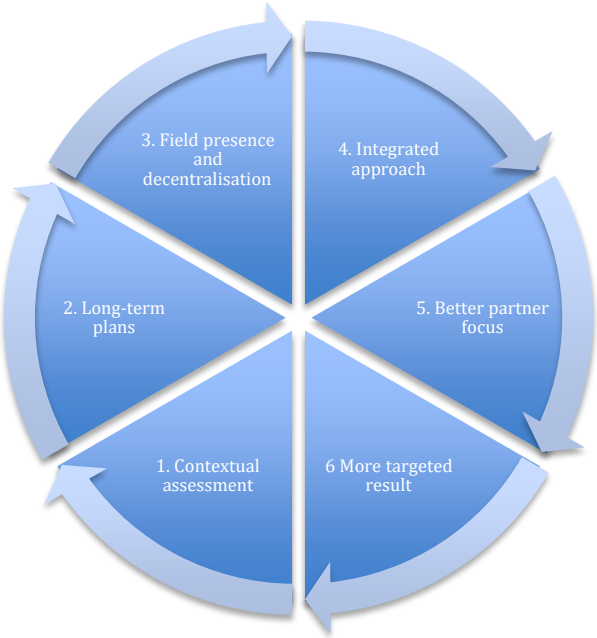

Figure 2.3: **Suggested Cycle of Links between Relief, Rehabilitation and Development Integration in Post-Tsunami Reconstruction Programs and Projects**152

LRRD is an ideal framework for this research because it recognises that NGOs and agencies need to integrate livelihood and socio-economic aspects into the planning

[151]. Zeccola, 'Linking Disasters in Aceh', 127.
[152]. Emery Brusset, *A Ripple in Development? Long Term Perspectives on the Response to the Indian Ocean Tsunami 2004.* (Sida, May 2009), 115–6, www.sida.se/publications

and implementation of their projects to ensure local CB and economic sustainability. The model brings together relief, rehabilitation and longer-term development interventions, regardless of the size or character of a disaster.[153] LRRD needs to be integrated into the operations of each phase. The integration is more than simply methodology. It needs to integrate culture (i.e., integration of local knowledge and capacity) into the planning and implementation of programs to encourage greater participation, new ways of thinking (i.e., improve Acehnese perceptions of foreigners) and a willingness to accept foreign assistance. The inclusion of these elements in management policy, funding, operational strategy and implementation is required to increase consistency between policies and practice.[154]

LRRD has become increasingly relevant and important due to a rise in the number of disasters caused by natural hazards, conflict and climate change.[155] LRRD is a practical framework that formed the foundation for sustainable development during humanitarian operations in post-PTR in Aceh. The main aim of LRRD was to ensure humanitarian operations (such as the ERR phase in Aceh) did not undermine the integration of development work into programs. It also emphasised the importance of building humanitarian and development work around humanitarian knowledge and results. For example, in Aceh, the integration of local knowledge and capacity into the planning of programs in ERR and RR encouraged higher participation levels, promising better development.

[153]. Inge Brees, 'Linking Relief Rehabilitation and Development (LRRD): Towards A More Joined Up Approach Enhancing Resilience and Impact', *NGO Voice,* July (2012): 1–6.
[154]. Ibid.
[155]. Ibid.

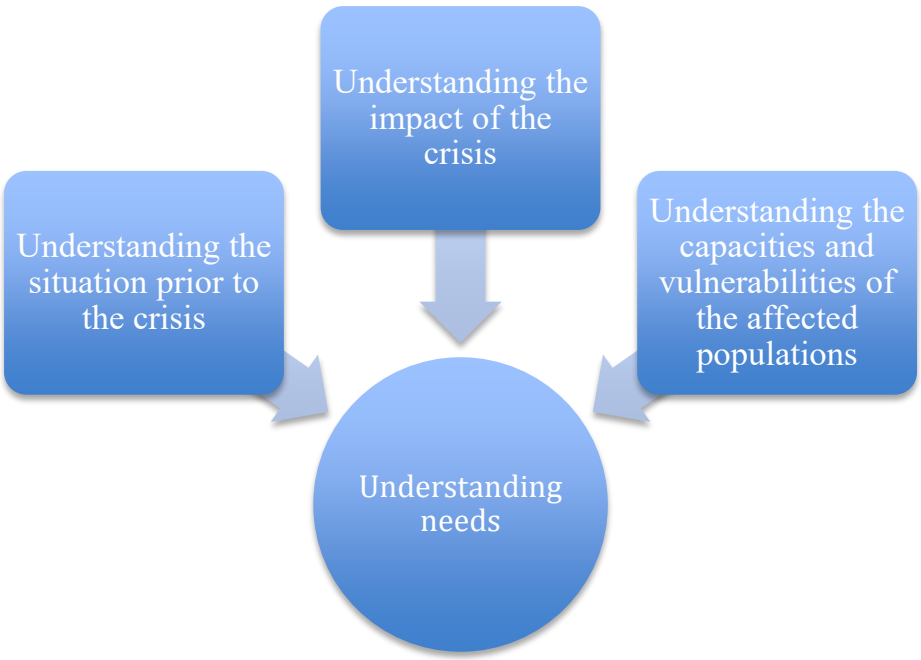

Figure 2.4: Participation by Crisis Affected Populations in Humanitarian Action

Sources: A Handbook for Practitioners, ALNAP.

This integrated contextual assessment, also known as NA, was the ideal first step towards ensuring increased participation to build better local operational capacity. This had to be followed by 'an upright cycle of LRRD' (see Figure 2.4). NA allows the international actor to understand the needs of the AC. As depicted in Figure 2.4, to understand the communities' needs, NGOs must analyse the situation before the crisis/disaster. Second, NGOs must understand the impact of the disaster. The understanding of the first and latter stages will help NGOs understand existing local capacity and vulnerability before determining the appropriate action.

The combined findings from the LRRD reports and the research show that most development actors, such as NGOs, donors and UN agencies, tend to focus on project-based intervention. Coordination in the NA stage would enable all actors involved to better understand the limitations and needs of local capacity. Further, it would allow for integration of multidimensional disaster risk-reduction measures in programs.[156]

Another important matter was to ensure the inclusion of the national government to effectively manage the handover process. The inclusion of the Indonesian government

[156]. Brusset, *A Ripple in Development?,* 115–6.

in early recovery efforts was secured by providing them with clear planning priorities. This enabled the government to generate structural economic and social planning and enforcement towards a smooth transition to the development phase.[157]

Coordination and an integrated approach were of utmost importance to the success of PTR. It was crucial to integrate early recovery, DRR, CB and poverty alleviation to achieve long-term development plans in all components of PTR. A lack of integrated planning in the four areas within the LRRD framework and a lack of coordination emphasised the achievement of institutional program objectives. Ultimately, this resulted in fruitless outcomes in the PTR phase.

The cycle of LRRD helps explain what needs to be done to link PTR and long-term development plans. The first point is to acknowledge local reality, which means including local knowledge and perspectives in integrated planning. In Aceh, the process of obtaining local knowledge started with NA. The adaptation of the following six main components in the LRRD cycle would lead to targeted CB goals for local actors, such as government agencies and local NGOs. [158]

In Aceh, the coordination task was governed by BRR in May–June 2005. The five-year rehabilitation and reconstruction period pronounced by the Indonesian government gave all international and local agencies an equal chance to use Aceh as a 'development lab',[159] while being closely watched and coordinated by the highly mandated BRR. The empirical findings indicate that the BRR's coordination success can be credited only with the reconstruction of physical and organisational infrastructure.[160]

However, due to the lack of emphasis on LRRD integration and efforts to strengthen existing operational local capacity framework, the coordination task undertaken by this government agency was barely a success. The bureaucracy within BRR failed to encourage cooperation among most international bodies, compromising coordination

[157]. Ibid., 116.
[158]. Brusset, *A Ripple in Development?,* 115–6.
[159]. Kenny, 'Reconstruction in Aceh', 208.
[160]. Mardhatillah, 'The Role and Experiences of Badan Rehabilitasi and Rekonstruksi'.

and limiting the success of the PTR phase. Without proper coordination, the programs and projects failed to support CB in Aceh.[161]

In addition to the lack of coordination among agencies in Aceh, PTR efforts focused solely on tsunami-affected communities without any attempts to direct reconstruction efforts to include conflict-affected areas. The tsunami-affected regions did not necessarily have better economic prospects, but could benefit during the PTR phase from enormous tsunami aid funding. Alternatively, most conflict-affected areas were rich with an abundance of natural resources that promised better industrial development but were deprived of the long-term benefits offered by tsunami development programs and projects. While this research does not intend to study marginalised communities in particular, it is important fact to note when measuring the overall socio-economic health and livelihood of Aceh, which is yet to be explored. The findings also indicate that local NGOs' partnership and participation in ACs were fundamental in integrating the four primary elements of LRRD.[162]

[161]. On the importance of coordination between government agencies, two points highlight the role of BRR as a coordination agency. First, most INGOs and beneficiaries in the research mistrusted BRR operations. This is despite numerous reports from BRR and other agencies (such as the TEC) that cite BRR as competent and corruption-free. Second, BRR focused more on physical development in Aceh (particularly on PHR and other community facilities) than on livelihood development.
[162]. Brees, 'Linking Relief Rehabilitation and Development', 1–6.

2.5 Methodology

2.6 Research Aim and Questions

This study aimed to explore and analyse the effectiveness of NGOs in PTR from the perspective of beneficiaries in Aceh. Therefore, the thesis has the following aim and research questions in relations to objective of the thesis in chapter 1.

1) How did the participation of local beneficiaries in PTR programs and projects in Aceh designed and implemented by NGOs affect capacity building?
2) To what extent were local communities' engagements in post-tsunami reconstruction had reduced vulnerability in post-developmental phase.
3) To what extent did the local communities consider the work of NGOs had reduced their levels of vulnerability in mid- to long-term reconstruction and development?

2.7 A Case Study Approach

According to Yin, case studies can be part of a larger mixed methods study. [163]The approach taken in this thesis was a single case study of the tsunami-affected region in Aceh, Indonesia. This region was affected by the 2004 tsunami, and required the assistance of the international community for reconstruction.

Yin also highlighted that

> "the relative size of the sample—whether 2, 10, or 100 cases are used—does not transform a multiple case into a macroscopic study. The goal of the study should be to establish the parameters, and then these should be applied to all research. In this way, even a single case could be considered acceptable, provided it met the established objectives". [164]

Aceh has been chosen as the case study because it was the region most affected by the 2004 tsunami. Two main cities in Aceh, BA and WA, were selected to compare the effect of post-PTR programs and projects on beneficiaries. The selection was based on the magnitude of destruction and number of NGO-led programs and projects in these two regions. The comparison between the two cities allows the researcher to

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[163]. Robert K. Yin, *Case Study Research: Design and Methods* (Thousand Oaks, CA: Sage, 1994), 24.
[164]. Ibid., 26.

identify the issues and challenges facing both beneficiaries and NGOs in maximising AC participation in PTR programs and how the outcome affected the socio-economic climate and CB in Aceh.

2.7.1 Location of Data Collection: BA and WA

The researcher chose BA and WA for the sampling, based on the vast scale of destruction caused by the tsunami in these two regions. BA is the capital city of the province and two other cities in WA, Calang and Meulaboh, were located along the BA and WA coastlines. These cities were located along 300 km of coastline that was damaged by the tsunami. [165] The selection of the regions in Aceh was based on the highest number of victims requiring tsunami aid. The comparative figures (see Figures 2.5–2.8) illustrate the characteristics, such as age range, gender, marital status and background, of interviewees from both regions. These figures help explain the difference in patterns between ACs in BA and WA.

During visits to Aceh, the month of December 2012 marked the eighth anniversary of the tsunami disaster in Aceh, Indonesia. The development of the Tsunami and Disaster Mitigation Research Centre, Syiah Kuala University (TDMRC Unsyiah) located in the coastal area signifies a remarkable and speedy recovery, despite the massive destruction of the tsunami eight years ago. The tsunami that hit BA and its surrounding districts caused extensive casualties and loss of life (more than 126,900 people).

In WA, the highway connecting major cities like BA, Calang and Meulaboh was built through collaboration between USAID and a Japanese agency (JICA). With disaster mitigation and DRR factor in place, the rebuilt highway was relocated a further five km from the coastline. The ruins of the old road remain as a tsunami memorial for the local population. In BA, the tsunami eroded 400 m of coastline and created an island in Ujong Seuden. [166]

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[165]. Tsunami Museum, Banda Aceh, Indonesia, 10 December 2012.
[166]. Syamsidik et al., 'Coastal Land Use Changes', 1–13.

In this region, 90 per cent of the communities were involved in fisheries activities and lived five to 10 km from the sea before the tsunami. There were some hilly mountainous landscapes 10 km from the sea. The bay-like landscape explains why almost all communities along these beautiful coastlines were wiped out when the tsunami hit. The epicentre of the earthquake in Aceh was much closer to the city of Meulaboh than to BA.

This study undertook two rounds of data collection in the different regions surrounding Aceh and Jakarta. During the first trip (November–December 2012), the research team interviewed seven INGO staff members in Jakarta and 30 local respondents in BA. In BA, the research team interviewed a few local NGOs, local entrepreneurs, award-winning local leaders and ACs. The research team also visited some historical areas relevant to the conflict in Aceh and to interview some communities in Sigli in Pidie, which was known as a high-conflict region in Aceh The location of this region was close to the GAM operation hub making it prone to be involved in the conflict between the central government army TNI and GAM revolutionary army. The various interviewees' background information gathered during the first trip prompted better planning and perspectives for the second data collection trip to Aceh.

The second data collection trip took place May–June 2013 and focused more on the west coast of Aceh. The team interviewed more respondents from cities like Calang, Meulaboh and other small towns located along the coastline between BA and Meulaboh. This time, the research team aimed to reach the communities that lived along the highway, representing ACs along the west coast of Aceh. There were more than 30 local respondents, including the *Geuchik* (head of the village), community secretariat, chairman of the local district office, forestry department staff, former INGO staff and local villagers.

2.8 Research Design

The research design of this study is a flexible qualitative design. According to Sarantakos,

> The different between quantitative and flexible designs are more obvious and more significant. Even when the same concepts and element are used, their content, purpose and nature often vary considerably. [167]

He further explained how the method, sampling and projection, data collection, data processing and reporting of qualitative flexible model are different from quantitative model. Table 2.2 compares the two.

Table 2.2: Differences between research designs in qualitative (flexible) model and quantitative model.[168]

Procedure	Quantitative Model	Qualitative (flexible) model
Research Topic	Selection of Research topic Selection of Methodology	Selection of research topic Selection of methodology
Methodological construction of the topic	Definition: precise, accurate and specific. Employs operationalisation Hypothesis: formulated before the study	Definition: general and loosely structured. Employs sensitizing concepts Hypothesis: formulated through/ after the study
Methods, sampling and projection	Well planned and prescriptive Sampling: well planned before data collection; is representative Measurement/scale: employs all types Arranging printing of documents Appointing assistants (if required)	Well planned but no prescriptive Sampling: well planned, often during data collection; is not representative. Measurement/scale: mostly nominal Planning field visits' Appointing assistance (if required)
Data Collection	Uses quantitative methods and statistical analysis	Uses qualitative methods Usually single handed
Data Processing	Mostly quantitative and statistical analysis Inductive generalisations	Mainly qualitative; often collection and analysis occur simultaneously Analytic generalisation
Reporting	Highly integrated findings	Mostly not integrated findings

The topic of this study is 'the beneficiaries' perspective of NGO's role in post-tsunami reconstruction in Aceh, Indonesia". The selection of the research topic was intended to further explore the effectiveness of PTR programs and projects during RR

[167]. Sotirios Sarantakos, *Social Research* (London: Palgrave Macmillan), 119–141.
[168]. Ibid., 119–141.

and ERR phase on the socio-economic climate of the ACs in Aceh after the 2004 Tsunami. The data collected from this empirical study will be embedded with the data analyse from interview transcription of the beneficiaries. The table 2.2 were meant to explain the mix method design of this research. The combination of both quantitative findings and qualitative interpretation used to explain how the beneficiaries' participation would affect the overall CB.

Sampling was done using the snowball technique, based on the referrals of key informants in the major regencies in Aceh, BA and WA (including Aceh Besar, Aceh Jaya, Pidie Jaya, Lumno, Calang and Meulaboh). Participants were cautiously selected with the assistance of key informants, who were also co-researchers in the TDMRC Unsyiah at Syiah Kuala University (BA). The methods applied were in-depth interviews and focus group discussion (FGD) with ACs, NGOs and government agency representatives.

As the research takes off, this sampling technique works like a chain referral. The research team will observe the initial respondent and ask assistance from the subject to help identify people with similar experience, knowledge and interest in assisting ACs in Aceh.

2.8.1 Sampling Background

Sampling was done from two perspectives of PTR in this empirical research. First, there were eight NGOs in Jakarta: MC, Oxfam, CRS, 118 Ambulance Service, PLAN International, Caritas Indonesia and Islamic Relief. Their experience and perspectives on their assistance in the aftermath of the tsunami and the RR process were useful to analyse the contribution of NGOs in PTR. In addition to NGOs in Jakarta, there were local NGOs: International Red Cross (BA division) (PMI), Islamic Relief BA, Islamic Relief Meulaboh, *Rumpun Bambu BA*, *YPK BA* and *Panglima Laot Aceh* (PLA). These local NGOs shared their stories and experiences of PTR processes.

Researchers also interviewed members of local government agencies, such as Agencies for Disaster Mitigation or Badan Penanggulan Bencana Daerah (BPBD), *Pemadam* (fire brigade) Badan Perencanaan Pembangunan Daerah (BAPPEDA) and the head of the Forestry Department. This ensured representation of government agency perspectives in the research. Information, knowledge and experiences from

local and international NGOs' operations during PTR were analysed using Sphere handbook guidelines for common principles and universal minimum standards in Humanitarian Charter and Minimum Standards in Humanitarian Response.[169]

The second perspective came from approximately 60 tsunami survivors, representing the beneficiaries of tsunami aid. There were 30 local people from BA and another 30 from the WA regency.

The research intends to examine the role of NGOs in PTR based on beneficiaries perspective, which means the selection of regions with a high number of NGOs is necessary to avoid the bias of beneficiaries' views based on a few NGOs. The research was conducted after several years of RR phase, which explain the selection of the respondents. In order to avoid bias, the research first conducted interviews with NGOs in Jakarta and later in Aceh. This was followed with interviews with the beneficiaries in both region Banda Aceh and West Aceh. In addition to this the research also selected respondents from the government agencies in the region to acquire an alternative opinion on the whole PTR process using interview and FDG method.

Respondents were selected based on whether they had direct involvement in the process of receiving, working or dispersing tsunami aid. Interviewees included the heads of villages, district officers, local staff, local university researchers and government consultants that had been employed by international agencies during the RR period. The study divides interviewees into three main categories: the beneficiaries from ACs who were the final recipients of aid; INGOs, NGO staff and consultants that practiced the implementation of programs; and the officers and employees of government agencies directly involved in PTR.[170]

NGOs' perspectives were crucial to this research because they are responsible for conducting NA and determining whether local people and knowledge should be included in project planning. Second, people were selected from ACs that were the

[169]. SPHERE is a comprehensive guide for humanitarian NGOs that offers assistance during disasters and emergencies. This manual provides guidance for various stakeholders who respond to emergencies in Indonesia.
[170]. Most of these interviewees were beneficiaries of PTR assistance between late 2004 and late 2009.

targeted beneficiaries and recipients of tsunami aid. Both perspectives are mutually crucial for program and project planning.

In addition to these two perspectives, other perspectives that can be classified as neutral were found in the empirical data. Some neutral views came from social and academic researchers in Aceh. These views explain how insufficient NA in the ERR and RR phases has an impact on outcomes of the programs in the developmental phase. Another important source of information was the FGD sessions that included researchers at TDMRC Unsyiah, disaster management PG students, local NGOs, locally based INGOs staff, international consultants and various staff from disaster-related government agencies.[171] The respondents in this empirical study are coded based on their origin. For example, BA1 means respondent number 1 in BA. The same applies to respondent in WA, coded as WA1.

However, the research team faced a few challenges in conducting the field research. Issues such as language differences were among the main constraints in interviewing respondents residing in the rural villages in Aceh. Here the role of research assistance was important. Research assistants in this field work functioned mainly as key informants to search for the right respondent and as translators if the researcher found difficulty in comprehending the respondent's answers. These are honorarium paid research assistants from postgraduate studies in TDMRC Unsyiah Syiah Kuala University, BA. The author conducted all the interviews, with the aid of the research assistants from TDMRC Unsyiah.

2.8.2 Data Collection Process

The methodology of this study is based on significant analysis and critical assessment of two phases in PTR; Emergency Relief and Recovery (ERR) and Reconstruction and Rehabilitation (RR).

The research heavily depends on analysis of interview transcription, recording and government office documents. This research used in-depth interview, FGD, and

[171]. Discussions focused on NGO–state collaboration during PTR and its effect on programs and projects. Participants included the direct coordinator, planner, director and consultant who worked with various NGOs and INGOs during PTR. Their perspective was critical in supporting findings from the other two perspectives: the NGOs and beneficiaries.

analysis of documents in a single case study to focus on the issues and challenges that inhibited the participation of the AC in the projects and programs in sectors such as Health, Permanent Housing reconstruction, Socio-economic Programs, Land Rights, and Tsunami Mitigation. This was supported by a simple quantitative survey focused on the participation of AC in these sectors and how it had impeded their livelihood and socio-economic climate, which eventually reflected on sustainability and CB as elucidated in analytical framework in Chapter 2 (Figure 2.1).

The study adopted a qualitative research methodology, which adapted a mixed method approach. The data collection adapted snowballing techniques. The data collection was conducted in two different regions, which was affected by the tsunami. The BA and WA regions were selected for study because they had the highest number of tsunami victims compared to other tsunami-affected regions of Indonesia. There were also high numbers of tsunami aid recipients during the PTR phases in these two regions. This in turn attracted larger numbers of aid agencies, such as NGOs and other international agencies to provide assistance following the tsunami.

The research intends to examine the role of NGOs in PTR based on beneficiaries perspective, which means the selection of regions with a high number of NGOs is necessary to avoid the bias of beneficiaries' views based on a few NGOs. The research was conducted after several years of RR phase, which explain the selection of the respondents. In order to avoid bias, the research first conducted interviews with NGOs in Jakarta and later in Aceh. This was followed with interviews with the beneficiaries in both region Banda Aceh and West Aceh.

The data collection was conducted using snowballing techniques. The researcher located respondents using a snowballing technique for a number of reasons. First, the research ethics committee (HREC: 12436)[172] emphasised it was important to engage sensitively with tsunami victims so as not to increase or exaccerbate the trauma they had already experienced during the interview. The snowballing technique allows the respondent to come forward to take part in the research willingly when approached by the research team. The snowballing technique is also applied when the potential

[172]. Please refer to Appendicies 2–3.

subject is hard to locate.[173] In Aceh, the researcher sought the agreement of the respondent through key informant before including the beneficiaries as respondents in the study.

Second, this sampling technique works like a chain referral. The research team will observe the initial respondent and ask assistance from the subject to help identify other people with similar experience, knowledge and interest in assisting ACs in Aceh.

The number of respondents selected for this study is 60. The thesis adopted 'exponential non-discriminate snowball sampling;'[174]which does not limit the number of respondents. This sampling technique needs 'little planning and fewer workforces'[175] compared to other sampling techniques. As the author resided in Sydney, Australia, while preparing to conduct fieldwork in Aceh, this technique allowed the researcher to reach populations through key informants that are difficult to sample due to the distance and time constraints.

2.8.2.1 Literature Review Design

The literature review of this research started by explaining the link between disaster, hazard and the vulnerability of disaster-prone regions and how this linked to the community in Aceh. The review continued, examining the main phases of PTR and the development process in Aceh, in particular, setting out the framework for reconstruction,'Building Back Better'

The literature review regarding PTR in Aceh exposed two missing gaps in the body of knowledge: the beneficiaries' perspectives on the role of NGOs on PTR in Aceh, and the time frame covered by the existing literature. The review also examined existing literature on projects and programs in sectors such as Health, Permanent Housing reconstruction, Socio-economic Programs, Land Rights, and Tsunami Mitigation.

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[173]. Ilker Etikan, Rukayya Alkassim and Sulaiman Abubakar, 'Comparison of Snowball Sampling and Sequential Sampling Technique', *Biometrics & Biostatistic International Journal,* 3, no. 1 (2016).
[174]. Ibid.
[175]. Ibid.

2.8.2.2 In-depth Interview

The researcher with the presents of honorarium research assistance held the interview from TDMRC, UnSyiah Kuala University. The research recorded all the interview session using a smart pen, which allowed for the discrete and accurate recording of the interviewees' responses. The categories of respondents, which represent the range of stakeholder in the PTR, are illustrated in the following figures below.

2.8.2.3 Comparison between Respondent Categories in BA and WA (Calang and Meulaboh)

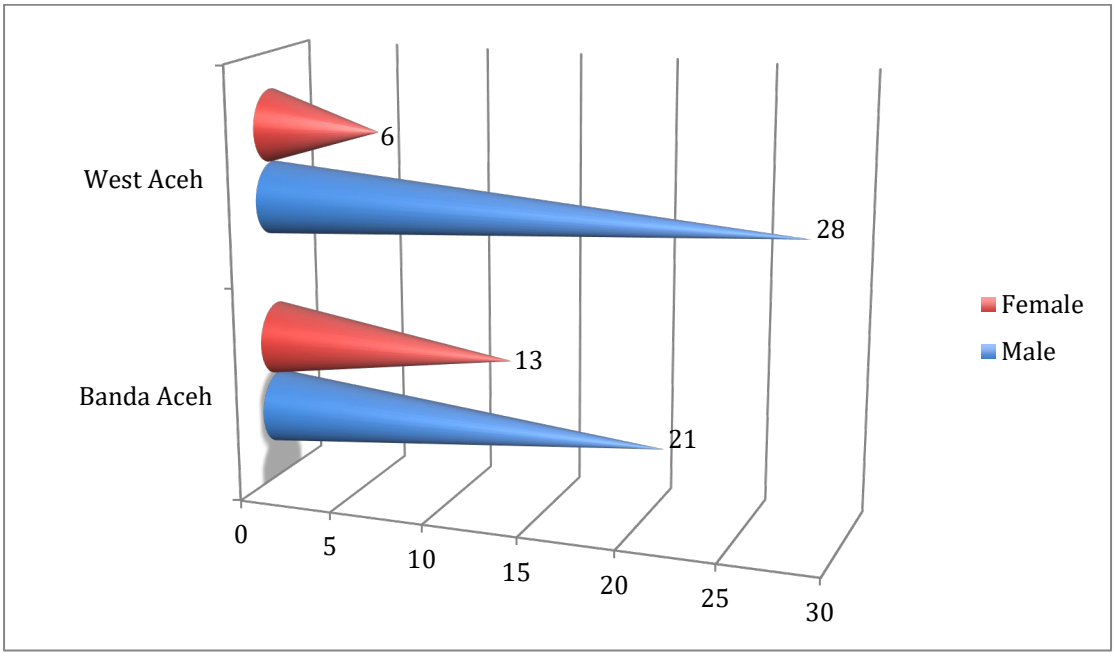

Figure 2.5: The Gender of Participants Interviewed in BA and WA

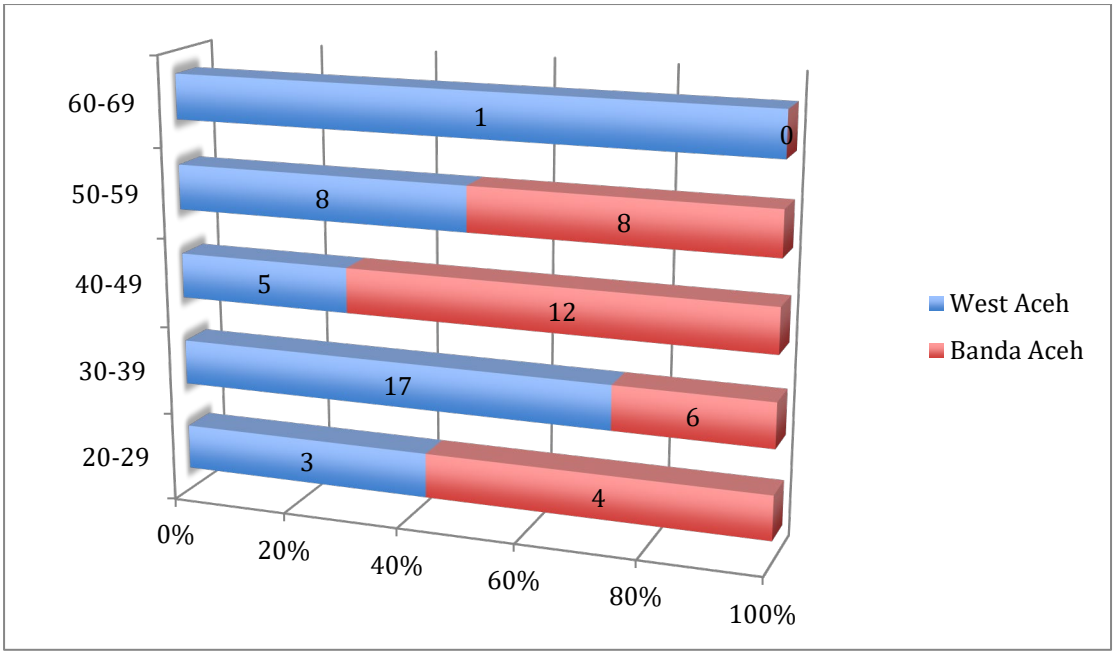

Figure 2.6: The Age Range of Participants Interviewed in BA and WA

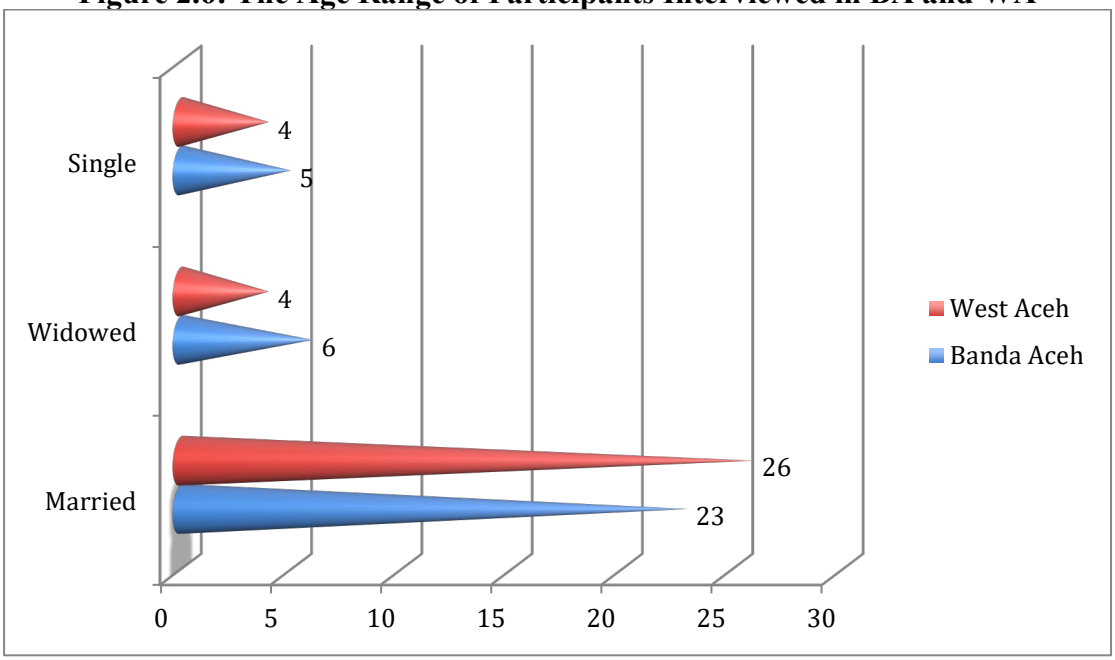

Figure 2.7: The Marital Status of Participants Interviewed in BA and WA

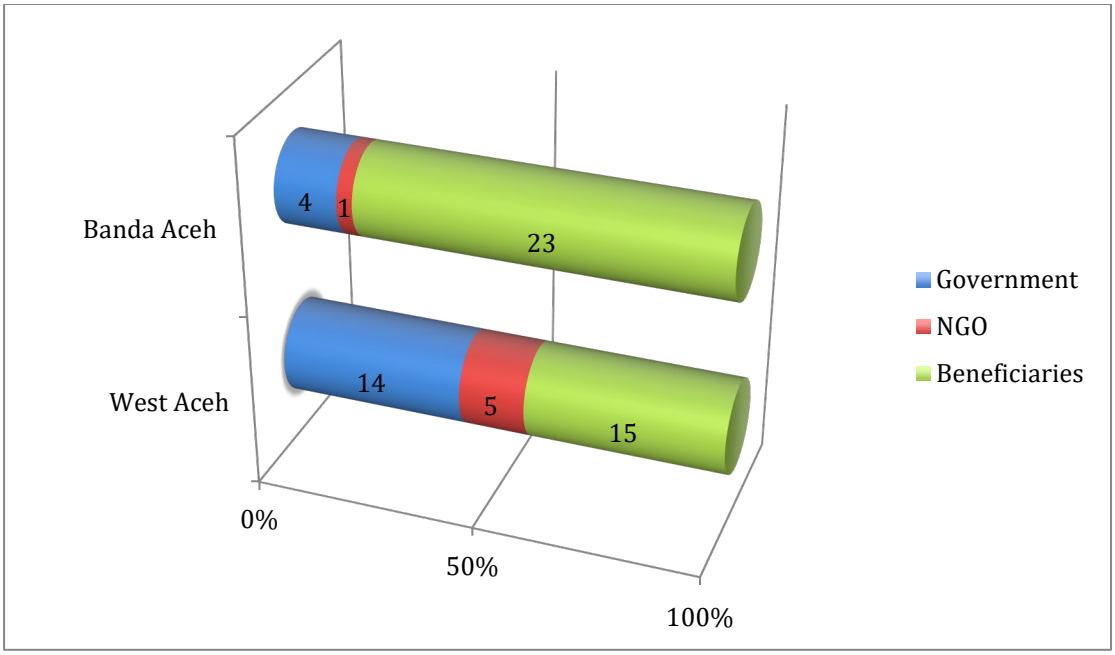

Figure 2.8: The Background of Participants Interviewed in BA and WA

Based on the comparative data in Figures 2.5–2.8, it is evident that male respondents outnumbered female respondents by almost half in both regions. WA had the smallest percentage of women participants. The gender compositions were a direct result of the traditional responsibilities of females and males in local Acehnese households. Most Acehnese families depend on either the fisheries sector, such as producing fish-based food products, or agriculture as their main source of income. This socio-economic factor is the pulling factor that led communities to build so close to unprotected coastlines.

On the morning of Boxing Day in 2004, most women, children and elders were at home. Women contribute equally to household incomes either from home-based industries in the fisheries sector or working on agricultural land. The loss of a higher percentage of women, elders and children was related to this cultural trend. Conversely, most men were fishing at sea and survived the tsunami, which explains the higher number of female casualties than male casualties in Aceh. For example, in the district of Baitussalam, according to a village elder[176], almost 90 per cent of men in the village remarried after the tsunami due to losing their wives and children.

[176]. *Desa Kajhu, Dusun Lamseunong Baru Jaya Kecamatan Baitussalam*, interview by research team, Banda Aceh, 8 December 2012, BA16, transcript.

However, this does not indicate the marriage percentage in Aceh before or after the tsunami (see Figure 2.7). Respondents in both regions said a high number of widowed men had remarried by the time of the study. It is important to note that at the time of research, the Indonesian government was conducting a nationwide campaign to reduce marriage at a young age (to reduce socio-economic problems). This campaign carried the slogan '*tunda nikah dini*', which means, 'postpone early age marriage'. [177] This campaign encouraged younger generations to establish themselves economically and settle down once they have a stable life ahead of them. Findings demonstrated that most widowed female respondents did not remarry and that no male respondent was found to be a single parent or widowed in both regions after the tsunami. Most female respondents focused more on raising their children.

Interviewees' backgrounds show that 50 to 80 per cent of respondents were from local communities (villages). The rest of the respondents were local government staff and some former and existing local NGO employees and consultants who were equally affected by the tsunami in Aceh.[178]

2.8.2.4 Focus Group Discussion

The FGD at TDMRC on the second data collection trip helped researchers extract more information on collaboration and coordination among primary stakeholders during PTR. The FGD also Attendees were carefully selected during the first trip to Aceh to ensure their relevant contribution to the course. This session was attended by various stakeholders including consultants, NGOs, local NGOs, disaster mitigation agencies, and representatives from TDMRC, BPBD, BAPPEDA and *Pemadam* at the province level. Discussions focused mainly on organisational responsibilities and coordination during PTR.[179]

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[177]. Data are extracted from analysis of empirical finding of this research conducted between November 2012 and June 2013 in Aceh.

[178]. The mixed background of respondents brings diversity and multiple perspectives to the research into NGOs' operation and coordination with local agencies in the ERR phase. For example, most local agencies' staff were part of ACs. As beneficiaries, they were directly involved in tsunami aid programs and projects.

[179]. Findings from this study explain the coordination challenges facing international and local government disaster agencies. Some NGOs share difficulties in coordinating primary stakeholders during PTR, which can affect beneficiaries. The FGD connected the challenges encountered by major players during and after the RR phase. This information is useful for other areas of RR.

2.9 Data Collection Process

No	Research Question	Data Requirement	Source	Acquisition Method
1	How did the participation of local beneficiaries in PTR programs and projects in Aceh designed and implemented by NGOs affect capacity building?	• Interview with NGOs and beneficiaries of PTR • Reference to existing literature on participation and CB	-MC, -Oxfam, -CRS, -118 Ambulance -Service, -PLAN International, -Caritas Indonesia and -Islamic Relief. International Red Cross (BA division) (PMI), -Islamic Relief BA, Islamic Relief Meulaboh, -*Rumpun Bambu BA*, -*YPK BA* and PLA. -30 beneficiaries in BA -30 beneficiaries in WA	-Literature study -Internet search -NGOs interview -Beneficiaries interview
2	To what extent had local communities' engagements in post-tsunami reconstruction reduced vulnerability in the post-developmental phase.	-Interview with NGOs and beneficiaries of PTR -Focus Group Discussion -Field Observation	-MC, -Oxfam, -CRS, -118 Ambulance -Service, -PLAN International, -Caritas Indonesia and -Islamic Relief. -International Red Cross (BA division) (PMI), -Islamic Relief BA, Islamic Relief Meulaboh, -*Rumpun Bambu BA*, -*YPK BA* and -PLA. -30 beneficiaries in BA -30 beneficiaries in WA	-Literature study -Internet search -NGOs interview -Beneficiaries interview
3	To what extent did the local communities consider the work of NGOs had reduced their levels of vulnerability in mid- to long-term reconstruction and development? (How does as a disaster management framework could help the integration of local knowledge and perspectives, local input from need analysis (first form of participation), good coordination practice, tsunami funding management would produce good participation of the effected communities and better capacity	-Interview with beneficiaries of PTR -Focus Group Discussion -Field observation	-MC, -Oxfam, -CRS, -118 Ambulance -Service, -PLAN International, -Caritas Indonesia and -Islamic Relief. -International Red Cross (BA division) (PMI), -Islamic Relief BA, Islamic Relief Meulaboh, -*Rumpun Bambu BA*, -*YPK BA* and -PLA. -30 beneficiaries in BA -30 beneficiaries in WA	

	building based on LRRD framework through out all PTR phases?)			

Table 2.3: Data Collection in Relation to Research Questions

2.9.1 Methods of Data Analysis

The thesis adopted triangulation of data as the method to analyse the data collected from fieldwork. According to Denzin and Patton there are four types of triangulation. There is method triangulation, triangulation of sources, analyst triangulation and theory/perspective triangulation. The method of triangulation of data allows the researcher to compare and analyse the beneficiaries' different point of view in each sector in PTR in Aceh.

Two types of triangulation in particular, triangulation of sources and method triangulation, are likely to help strengthen the validity of the case study evaluation in Aceh. Mixed method research suggested that 'a method of triangulation can provide increased confidence in the findings from a study that has combined quantitative and qualitative methods'[180]. Denzin further explained that,

> 'The use of multiple methods, or triangulation, reflects an attempt to secure an in-depth understanding of the phenomenon in question. Objective reality can never be captured. We only know a thing through its representations. Triangulation is not a tool or a strategy of validation but an alternative to validation (Flick, 2007). The combination of multiple methodological practices, empirical materials, perspectives, and observers in a single study is best understood as a strategy that adds rigor, breadth complexity, richness, and depth to any inquiry (see Flick, 2002, 2007)' [181]

The research adopted multiple methodological practices, combining quantitative data, empirical material from Aceh, perspectives of beneficiaries in Aceh, and field observation in Aceh as a single case study.

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[180]. Robert K. Yin, 'Validity and Generalization in Future Case Study Evaluations', *Evaluation,* 19, no. 3 (2013), 323–324.
[181]. Norman Denzin, 'Triangulation 2.0', *Journal of Mixed Methods Research*, 6, no. 2 (2012): 82.

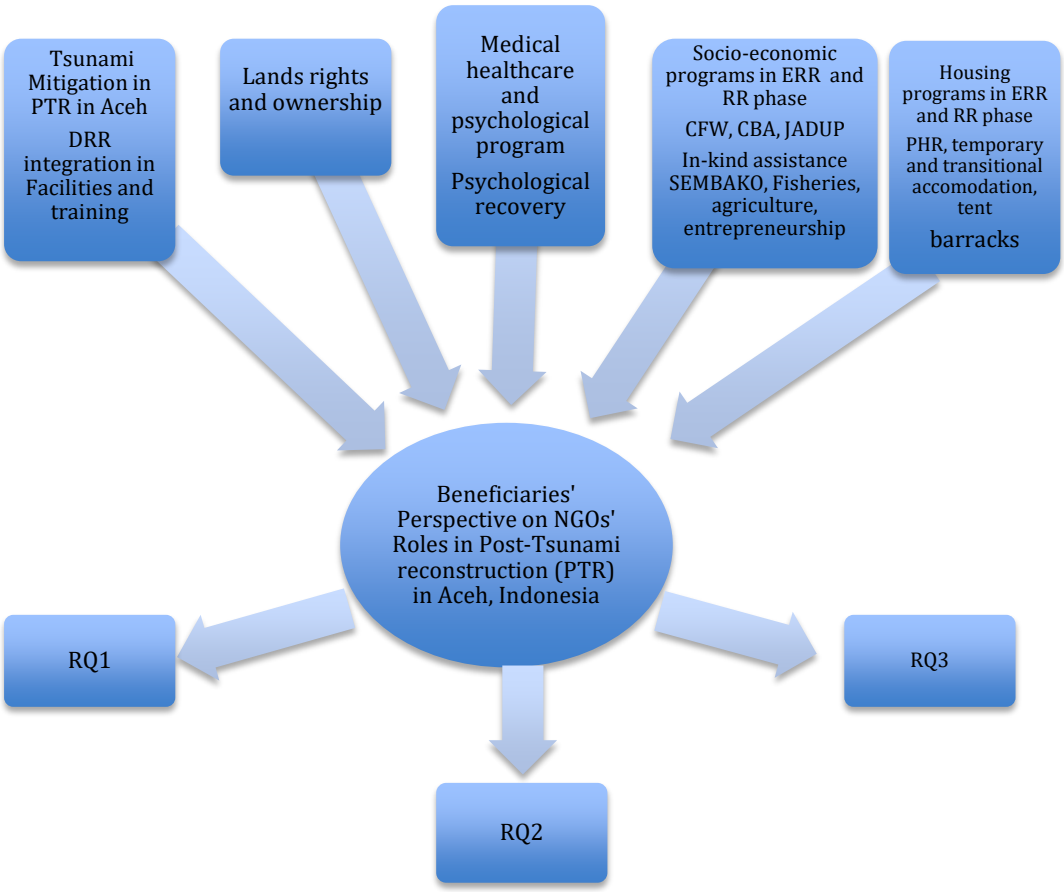

Figure 2.9: Process of Analysis of Data

2.9.2 Data analysis process and result

The data collection in Aceh's most affected regions, BA and WA, consisted of conversations recorded on smart pen, smart pen transcription, notes and documents. As noted earlier the methods of data collection in this research were mainly qualitative, including in-depth interviews, a FGD, field observation and document review. The data from interviews was transcribed using a smart pen application to transcribe the data. Then it was manually analysed based on the content. The content was divided based on main sectors in both phases in PTR namely; socio-economic program, Housing Reconstruction program, medical and psychological healthcare (Chapter 3), land rights and ownership (Chapter 3 and Chapter 7), and TM (Chapter 8). The data from FGD was combined with the material from interviews to strengthen and cross check to avoid bias between the two sampling sources. The analysis from both samples based on the sectors mentioned above are combined with FGD data to develop conclusions and recommendations. Conclusions were tested and supported by

the data generated through field observation. However the result are not to be considered representative of all the beneficiaries in Aceh and Nias, Indonesia.

The study makes a positive contribution to developmental studies in post-disaster management, particularly to understanding the importance of including implicit participation and CB in each of the post-disaster reconstruction phases. This study also provides a deeper understanding of the importance of the coordination of information, data, local knowledge between main stakeholders such as the beneficiaries, government organisations, and international agencies especially NGOs in PTR.

Chapter 3:
PHASE I: Post-Tsunami ERR in Aceh Indonesia

This chapter will explore the four key themes in ERR by analysing and comparing beneficiaries' perspectives in the two most affected cities in Aceh: BA and WA. This thesis includes two chapters dedicated to case study analysis. First. Chapter 4 discusses the analysis and findings related to participation and CB in the ERR phase. Second chapter 9 discusses the findings and includes the analysis from Chapter 5-8 and combine the outcome of both analysis chapter (Chapter 4 and Chapter 9). The framework for analysis is based on Figure 2.1, which illustrates how participation relates to CB as part of achieving LRRD in different phases of PTR. This analytical framework to investigate the link between participation and CB (see Chapter 2) will underpin the discussions in Chapters 4–9.

It is important that programs planned and designed by NGOs determine the level of AC participation in PTR in Aceh. In addition to encouraging community participation, NGOs must integrate people's ideas, local ISK and capacity in the design, planning and implementation stages. Integration of local knowledge encourages greater community participation and ensures improved outcomes for beneficiaries.[182]

PTR in Aceh comprised three stages. First, ERR lasted for approximately three months. The second phase was RR, which began as early as three months after the tsunami and lasted approximately for four years (2005–2009). Third, the developmental phase encompassed the outcomes of the first two phases of TM and preparedness programs, which occur concurrently during the development phase. The third phase did not follow a specified time frame. [183]

This chapter will examine two main elements of ERR: the organisation and actors involved and the programs that contributed to CB in ACs. The discussion will examine four areas identified in the research as having a significant impact on participation and local CB.

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[182]. Data are extracted from analysis of empirical findings of this research conducted between November 2012 and June 2013 in Aceh.
[183]. Data are extracted from analysis of empirical findings of this research conducted between November 2012 and June 2013 in Aceh.

The programs in ERR include:

1) socio-economic and livelihood programs (CFW)
2) medical, health care and psychological programs
3) temporary shelters and settlement
4) land rights and ownership.

This chapter also discusses the role of various stakeholders, such as international agencies, NGOs, donors and organisations, in ERR. The expectations, needs, objectives and responsibilities of all stakeholders are unique. These differences affect the design, planning and implementation of ERR programs. A critical element of this research was how these expectations and responsibilities influenced AC participation and CB in the developmental phase. While ERR programs were largely focused on helping ACs overcome trauma and gain confidence to restart their lives, they also prepared them to engage positively in RR.

3.1 Programs and Projects in the ERR Phase

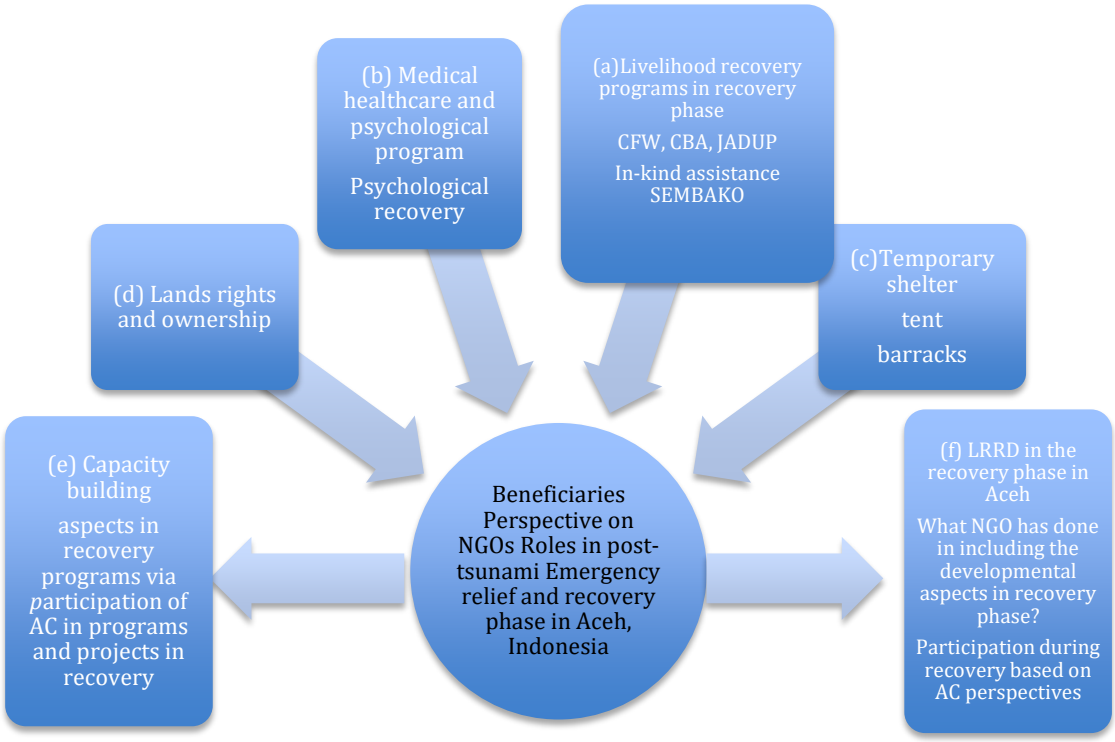

Figure 3.1: ERR and the Relationship between Non-Governmental Organisations' Integration of Links between Relief and Rehabilitation Development through Participation and Capacity Building.

The diagram above shows the programs and projects that were planned and implemented by NGOs in the ERR phase in Aceh. The discussion in the following sections will include the four main sectors (labelled a, b, c, and d in the diagram) such as livelihood recovery programs including Cash for Work, cash-based assistance (CBA), *Jatah Hidup* and SEMBAKO. The medical health care and psychological program look at both the psychological and physical recovery of the ACs. The temporary shelter section discusses the impact of accommodation such as tents and barracks on the socio-economic climate of the ACs during ERR. The land rights and ownership section will highlight issues such delays in acquiring land certificate limiting the capacity of the community to obtain mortgages or use property as security for business borrowing or other socio-economic activities.

The (e) and (f) sections will discuss how the role of NGOs was significant during this phase in assisting the ACs to recover from the traumatic experience. The AC was just beginning to start their live all over again after the 2004 Tsunami taken almost everything they owned, the role of NGO was very significant from the perspective of the beneficiaries that involved in the programs and projects in ERR phase.

3.1.1 Cash for Work

CFW, or food for work, programs are essential elements of ERR that affected ACs' long-term economic development in PTR Aceh. CFW is a form of (CBA) through which participants are paid daily.[184] Most INGOs use CFW as the first form of conventional livelihood programs. This encourages communities to work together to clean tsunami debris in their home, public spaces and agricultural lands.

3.1.2 Cash for Work and Non-Governmental Organisations: What is in it for Stakeholders?

From NGOs' perspectives, this form of assistance aimed to aid trauma recovery and improve morale in local communities.[185] INGOs such as Oxfam, MC, Care International, Plan International and others implemented this program in humanitarian operations as a simple short-term measure. Originally, CFW programs were

[184]. Another common form of CBA during the ERR phase was CFW programs.
[185]. Mercy Corp, interview by research team, Jakarta Indonesia, 14 November 2012, transcript.

considered the default option to assist ACs in ERR. The program, which usually runs for three months to one year, aimed to alleviate the immediate traumatic experience and provide tsunami survivors with daily-based income support. For example, in Aceh, CFW included activities such as clearing tsunami debris in their *gampong*, paddy fields and agricultural land. However, once this task was complete, the community had to search for permanent income opportunities to ensure its ongoing livelihood.

Obviously, programs that offered economic incentives attracted ACs' interests. However, the findings, that are discussed in detail in the following sections, indicate that incentive-based programs can trigger several problems, including dependency syndrome. Reliance on participation incentives had dire effects on CB for socio-economic independence.

However, manipulation of participation through incentives did not contribute to improvement in long-term CB. While ACs in both regions rated the program as a satisfactory short-term income measure, almost 30–40 per cent of respondents in both regions declared the programs damaging for long-term economic sustainability. This is because ACs went on to experience financial difficulties in the RR and PTR phases. Table 3.1 illustrates ACs' levels of satisfaction with CFW.

Table 3.1: Response on The Benefits of Cash for Work[186]

Cash for work programs	Response	BA (%)	WA (%)
Program assisted after tsunami	Y	77	83
	N	23	17
Satisfaction of CFW	Good	62	67
	Average	19	6
	Bad	19	28
Long-term continuity of CFW	Y	85	78
	N	15	22
CFW improved socio-economic level	Y	88	89
	N	12	11
General benefit of CFW	Y	92	83

[186]. Data are extracted from analysis of empirical findings of this research conducted between November 2012 and June 2013 in Aceh.

	N	8	17

Based on local capability assessment, one INGO stated that Aceh had the human and funding resources to undertake CFW locally. CFW required many workers and supervisors. Most participants claimed they were paid simply for being present at their workplace. The pay rate was based on the pre-tsunami *upah* minimum regional (UMR) rate. According to one respondent in WA, the rate was IRP100,000 per person.[187] The standard rate for UMR in most regions in Aceh before the tsunami ranged from IRP75,000 to IRP100,000.[188] Almost all NGOs paid between IRP25,000 and IRP75,000 for daily participation.[189] Some NGOs paid IRP25,000 on average and included a meal allowance, while others offered higher pay, excluding the meal allowance. Based on LRRD literature, NGOs were under pressure to spend the funds because donors' goals were to support programs with visible results.[190]

NGOs offered generous pay in CFW projects because it was a simple and effective way to disperse funds within the three to six-month period specified by donors. Thus, CFW was the best program to encourage greater community participation, spend donor funding quickly and meet the 'achievable' program status required by donors. The CFW program aimed to clean up tsunami debris and alleviate community suffering. NGOs fulfilled their upward accountability because the CFW met donors' criteria.

3.1.3 Time Frame of Cash for Work

Another main issue with CFW programs was the time frame. There were several factors that determined the length of CFW initiatives. First, the scale of destruction and amount of debris in different areas varied. For example, the BA coastline was full of debris, as far as 10 km inland. There was also a massive tanker ship stranded in a village about nine to 10 km inland. It was believed that four houses were trapped

[187]. Beneficiary, interview by research team, West Aceh, 12 May 2013, interview CM6, transcript.
[188]. Ibid.
[189]. In some regions, NGOs included lunch or meals in program packages—also known as food for work—to encourage community participation.
[190]. E. Burke, 'Evaluation of the Linkage of Relief, Rehabilitation and Development (LRRD) Regarding Interventions in Connection with the Tsunami Disaster in December 2004: Indonesian Case Study', *Tsunami Evaluation Coalition* (2006): 103. Projects are driven by pressure to spend and be visible. Expertise is considered by many a 'validation' exercise. The sharing of existing regional capacity between the countries studied was limited mostly to professional workshops.

underneath the ship; they were never recovered. In WA, the level destruction was similar, but reached less than five km inland. The large debris required more time and heavier machinery to remove wreckage and clear tsunami dirt. In addition to large debris, most tsunami-affected areas were covered in 2 m high layers of dirt.[191]

Second, the number of tsunami survivors also determined program length. In most coastal communities, almost 50–90 per cent of the population was lost or displaced; some were never found.[192] Higher casualties and larger numbers of displaced community members meant a smaller available workforce for clean-up efforts. This caused programs to extend from a few months to six months, or even one year, which delayed economic recovery. Generally, most CFW beneficiaries' testimonies indicate that programs ran for three months to two years.[193]

Beneficiaries require continuous programs to help build long-term capacity and independence, including sustainable socio-economic enterprises such as agricultural and aquaculture activities. In both regions, most ACs claimed CFW programs were necessary (see Table 3.2). A majority, 78–85 per cent, confirmed that CFW was valuable, while only 15–22 per cent saw little value in continuing the programs. In terms of program duration, 28–35 per cent of ACs wanted the program to last for three months, while another 22–35 per cent preferred a stretch of over two years.

Determining which initiatives to implement depends on NGOs' efforts and creativity. CFW was an example of a conventional program applied in most PDRs at the global level. NGOs should have considered the pre-existing economic, social and historical condition of post-conflict Aceh.

Table 3.2: Satisfaction Levels for Program Length[194]

Region (percentage)	BA (%)	WA (%)
How long do you think is	Y 85	Y 78

[191]. T. Ahmad Dadek, '*Buku* Tsunami' (unpublished manuscript, 2013), 19.
[192]. Ambulance 118, interview by research team, Jakarta Indonesia, 12 November 2012, transcript.
[193]. BA12 worked as a CFW facilitator and was paid IDR30,000 daily for two years. BA10 worked in a CFW program for two years (in a palm plantation) for IDR30,000. BA9 worked in a Mercy Corp CFW program targeted at women in the community. Cleaning the village took six months. BA11 earned IDR25,000 daily from CARE and worked in Peukan Bada for six months. BA5 was involved in CFW for one year.
[194]. Data are extracted from analysis of empirical findings of this research conducted between November 2012 and June 2013 in Aceh.

necessary to have these programs?	N 15	N 22
3 months	35	28
6 months	4	22
12 months	8	6
18 months	4	11
Longer than 24 months	35	22
Do you need these programs to continue?	14	11
How would you rate your satisfaction level of the program?	Good 62% Average 19% Bad 19%	Good 67% Average 6% Bad 28%

Local researchers and NGOs argued that the time frame and wage rate of CFW programs had affected the Acehnese communities. The main issue raised was whether the program ran beyond the time required to clear tsunami debris. This 'overstretching' created a 'dependency syndrome' among ACs, which had an impact on local CB during ERR phase.

Different agencies had unique experiences in determining the time frames for CFW programs. One INGO in Aceh believed the ideal duration was between one and six months. Further, the INGO stated that these programs are simple to manage and offer attractive incentives to local communities (in some cases, almost triple the regular pre-tsunami wages in Aceh). ACs generally accept any form of income-generating activities due to their extensive losses and see CFW as a means of overcoming trauma and restarting their lives. Conversely, INGOs view CFW programs as a simple and efficient way to fulfil donor expectations.

Another INGO suggested a CFW time frame of only one to two months based on their experiences in Aceh. According to this INGO, the CFW was inflicting long-term damage on community independence and capacity. NGOs faced difficulties in encouraging ACs to participate voluntarily in socio-economic programs in RR once incentives were withdrawn. This had a devastating effect on participation in RR

programs.[195] The rewards offered during ERR had caused ACs to become more focused on financial rewards than on participating for ISK development.

Alternatively, Oxfam explained that CFW need to be prolonged in Aceh to support long-term socio-economic sustainability. Oxfam integrated NA input by building ISK transfer into CFW programs to help ACs sustain a self-reliant economy. The capacity of survivors and the varying impact of the tsunami in different regions affected the levels of destruction in each AC. Therefore, determining the duration of CFW programs depends NA outcomes and the scale of destruction. It would not be appropriate to limit CFW to three to six months based on assumptions that it will cause negative effects on social structures. The NA works as a benchmark that helps NGOs decide a suitable time frame based on the scale of destruction and pre-existing socio-economic conditions.[196]

A heavy focus on humanitarian need rather than recovery requirements also caused overstretching of short-term programs. The focus on recovery requires greater input from locals and integration into CFW planning. CFW is a good example of how program agendas manipulated by external actors only benefit ACs in the short term. However, in the long run, they can have damaging implications on social structures and development.

As donor requirements were the primary targets of most NGOs, there was steady competition between NGOs in terms of pay rates. There was no mechanism to control and manage standardised pay rates for CFW in Aceh:

> The reality in Aceh is that a lot of INGOs paid IRP100,000 per day per person. Their concern was to spend the money, and they were not concerned about the orientation, or the quality, but only quantity. So the INGOs kept offering higher pay and competed with one another to pay greater than the other.[197]

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[195]. Mercy Corp, interview by research team, Jakarta Indonesia, 14 November 2012, transcript.
[196]. Oxfam, interview by research team, Jakarta Indonesia, 16 November 2012, transcript. The Oxfam CFW program in Aceh was overstretched due to the large region that the CFW had to service. The duration of a CFW program depends on the level of destruction in each zone. Some may take one to three months with a possibility of extension. Operations were not conducted simultaneously due to varying capacities and levels of destruction across zones.
[197]. Plan International, interview by research team, Jakarta Indonesia, 7 June 2013, transcript.

This NGO's experience in CFW suggests that coordinating a standard rate for CFW would have improved outcomes for ACs. The aim to spend quickly triggered competition instead of fostering coordination and collaboration, which would have benefited ACs:

> The CFW was for one year and only needed to clean the debris. It is better if the NGOs collaborate and consider the regular practice in the village when implementing such programs. The fund used for prolonging the CFW can be utilised to help the community in other aspects such as food and daily household need.[198]

A local NGO that specialised in assisting fisheries communities suggested that several elements led to competition among INGOs. First, without proper coordination between NGOs, tsunami funds were not effectively directed and used to build and repair facilities. Second, there was a lack of proper sharing of data in the ERR phase, which resulted in the overlapping of aid among NGOs. The absence of a reliable database forced NGOs to spend time and energy exchanging information among themselves.

3.1.4 Benefits of Cash for Work

Most ACs in both regions believe CFW programs benefited them in the short term and helped them recover from the immediate effects of the disaster. The program was viewed as the main source of income for the working class and students who felt lost and psychologically demotivated due to the death of parents and family members. One beneficiary stated that CFW offered him an attractive way to support his education and his recently widowed mother. The program's appealing pay and his determination to help support his mother prompted the high school student to quit school and work as a security guard at TDMRC.[199]

Participants responded differently to the ways in which CFW programs benefited them, depending on individual priorities. In general, most ACs felt that CFW was a

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[198]. SEKDA *Kec. Krueng Raya, Mesjid Raya Aceh Besar*, interview by research team, Banda Aceh, 13 December 2012, BA25, transcript.

[199]. Beneficiary, interview by research team, Banda Aceh, 9, 12 December 2012, interview BA18, transcript. This information is extracted from an interview with BA18 (student/security guard at TDMRC) from *Ulee Lee Meuraxa Banda Aceh*, who earnt IDR35,000 in a one-year CFW lunch program. He skipped school at times to support his education.

helpful source of income and had motivated them psychologically to return to their villages to rebuild their lives during the ERR phase. Table 5.1 indicates that 88–89 per cent of respondents in both regions believe CFW helped improve their socio-economic conditions. ACs in WA showed greater support for this program than did BA respondents.

3.1.5 Disadvantages of Cash for Work

Conversely, a few ACs stated that the design of CFW schemes created long-term socio-economic disadvantages. The most common complaint related to the conventional and overly flexible structure of programs. The influx of aid and funding[200] caused most NGOs to spend quickly and spontaneously without revising the effects on CB. For example, the district office secretary in BA claimed that the overstretching of CFW was an indirect result of the influx of aid during the RR phase:

> Overstretching CFW was not good for the community. There were too many aids available to rehabilitate and reconstruct Aceh. So the INGOs found that there is no need to encourage public participation in their programs. Mercy Corp in Paya Kareng facilitated the CFW. It also depends on the size of the village and areas that need to be cleared.[201]

This explains how significant amounts of aid can affect participation and CB. The primary concern raised among government and local leaders was that the program inflicted severe dependency syndrome. This had a dire impact on the community's cultural practice and social relations after the end of RR. Consequently, most local community leaders complained that gathering local communities for the regular practice of *gotong royong* was virtually impossible without the offer of incentives:

> CFW was dangerous for long-term development, which makes the community too dependent and lack the initiative to develop them. CFW was not good in general. It changes the community-based *gotong royong* that is a

[200]. Tony Lloyd-Jones, *Mind the Gap! Post-Disaster Reconstruction and the Transition from Humanitarian Relief* (London: University of Westminster, 2006), 13.
[201]. Beneficiary interview by research team, Banda Aceh, 13 December 2012, BA26 (local female leadership award winner), transcript.

> standard practice before the tsunami.[202]CFW [paid] IRP40,000 [daily] for one year … over the long term, CFW makes them dependent.[203]

Many socio-economic programs in ERR failed to establish sustainable socio-economic climates due to a lack of proper monitoring and observation. Most ACs claimed that the unnecessary overstretching of programs had delayed the implementation of sustainable long-term programs with decent CB and ISK development.

Ironically, the CFW had dire effects on CB despite the high level of AC participation in the program. Although the participation level was high due to the incentives, the long-time frames did not encourage the development of local CB values. NGOs, as development agencies, had no choice but to create any program that would help them spend funds to ensure the continuous flow of aid from donors. Equally, the ACs required activities to keep them occupied and motivate them to return to their gampong. NGOs viewed CFW as ideal models to fulfil their upward and downward accountabilities. Without any element of ISK transfer, CFW programs have minimal value as CB tools in ERR.

3.1.6 Cash for Work and Beneficiaries: Livelihood Sustainability or Dependency Syndrome?

Most respondents found CFW programs helped them overcome their traumatic loss and experience. Based on the CFW satisfaction survey, 62–67 per cent of respondents in both regions believe the program positively affected their livelihoods. Generating side income in CFW helped ACs to rebuild their lives slowly. The program indirectly encouraged them to return home and the daily pay offered a form of financial support.[204]

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[202]. Beneficiary/local district office secretary, interview by research team, Banda Aceh, 3 December 2012, BA6, transcript.
[203]. Beneficiary/Former village secretary, interview by research team Banda Aceh 2 December 2012, BA4, transcript.
[204]. As highlighted earlier, the duration of programs was highly dependent on the level of damage inflicted on individual areas. ACs became reliant on these programs and expected high pay for short-term work. The lack of independence integration in early livelihood programs affected genuine participation in the program.

While the high level of community participation offered some advantages, it did not contribute to CB for longer-term developmental and sustainability. NGOs manipulated the short-term remuneration benefits to hasten ACs' recuperation process. The program failed to assess the deeper impacts of the CFW on the lives and social structure of the community. The integration of NA input into CFW programs would have improved ACs' socio-economic conditions.

For example, a local fishery NGO, PLA in BA, explained how the lack of a central database affected the continuity of programs in the ERR and RR phases. In the beginning, the PLA conducted CFW as a recovery program to assist ACs. Without a local governance function in place, the PLA provided data (gathered from NA) to the AC and local government to identify the economic needs of the fisheries communities. Using NA to inform decisions, CFW programs were the best approach in this case to reduce the trauma and stress of removing debris from villages. This is an example of how the local NGO used CFW for a short period, focusing mainly on restoring long-term livelihood-based socio-economic activities.[205]

The lack of a central database was the main coordination problem in coordination, limiting NGOs' ability to track aid and assistance. The time pressures caused by the lack of centralised data compromised the ability of NGOs to acquire quality fishing equipment. By the time the NGOs they had identified the needs they did not know the requirements of the locals and bought cheaper equipment. These two issues delayed ACs' adaptations to livelihood programs. The impact of overflowing funds had affected the quality of fishing equipment, leading to poor productivity and difficulties sustaining socio-economic recovery. The LRRD report also identified the overlapping of assistance due to several agencies conducting NA in the same location. The LRRD report explains the consequences of the lack of a database for tsunami aid delivery:

> There were several reports of the same needs being assessed by several actors in one location, leading to the delivery of related supplies and services to the same community. In some cases, another player who managed to assess and respond earlier has already provided supplies delivered to a village by one actor. Examples here include the need for boats, houses and

[205]. Former NGO/consultant, interview by research team, Banda Aceh, 15 December 2012, transcript. Recovery programs continued throughout the RR process to help fisheries workers who lost their equipment. Machines and boats were replaced with new ones. However, a lack of infrastructure meant outcomes of this program were not recorded.

> schools. Although this issue may be linked to assessment, it is more of a coordination problem.[206]

The PLA explained why the time frame for CFW should consider the scale of land to be cleared and the integration of sustainable socio-economic activities, such as plantation and aquaculture enterprises. This would ensure the CFW was advantageous to NGOs, donors and ACs. The need to extend CFW programs depends on NGOs' creativity to prolong incentive-based programs for long-term benefits. One INGO shared its experience conducting CFW to reconstruct temporary roads and transportation facilities. CFW can be used to help overcome workforce shortages during ERR and nurture ISK development in ACs.

> Road and transportation were led by US aid. Small roads were built during the CFW program. The smaller road was important to connect them to public facilities, markets and other services. With these routes, other NGOs can utilise them to reach the AC. The CRS used the CFW to open small roads and eventually benefited other NGOs as well as the AC.[207]

This was an example of an INGO using CFW as a modus operandi for clearing paths crucial to building tents and roads. This has greater CB potential because ACs learn labour skills that are of long-term benefit. This coexists with the main aims of the recovery phase: alleviating trauma and stress, which is vital for survival.[208]

For INGOs bound by visa restrictions, CFW was a fast and practical option. As discussed in Section 4.8, normally, to acquire a pass for social visits, the Indonesian Immigration Department grants a one-month visitor visa.[209] In the beginning, the government granted one-month visas for the NA process. However, some INGOs tried to run programs within the limited period of one to three months.

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[206]. Claude de Ville de Goyet and Lezlie C. Morinière, *The Role of Needs Assessment in the Tsunami Response* (London: Tsunami Evaluation Coalition, 2006), 29.
[207]. ECB Catholic Relief Service, interview by research team, Jakarta Indonesia, 13 November 2012, transcript.
[208]. *Panglima Laot Aceh* (local NGO), interview by research team, Banda Aceh, 15 December 2012, transcript. The CFW program was an initiative to entice locals back to their villages to rebuild their lives. NGOs provided the community with household needs and SEMBAKO for approximately two years. This support helped the AC remain focused on returning to socio-economic sustainability. Most of the worst-affected ACs in Aceh Besar, Aceh Jaya, BA and WAwere involved in the CFW.
[209]. Mardhatillah, 'The Role and Experiences of *Badan Rehabilitasi dan Rekonstruksi*', 186–209.

Thus, INGOs had little option but to start with short-term community programs. At the same, the Indonesian government was working on a disaster management blueprint to coordinate international agencies in Aceh. INGOs had already started programs in Aceh. The management plan was completed after six months and BRR was placed in charge of coordination. ACs were eager to receive assistance as soon as possible.[210] This is an excellent example how donors preferred methods to channel funds and visa limitations affected the type of programs conducted.

During lengthy state bureaucratic procedures, donors established NA as an essential requirement for INGOs to fulfil before submitting budget proposals. NGOs relied on donors for funding, so donor demands heavily influenced the plan, design, implementation and duration of PTR programs. To guarantee the continuity of funding, NGOs were accountable to donors. However, it is regrettable that CFW programs began before NA input could be integrated into programs.

From the CB perspective, a social science researcher and INGOs shared their concerns on CFW's dangerous implications for ACs in the long term. One INGO in WA stated that 'some societies, especially the pre-war society, usually need more time to recover.'[211] However, the social science researcher stated the ACs should not be treated as passive objects during the recuperation period. Rather, they should be active subjects to encourage self-reliance and development skills.

CFW creates a dependency among ACs.[212] Few agencies emphasised the effects that prolonged short-term incentive programs can have on long-term development and CB in Aceh. The local researcher and NGOs argued that CFW programs should not extend beyond three months. NGOs in WA coordinated and agreed not to overstretch CFW programs unnecessarily, even if excess funds remained at the end of ERR. Most interviewees agreed that CFW created a mental dependency and weakened existing social structures. Rural communities found it difficult to return to more self-sufficient

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[210]. Former NGO/consultant, interview by research team, Banda Aceh, 15 December 2012, transcript.
[211]. ECB Catholic Relief Service, interview by research team, Jakarta Indonesia, 13 November 2012, transcript.
[212]. Researcher and senior lecturer from the Faculty of Agriculture at Syiah Kuala University, interview by research team, Banda Aceh, 16 December 2012, transcript.

income sources at the end of CFW programs. The lack of industrial development in Aceh exacerbated the socio-economic problems further.[213]

The urban communities did not find it difficult to settle into the new economic environment because there were new industries that offered fresh employment opportunities. For example, in rural areas, such as Gampong Ujong Pancu (BA) and Gampong Genting Sigli (Pidie region, WA), it is evident that ACs could not depend on economic cycles to sustain their livelihood. Most rural communities survived by doing small farming or odd jobs that did not guarantee long-term financial security.

A Gampong Ujong Pancu beneficiary explained that receiving financial support without obtaining ISK or training is not beneficial for socio-economic development. This beneficiary argued that CFW should continue for more than two years since there was no source of income or business activity to rely on after the tsunami. The recuperation process for ACs in rural areas is much slower. Therefore, the dependency on short-term programs such as CFW is much higher.[214]

As part of CB, a local NGO suggested that CFW only created more problems in Acehnese society and did not prepare ACs during ERR phase to continue with more sustainable socio-economic program for better long-term development. The concept of paying villagers daily to remove debris had somehow disrupted existing social networks among local communities. Before the tsunami, *gotong royong* was a common culture in Aceh in which the community would gather and work together. This culture disappeared from the community since the introduction of CFW by NGOs. The Acehnese society today is profit-oriented and people expect incentives to participate in any communal activities. [215] Some ACs suggested that NGOs should consult the *Geuchik* and local elders before introducing programs to learn the healthy

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[213]. Despite the complex and long-term needs of tsunami- and conflict-affected communities, CFW programs should not be relied on as an income source if sustainable economic independence is to succeed.

[214]. Both cities differed in their predictions on how long CFW programs would be required by ACs. In BA, 35 per cent of respondents suggested a duration of over two years, while only 22 per cent of WA participants cited this as an ideal duration. More than 35 per cent of respondents in BA and 28 per cent of respondents in WA claimed that CFW programs were beneficial for three months or less. CFW programs can create dependency syndromes because skills, knowledge and training are not transferred. Capacity-building elements build independence and community ownership rather than simply wage-earning opportunities.

[215]. Researcher and senior lecturer from the Faculty of Agriculture at Syiah Kuala University, interview by research team, Banda Aceh, 16 December 2012, transcript.

practices of the village.[216] The local secretariat office in Aceh Jaya suggested similar ideas to avoid social disruption.

3.2 Medical, Health Care and Psychological Programs

Medical, health care and psychological programs were rated as the highest priority sector among the ACs in PTR Aceh, especially in the ERR phase. NGOs providing medical aid described the situation after the tsunami. They focused solely on servicing the needs of ACs. Due to issues such as logistics and shortages of medical equipment and staff, healthcare services only reached ACs in Aceh from the third day onwards. The remote location of the island and damage to transport infrastructure delayed the arrival of foreign aid. ACs had to rely on surrounding unaffected villages for initial aid.

The discussion of the empirical findings is divided into two parts. Evidently, medical, health care and psychological support continuously improved in ERR and RR in PTR. However, in terms of mental health support, a high percentage of adults in ACs preferred religious discussion and classes to overcome their trauma and fears, and to accept their post-tsunami realities. Children, who were most affected and traumatised after the tsunami, needed a continuous psychological program.

However, despite the challenges facing medical services, the findings indicate that this sector had outstanding success in encouraging local participation and transferring ISK. This increased CB in the medical and health care system. This discussion will focus on several success stories that support the idea that participation enhances CB. Points of discussion include facilities, increasing the quality of the service, means of ISK transfer, coordination and collaboration, logistics, external actors (donors' influence and expatriates' effects on local human resource capacity), beneficiaries' perspectives and the link between participation and CB in the medical and health care system in Aceh.

[216]. PMI, International Red Cross, interview by research team, Banda Aceh, 29 November 2012, transcript.

3.2.1 Facilities

Facilities, such as air purifiers and mobile clinics, were essential for ACs after the tsunami. NGOs focused on allocating water purifiers to provide fresh drinking water. They also used chlorine (known as '*air rahmat')* to provide clean drinking water for ACs.[217] A mobile clinic is a facility that can accommodate up to six people and is suitable for minor surgeries. These clinics were used to attend to the sick and wounded at refugee camps. Through collaboration with *Ikatan Doktor Indonesia*, doctors and nurses provided ACs with free medicine (*pengobatan gratis*).[218]

Logistics is crucial to delivering medical aid. Mobile clinics and ambulances were brought into Aceh by *Trans Sumatera* through Medan in North Sumatra. Coordination with local government agencies, such as *Ikatan Doctor Indonesia*, allowed local NGOs to provide medical care and cover the shortages of doctors and nurses. *Ikatan Doctor Indonesia* attended to the sick and wounded during the ERR phase. Due to limitations in mobilisation, the NGO stationed the mobile clinic at a fixed point and ACs had to travel from their refugee settlement to secure medical attention. This affected the survival rate of the injured and wounded. The vast number of patients seeking medical help compared to the limited number of medical staff caused a great deal of stress for medical teams.

Coordination among primary stakeholders, such as the local municipal office, was essential to enable smooth operations. For example, Ambulance 118 coordinated with the municipal head office in Aceh to ensure continuous exchange of information on the facilities and services offered, including medication, staff and water purifiers. With effective coordination and collaboration, the municipal office supported this NGO's operation for two years.

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[217]. Mercy Corp, interview by research team, 14 November 2012, Jakarta, Indonesia, transcript. 'Water purifier for local distribution. This was one of the kits they give during emergency response. "*Air Rahmat"* (blessed water) refers to chlorine to clean the water for domestic usage. They can boil the water after the drops of *air rahmat.*'

[218]. Ambulance 118 (local NGO), interview by research team, Jakarta Indonesia, 12 November 2012, transcript.

3.2.2 Quality of Service

NGOs asserted that the poor quality of facilities and services posed a risk to the long-term health of ACs. For instance, most medications were close to their expiry date, which made them unsafe for consumption. Due to concern over the status of the food items distributed by the government, the INGO had to sort food items and medication, which delayed service delivery. Non-halal food and expired medications were discarded:

> The medicine and food brought by the government during the tsunami made the NGO unable to monitor the food and medicine. [They] needed to discard any food close to expiry date, no halal label, no way to pick and choose according to the need of the local people. Medicine was close to expiry date and not useful for the people. Some foods were not suitable and not halal for the Acehnese … NGOs destroyed the non-halal food before they reach the people. There should be some choices to choose from and select known as *Badan Pemeriksaan Halal*. Not only food but also medication.[219]

Another local healthcare NGO shared the same concerns:

> PMI Aceh still has leftovers of daily essential kits from the assistance they received after the tsunami. This is stored in the storeroom and utilised during any emergency in Banda Aceh such as floods, etc. However, medication supply received during the tsunami was close to expiry and had to be disposed of after the emergency response period. The medical supply was from the government and most of the time; the government hires their contacts to provide this close to expiry medicine.[220]

The subcontractors appointed by the Indonesian government were responsible for checking the expiry date of medicine.

3.2.3 Information, Skills and Knowledge Transfer

The findings from Aceh indicate that some NGOs focused on transferring medical ISK to build local capacity in the ERR phase. Towards the end of ERR, these NGOs started capacity-based programs, such as 'training of the trainer' (ToT), which is an example of health service training for local communities:

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[219]. Mercy Corp, interview by research team, Jakarta Indonesia, 14 November 2012, transcript.
[220]. PMI, International Red Cross (local NGO), interview by research team, Banda Aceh, 29 November 2012, transcript.

> Later there was health and maternal [services] for women and children … at community level and government level. International Medical Corps [provided] training at the state level to ensure proper and good management and in village, the Cadres volunteers training at community level.[221]

The following section explores the ToT program implemented by various NGOs in Aceh. ToT successfully transferred ISK through local participation.

3.2.3.1 Training of The Trainer

ToT was a training program aimed at building local capacity through participation. Under this program, the CRS conducted training program for health and maternal care workers, under the supervision of the Health District Office (HDO). The CRS Cadres program (the village health service) was a community outreach activity to provide health care to local children and to women with maternal health problems. This program contributed indirectly to an increase in birth rates, immunisation, health status, vitamins, extra food and nutrition.

In WA, the CRS delivered medical assistance and training, such as ToT to increase the quality of medical services in the region. Programs such as CRS Cadres contributed to improving the quality of medical services for infants, pregnant women and other groups. As part of the program, CRS aimed to educate the community on the importance of early childhood and maternal health through the local government program known as *Managemen Terpadu Balita Sakit* (MTBS). MTBS is known as ToT by IMCI.[222]

CRS programs in health care and maternity had two primary aims. First, to increase local health system capabilities. Second, to increase access and support for vulnerable groups such as children and mothers. This program helped targeted groups to raise their voices and advocate their health needs to local governments.

Before the tsunami, Aceh was in conflict, under military rule. The region was consistently repressed and did not voice its demands.[223] In this environment, the

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[221]. ECB Catholic Relief Service, interview by research team, Jakarta Indonesia, 13 November 2012, transcript.
[222]. Children aged under five years.
[223]. ECB Catholic Relief Service, interview by research team, Jakarta Indonesia, 13 November 2012, transcript.

primary objectives of CB were to benefit ACs in terms of health care and establish a proper channel for the locals to communicate their needs to government. Programs such as Cadres helped ACs acquire valuable medical ISK and advocacy skills.[224] These trainees can be deployed to other provinces in Indonesia in times of need. Today, these trainers can be found in HDO in Meulaboh, WA. There are elements of coordination between foreign and local agencies. Local health agencies are responsible for the provision of medical care. Collaboration allows foreign agencies to transfer valuable ISK to local groups to prepare them for future disasters.

The PMI or (International Red Cross [IRC]) of BA was a locally based NGO that managed to increase its capacity through cooperation with the International Committee of the Red Cross (ICRC). ICRC in BA successes includes increasing the number of volunteers for disaster response and establishing more blood supplies in case of emergency. The average daily blood demand for 14 hospitals around Aceh was 120 bags per day. However, the blood bank could not accommodate this demand, supplying only 60–70 bags per day. Further, before the tsunami, there were no standing blood stocks in Aceh. During ERR, most locals had to rely on relatives for emergency blood supplies. This was crucial for rhesus negative blood because it takes one day to transport this blood group from Jakarta to Aceh. The shortage of blood was acute after the tsunami.

PMI's BA efforts were not in vain. Today, there are five blood banks to accommodate Aceh's blood demands. This was made possible through local participation and continuous support. For example, during Ramadan (fasting month) 2011, the PMI in BA managed to contribute 710 bags of blood within 22 days through its blood donation program. Close coordination between the PMI and local government subsidy programs allowed the group to recruit more than 800 volunteers who remain on call to donate blood during a disaster.[225]

According to this NGO, the best method to induce local participation was directly approaching the community. Through NA, the ICRC identified and addressed the factors that contributed to low blood supplies in Aceh. The excellent response and

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[224]. Children aged under five years.
[225]. PMI, International Red Cross (local NGO), interview by research team, Banda Aceh, 29 November 2012, transcript.

high number of participants from ACs indicate genuine community participation. Therefore, ICRC collaboration with local and provincial governments and subsidy programs increased blood supplies in Aceh. The subsidy also allowed administration charges of IRP250, 000 per person to be waived, creating a new free medical scheme in Aceh.

Despite facing many obstacles, such as limited government funding, PMI managed to encourage volunteer blood donors to join a standby list for emergencies. Further, they formed a committee at the village level to act as an emergency first-response team. The disaster response team was known as Community Based Action Team (CBAT).

A CBAT team member interviewed for this research was part of the village response team, which was active during the floods season. During this emergency, CBAT helped local villagers in Meulaboh, WA. The team members mainly guided ACs to safe areas and prevent further damage to livestock and paddy plantations. Meanwhile, PMI in BA also emphasised the importance of integrating CBAT into existing tsunami and disaster mitigation plans.

ToT programs, CBAT and management of blood donation volunteers were supposed to be handed to the responsible government agency, BPBD. BPBD was to integrate these assets into disaster mitigation programs at provincial and national levels. However, a lack of human capital to monitor the transfer and integration process into DRR planning at a national level resulted in the discontinuation of the programs. Today, the programs are not functional during disasters. The CBAT volunteer from the committee had been trained to serve in an emergency; the discontinuation of the programs meant these resources were wasted.

These programs should have been integrated with *Pusat Kesihatan Masyarakat* (PUSKESMAS) to function as an emergency first-response team with the collaboration of the local BPBD office.[226] This would increase human capital in the medical and health care systems and contribute to the integration of different medical care teams for emergencies.

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[226]. PMI, International Red Cross (local NGO), interview by research team, Banda Aceh, 29 November 2012, transcript.

The ICRC in BA explained that CB programs like CBAT were supposed to be transferred to BPBD as part of the developmental program. The ICRC in BA faced challenges in transferring voluntary programs such as CBAT to the local BPBD office. The transition process was hampered by a lack of action from the local government.

The ICRC in BA was another example of an effective international partnership between local and international NGOs. The internal CB increased their capability to improve operations and programs within the community. Today, the ICRC in BA has better access to blood banks and more volunteers to donate immediate blood supplies.

The high level of local participation among village leaders and younger generations facilitated greater ISK transfer to local disaster response teams. Programs such as Cadres, You are On Your Own (YoYo) and CBAT, which sought to increase the local community level of preparedness during any disaster need to be integrated into the state-level disaster management planning. All ToT programs, from CRS's Cadres, ICRC's CBAT and Ambulance 118's YoYo, encouraged local participation. However, there were ongoing delays and difficulties incorporating these programs into BPBD's disaster mitigation planning at district and provincial levels.[227]

The primary focus in the first three months after a disaster is supporting the recovery of ACs. However, the consistent integration of programs that encourage continued participation in the RR phase is crucial to building local capacity in the development phase. Medical and health care programs may be useful during disasters, but without continuous participation, ACs will not benefit in the long term.

3.2.4 Mental and Psychological Recovery and Wellbeing

Mental and psychological recovery required a longer phase to ensure the welfare of all ACs. In Aceh, the mental and psychological self-recovery and recuperation of ACs was remarkable. In fact, NGOs agree that the psychological recovery of ACs in Aceh

[227]. The ToT program allows the formation of volunteer-based disaster response teams at village and district level. CBAT (community-based action team) was formed as part of the DRR integration in the long-term development plans.

was the best compared to other tsunami-affected societies (based on their observations and analysis in other regions).[228]

Evidently, most respondents claimed that their recovery relied heavily on religious discussion, seminars and self-healing. The majority of ACs argued that INGO programs for mental rehabilitation had little effect on their recovery because of cultural and religious differences. ACs largely relied on religion-based motivation programs held by the local mosque and other community centres. Local people have their own support mechanisms, such as religious gatherings and prayers, for overcoming psychological trauma. The Acehnese are more concerned with their experience in spiritual self-healing than foreign-based counselling or mental support.[229]

Likewise, by attending these religious seminars, ACs slowly began to refocus on economic and social development programs. The tsunami was a reminder of *Akhirah* (the judgment day). Most beneficiaries claimed their own recovery programs were the most efficient method of self-assurance. However, ACs also said that indirect support from NGOs (via programs such as CFW) allowed them to rebuild their mental and psychological strength.

According to PMI, the duration of the psychological support program in BA lasted for only a year (2005–2006). The program encouraged ACs to avoid panicking during earthquakes and helped reduce trauma so they could continue their fishing activities. The American Red Cross focused on dual target-oriented programs. Programs for women, for instance, were more focused on small–medium business activities, such as baking and sewing. The community-based programs were designed to mitigate loss and traumatic experience and aid psychological recovery.[230]

In Aceh, most INGOs did not venture into psychological programs due to a lack of expertise, culture understanding and local knowledge of AC traditions. International

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[228]. ECB Catholic Relief Service, interview by research team, Jakarta Indonesia, 13 November 2012, transcript.
[229]. ECB Catholic Relief Service, interview by research team, Jakarta Indonesia, 13 November 2012, transcript.
[230]. PMI, International Red Cross, interview by research team, Banda Aceh, 29 November 2012, transcript.

actors need to learn and adapt to local cultures, traditions, beliefs and knowledge before they plan and implement psychology-based programs.[231]

The duration of psychological recuperation programs ranges from two to four years. CRS explained the reasons the agency did not design any psychological programs with a longer time frame. They identified that INGOs need an active local NGO partnership in the mental and psychological health sector to continuously monitor the progress of beneficiaries. In addition, ACs in Aceh labelled those participating in such programs as 'weak'[232], and preferred religious practice to overcome their trauma. This strong attachment to religion led may INGOs to not consider psychological recovery programs. [233]

The best way to support locals' psychological recovery was to provide them with extensive economic and social development programs as suggested by the local fisheries NGO in BA. A local NGOs claimed that socio-economic development programs helped ACs rebuild and regain their physical and mental strength.

The communities were spiritually healthy and ready to rebuild with the aid and support of NGOs. In the wake of the world's largest disaster, the Acehnese communities were at their best in overcoming trauma and stress compared to other ACs in the 2004 Indian Ocean tsunami. The communities were brave enough to reoccupy their former land and even rebuilt houses on the same properties. Their religious beliefs were the main sources of their strength. There are several factors that ACs said encouraged them to return to their villages: sustainable economic climate, quality of life and other social factors.[234]

Children were among the most affected by the tsunami. Many were displaced or orphaned. Children's programs were based on the 'learn and play method' to

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[231]. ECB Catholic Relief Service, interview by research team, Jakarta Indonesia 13 November 2012, transcript.
[232]. ECB Catholic Relief Service, interview by research team, Jakarta Indonesia 13 November 2012, transcript.
[233]. ECB Catholic Relief Service, interview by research team, Jakarta Indonesia 13 November 2012, transcript.
[234]. *Panglima Laot Aceh* (local NGO), interview by research team, Banda Aceh, 15 December 2012, transcript.

encourage them and help alleviate their trauma. Children especially find it difficult to return to a normal life, and some took years to recover.

As children were the most affected group in communities psychologically, some INGOs designed and planned programs especially for children. The primary structure of the program included psychological elements to help them recover with the support of the ACs. The integration of psychological elements in the children's education program was crucial in managing their psychological trauma and supporting their mental wellbeing.

The children's program was designed to focus on psychological recovery by providing education, scholarship and facilities to assist them in every possible way. For example, a teacher at a religious-based school (*Pesantren* in BA) claimed funding aid from UNICEF to construct new buildings to accommodate hundreds of orphans from the tsunami. The provincial government provided scholarships to support these unfortunate children to further their studies.[235]

The discussion on psychological recovery programs emphasises the importance of integrating psychological and social development programs to ensure the mental health of future generations. The reconstruction of public facilities, such as local medical group PUSKESMAS, provided a place for ACs to access mental health support. This health centre offered programs such as Cadres to help rehabilitate, and ToT programs to train future generations for disaster situations. Their traumatic experience should be directed towards encouraging them to learn and be ready for risky situations. Children's mental wellbeing is an important and crucial part of CB for future disaster preparedness to absorb better DRR.

3.2.5 Beneficiaries

Beneficiaries in Aceh rated medical, health care and psychological programs as second priorities after PHR. Most beneficiaries claimed there was continuous government assistance for general health care. At least five per cent argued that PUSKESMAS was helpful in advocating for public health services. In WA, only one per cent claimed that *Posyahdu* provided medical and health care assistance for

[235]. Beneficiaries, interview by research team, Banda Aceh, 8 December 2012, BAI5, transcript.

infants and toddlers. In the immediate ERR phase, AMCROSS and G2G medical teams assisted ACs in both regions. There was also evidence of government and local NGO collaboration in the medical sector. Only a few respondents claimed to have not received any form of medical assistance.

Some interviewees complained about receiving delayed medical attention, which was sometimes too late, causing constant long-term health problems:

> His foot has been amputated three times. The first amputation was done by the local army medical team and the second amputation was by the Army medical of Malaysia and finally, by the Australian Red Cross medical team. The delay of amputation has caused further infection in his bone and that required more amputation to be done. He only managed to be amputated the first time five days after tsunami. He received continuous medical attention from PUSKESMAS during his stays in the barrack for almost one year due to losing his feet. The Malaysian army has helped him replace the stitches from his amputation.[236]

In similar cases, the delays forced ACs to rely on relatives and seek better medical help from outside Aceh to avoid further complications. For example, one interviewee claimed that her nephew was brought by a relative to Medan to seek medical assistance for his lung and ear infection in *Ramali Medan*.[237] However, not all ACs were as fortunate as this respondent; most had to rely on medical help supplied by local or international medical teams in Aceh. ACs in BA received delayed medical care compared to WA, because most government and private hospitals in BA were affected by the tsunami. The hospitals and medical centre in BA were damaged due to the proximity of to the coastal areas. LRRD reports indicate that 38 per cent of ACs in Aceh rated government and NGOs' efforts to provide medical care highly.[238]

3.2.6 Analysis: Capacity Building Programs in Medical Health Care

Medical health care is an important part of CB in social development. The findings show high casualties in coastal areas and almost zero survival in Aceh. This shows the

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[236]. Beneficiary, interview by research team, Banda Aceh, 7 December 2012, interview BA13, transcript.

[237]. Beneficiary, interview by research team, Banda Aceh, 11 December 2012, interview BA22, transcript.

[238]. Burke, 'Evaluation of the Linkage of Relief, Rehabilitation and Development', 83. Affected areas in BA were further inward. Water has destroyed areas as far as 10 km from the coastline, compared to WA, where the damaged areas were only 5 km from the shore. In Aceh, most ACs rated the government's medical response as average.

importance of CB in the healthcare sector, justifying the need to continue ToT and YoYo programs to train and transfer ISK in health care.

The needs of ACs were the priority of such programs, which were developed based on 'people planning'. People planning means AC participation and input are highly valued and integrated into the design of the program. This helps prepare coastal communities to better deal with disaster. The tsunami left the coastal area populations with zero survival rates. Ambulance 118 suggested that ACs need training to apply the principle of YoYo for 24–48 hours after a disaster. The ISK element in the YoYo program was crucial for CB in TM and DRR integration in ACs' daily lives. The program was designed to enhance the capabilities of communities to survive the first 24–48 hours of a disaster on their own. [239]

In addition to people-based program planning, collaboration with local government was essential for the successful transition of programs such as YoYo into the local development plan. NGOs faced integration problems with local disaster agencies. Their ability to create new programs was further limited by donor requirements. Ironically, the NGOs required to develop or create 'achievable' programs based on existing conventional frameworks would produce more tangible results if freed from donors' funding conditions. [240]

Initiatives like YoYo were part of the longer-term reconstruction, involving the exchange and delivery of emergency-management skills. Through CB programs, ISK can be transferred to local medical students and nurses so are better prepared to respond to emergencies independently. Ambulance 118 considered YoYo their long-term recovery contribution for local CB.[241]

In addition, Ambulance 118 programs aimed to prepare local communities with skills, logistics, resources and systems to prepare them to face the first 24–48 hours of a disaster. From a logistical point of view, most government assistance and aid can only reach affected areas within 48–72 hours after a disaster. The objectives of YoYo and

[239]. Ambulance 118 (local NGO), interview by research team, Jakarta Indonesia, 12 November 2012, transcript.
[240]. Ambulance 118 (local NGO), interview by research team, Jakarta Indonesia 12 November 2012, transcript.
[241]. Ambulance 118 (local NGO), interview by research team, Jakarta Indonesia 12 November 2012, transcript.

ToT were to deploy training skills and create a self-perpetuating system that allows trained staff to train others. CB programs ultimately aimed to reduce ACs' dependence on external aid and assistance. If programs such as YoYo and ToT are in place, this will increase DRR in ACs. The inclusion of ACs as part of the reconstruction process is essential, as shown by Ambulance 118 in their creation of YoYo.[242]

However, donors' funding is usually aimed primarily at immediate 'humanitarian assistance' after a disaster. CB programs to build independence in the community are not a focus. The donors' operational objective was to stay in Aceh for only three to six months and later 'abandon' the communities. Donors' criteria for ERR is an obstacle for INGOs because they are instructed only to assist and not to use funds creatively to meet the needs of ACs.

Conversely, in WA, INGOs such as CRS managed to run ToT and Cadres programs for child and maternal health care during ERR that successfully progressed into RR.[243] The HDO oversaw the training program in WA and tasked with ensuring the government health service was equipped with the skills to manage emergency situations. The CRS aimed to educate the community about child and maternal health through a local government program known as MTBS. Through this program, the community was given the knowledge and information to help them advocate for their needs.

CRS's investment in ToT was an effective method to transfer ISK. This free program trains the trainer to serve other provinces in Indonesia in times of disaster. Upon completion of the program, trainers are awarded with certificates of validation and recognition. As of August 2017, these trainers can be found in HDOs in Meulaboh, WA.[244]

The CRS Cadres program (village health post) is a community outreach program aimed at improving child and maternal health care. This program contributed

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[242]. Ibid.
[243]. ECB Catholic Relief Service, interview by research team, Jakarta Indonesia, 13 November 2012, transcript. The village health volunteer was trained in basic health services for children aged under five years and maternal women. The objective is to ensure that volunteer will train the community.
[244]. Children aged less than five years.

indirectly to an increase in birth rate, immunisations, health status, vitamins, extra food and nutrition. The HDO is a supervisory body whereas the CRS trains local health officials. The practice and content of the program will better prepare the community for future disasters.

3.3 Temporary Shelter and Settlement in the Recovery Phase

Under the humanitarian notion, shelter is divided into three different stages. Shelters provided by humanitarian agencies during emergencies are tents and tarpaulin.[245] During the recovery phase or transitional stage, humanitarian agencies or government build interim accommodation, such as barracks. The difference between the emergency stage and temporary or transitional stage is that material used for shelter construction, which is made of wood or bamboo/rattan, is not meant for permanent use.

3.3.1 Temporary Shelter: Tenda

The first form of temporary shelter provided for the accommodation of tsunami survivors was the tent, also known as *tenda*. It is a portable shelter made of cloth, supported by one or more poles and stretched tight by cords or loops attached to pegs driven into the ground. This provided temporary accommodation during the transition period before the transitional shelter was ready. The reconstruction of permanent houses started approximately four to six months after the RR phase. Thus, within the ERR phase, ACs were relocated to temporary shelters (such as *tenda*) from a few weeks to a few months. Later, they were transferred to barracks and transitional homes. The majority of ACs complained that life in barracks lacks facilities and privacy, which affected their quality of life.

3.3.2 Barracks or Barak: Six Months to Two Years

Barracks, or *barak* in the Acehnese dialect, refers to the long house-like temporary shelters built in tsunami-affected districts in Aceh. A small room separated by thin plywood walls characterises this design. Barracks are a large building or group of buildings similar to an extended house with separate plywood units. After the tsunami,

[245]. Heavy-duty waterproof cloth, originally of tarred canvas, that is used as a sheet or covering.

some barracks accommodated women and men separately, while others accommodated families. This accommodation has a shared kitchenette and an outdoor bathroom. Families relocated from *tendas* stayed in these barracks for between six months and two years, or until their permanent house was complete.

In the transition between barracks and the reconstruction of permanent housing, the ACs were provided with transitional accommodations. Transitional shelter units were temporary built-in shelters made mostly of wood and steel. They can be assembled without any major construction work. Empirical findings indicate recipients of Turkish and Saudi Arabian housing reconstruction stayed for six years in barracks or transitional homes while waiting for their houses to be rebuilt.

During the first empirical visit to Aceh in 2012, one barrack was still occupied local communities. The occupants of the *Barak Bakoi*, located not far from BA, were already receiving housing aid. There were many reasons these ACs were still living in barracks after the RR phase ended. One of the biggest problems faced by ACs was illegal hoarder refusing to evacuate the houses.

Illegal hoarders demand that ACs pay large sums of money (IRP4–7 million) as compensation. In such cases, ACs continue living in barracks until they have the funds to inhabit their new home. The findings indicate that occupants of barracks still face problems evacuating illegal hoarders. Further, some ACs in barracks could not transition to permanent housing due to certification delays:

> The illegal villager occupied the house before she gets to occupy her own house. This was due to the house built by the Saudi government. They were of high quality. Now working an odd job and also widowed after the tsunami. A lot of challenges compared to before the tsunami. She has to pay the people who occupy her house before the Saudi government gives her the key. She has to pay the illegal occupant IRP2 million for them to evacuate the house before she can stay in her lawfully owned house.[246]

> The same problem like other residents of Saudi Arabian houses. Illegal occupant.[247]

[246]. Beneficiary, interview by research team, BA, 5 December 2012, interview BA10, transcript.
[247]. Beneficiary, interview by research team, BA, 6 December 2012, interview BA11, transcript.

The hoarder issue had a significant effect on CB in ACs. For example, the illegal hoarders in *Lum Ujong* broke into homes. The Turkish and Saudi homes became targets due to their high quality. PHR projects led by the Saudi government are exceptionally high quality and have three bedrooms. The Saudi government allocated these houses to renters, single parents and migrants, which generated many concerns among *Lum Ujong* villagers. The local villagers demanded these so-called strangers pay money for access to the homes. The rightful owners were forced to pay these illegal hoarders. Owners of Saudi housing waited more than seven years and remained in the barracks until the matter was resolved.

3.3.3 Temporary Transitional Accommodation

In some districts, the INGOs provided ACs with temporary shelters or homes. These were ready-made houses, built of high-quality wood (six inches x six inches). Many respondents built these transitional shelters on their legally owned land because major construction work was not required. Some ACs chose to retain this temporary shelter and did not build their permanent house. Instead, they opted for the relocation program due to safety concerns. Others preferred to stay in this temporary shelter because of its proximity to their workplace and other socio-economic reasons. ACs' accommodation preferences depended on proximity to income source rather housing quality.

The shelter was provided by Caritas, France. The permanent housing by Caritas in *Blang Brandang*. She still occupies her shelter home, which is built on her original land at the coastal area and was affected by the tsunami in *Suak Indra Puri*. Due to relocation, the house is about 10 km from her office in BPBD, Meulaboh. The AC claims of no socio-economic consideration for their livelihood sustainability when the new relocation house was built for them. Safety consideration for their livelihood in the new relocation was neglected when the house was constructed in the jungle. On the other hand, a mining company operating near the coastal area are affecting their health in *Suak Indra Puri*.[248]

[248]. Beneficiary, interview by research team, WA, 17 May 2013, interview CM15, transcript.

The shelter was part of the NGOs temporary accommodation program to house the affected community while their PHR project was underway. Temporary accommodation also provided an option for those transitioning from barracks to their permanent home.

In some cases, PHR projects were delayed when illegal logging issues forced NGOs to opt for the brick as their primary construction material rather than timber. The logging issues delayed the construction of shelters built from forest materials. In acute cases, this accommodation was completed at the same time as the completion of PHR projects. Some ACs decided to rebuild temporary accommodation on land and others choose to accommodate their family in barracks while waiting for the delayed PHR to complete.

Some ACs leased or auctioned their temporary shelter when two accommodations were completed at the same time. Past studies claimed some ACs owned more than one shelter. These studies claimed a lack of coordination between NGOs in shelter and PHR projects, combined with illegal logging issues contributed to this 'overlapping' of services. In some cases, ACs had three types of accommodation at the same time: the temporary shelter, the PHR unit and the relocation PHR unit.

3.3.4 Impact of Delayed Transition from Tent to Transitional Accommodation on Affected Communities'' Livelihoods

The findings indicate that almost 60–85 per cent of respondents in both regions claimed shelter and accommodation to be the most beneficial element of PTR. However, the research also shows that ACs in Aceh were forced to live in tents up to three months after the tsunami. According to an INGO, logistical constraints and a lack of access to construction materials caused delays in some districts. This was because most agencies were unsure whether it was too early to provide ACs with transitional shelter, while most organisations were focused on providing other fundamental 'survival needs', such as food, clothing and WASH.

NGOs faced some challenges in transitioning ACs from temporary shelters to transitional accommodation. As mentioned earlier, they faced difficulties obtaining resources, and other logistical issues delayed the transitional process. These delays caused some ACs to receive both types of accommodation simultaneously. Further,

temporary shelters such as barracks can only accommodate ACs for between six months and two years. After this time, only renters, immigrants and owners with hoarder issues occupied the barracks. However, the empirical visit indicated a dependency on foreign aid in the barracks developed during the PTR phase. After two years, the NGOs discontinued sponsorship of food packages, known as *Sembilan Bahan Pokok* (SEMBAKO), and ACs had to support themselves.

The disaster affected the resources and logistics needed by NGOs to provide ACs with transitional settlement. A local NGO claimed they had to rely on Trans Borneo via Medan as the only viable transportation option for medical supplies. This was also the case for construction material for transitional settlement. Most humanitarian agencies faced difficulties in transporting materials from outside Aceh because the transportation of food and medicine was prioritised.

For example, *Terre Des Hommes* (TDH) focused on shelter, support and development of community livelihood, especially women's livelihood programs.[249] TDH planned to complete the transitional shelters within six months after the tsunami. However, due to logistics, lack of coordination and resources issues, this INGO was still providing ACs with transitional shelters after nine months. The findings indicate that most organisations' delays in providing transitional accommodation were due to the prioritisation of other immediate needs deemed necessary for survival. There were inconsistencies and a lack of coordination among NGOs in determining time frames for the different types of housing: emergency shelter, transitional shelter and PHR.[250]

Further, the findings indicate differences in completion time frames between temporary shelter accommodation and PHR in WA and BA due to several factors. For example, Oxfam records of their operations in WA indicate that transitional housing

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[249]. Oxfam Jakarta (formerly with *Terre Des Hommes*), interview by research team, Jakarta Indonesia 16 November 2012, transcript.

[250]. Former NGO/consultant, interview by research team, Banda Aceh, 15 December 2012, transcript. Housing reconstruction was supposed to follow the building of temporary shelter. However, in the case of Aceh, reconstruction started in February 2005, during the intended temporary shelter phase. CARITAS Germany completed its assessment in January and started planning for programs in February. On 5 March, it was ready to begin reconstruction in Kecamatan Low (Aceh Besar). During the recovery period, the group was supposed to build barracks and temporary shelter, not permanent housing. Other INGOs were still assessing during this time.

was delivered approximately three months after the tsunami.[251] Most ACs in WA claimed they did not receive transitional accommodation until roughly the beginning of the RR phase, which was approximately a year after the tsunami.

In BA, the scenario was different altogether. In BA, most INGOs started PHR projects in the second half of ERR phase, six months after the tsunami. This was partially due to a lack of coordination with local government agencies in BA. Government operations were affected by the tsunami, leaving more room for INGOs' direct approach. However, the promptness of INGOs resulted in more complaints from ACs in BA that their permanent houses were of low quality and lacking a proper bathroom or kitchenette. Some bathrooms and kitchenettes were built inside the house, which was considered culturally inappropriate by the Acehnese. Empirical findings from beneficiaries cite this as a direct consequence and disadvantage of NGOs' direct approach. Most households in Aceh lacked the services promised in plans, or deemed them culturally inappropriate.

In WA, close coordination between NGOs and local government agencies resulted in better housing aid and detailed planning. The delays eventually offered benefits to ACs. Government offices, such as BPBD, were in full operational capacity after the disaster, which was an advantage for NGOs and ACs in WA, unlike their counterparts in BA. There were few complaints in WA.

A lack of community-based planning, INGOs' inadequate local knowledge in housing and poor choice of contractors were the main problems in the ERR phase. In some cases, NGOs' contractors dominated reconstruction projects, leaving ACs with no avenues to deliver complaints to donors or INGOs. Evidently, BA had more complaints than WA in regard to the quality and completion of PHR. The issues of incomplete facilities in PHR will be analysed further in Chapter 4.

[251] Oxfam Jakarta (formerly with *Terre Des Hommes*), interview by research team, Jakarta Indonesia 16 November 2012, transcript.

3.4 Lands Rights and Ownership

3.4.1 Introduction

This section examines issues affecting ACs and NGOs in providing the shelters and temporary transitional accommodation in the ERR phase. There will be another discussion on the same subject in the RR phase, but with a different focus (see Chapter 7). This section addresses the effect of the early recovery process and land office rehabilitation on land rights and ownership.

On average, the earthquake and tsunami-affected an area between 1,500 km long and approximately five km wide along the coastline of Aceh and North Sumatra. In BA city, about 70 per cent of the district was affected by the tsunami. On the east and west coast of Aceh, the damage was more severe—it reached about 9 km inland.[252] The severe damage along this coastline affected the land administration office (*Badan Pertanahan Negara* [BPN]). This vital building needed to be repaired quickly to deal with the rehabilitation and reconstruction process in Aceh. The tsunami wiped away all evidence of land parcel boundaries and many survivors needed to reidentify their borders. [253]

In his book, a former district officer in Johan Pahlawan in Meulaboh described the damage inflicted by the tsunami. From his description, the district office was in poor shape, filled with tsunami dirt and debris. The floor was covered with half a metre of tsunami dirt and all relevant documentation on land parcel information was damaged. The databases of property sale and purchase information stored in computers were not retrievable. The land office gate was destroyed and compound full of debris. To clean the district office, he hired two local people for IRP400,000 a day, but they gave up the job on the second day due to the thickness of the dirt covering the office floor. Later, he requested the help of volunteers who came from North Aceh, but they initially refused to help due to an inability to clear the dirt. The dirt could only be removed using a massive machine, such as a backhoe. [254]

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[252]. Matsumaru et al., 'Reconstruction of the Aceh Region', 11–12.
[253]. Data analysis based on empirical findings of this thesis—Aceh from November 2012 to May 2013.
[254]. Dadek, '*Buku* Tsunami',19.

When the district office was finally cleaned with the assistance of a backhoe borrowed from a local merchant, the tsunami debris included a car and a fishing boat. To clear the dirt, the volunteers used the machinery to suck out the dirt and then cleaned the water wells for local communities. As a token of appreciation, the district officials offered the volunteers accommodation on the second floor of the office building for the duration of their work in Meulaboh.[255]

The earthquake caused submersion of a great deal of land. In many cases, the land parcel along the coastlines was fully or partially submerged.[256] The subsidence and uplift of land made the reconstruction of land parcel boundaries very difficult in affected areas.[257]

3.4.2 Land Office Rehabilitation

The rehabilitation of the BPN was crucial for it's functioning, which was needed to help ACs retrieve their land parcel documents and proof of ownership. When the tsunami hit the city, almost everything was damaged including relevant land documentation and archives. [258]

The BPN had to be restored before it could officially operate and address land issues. With no other records or database system in place, the BPN had to recover and preserve all remaining documents. The damage was extensive, leading to concerns about recovery and restoration costs.[259] It is estimated that about 10 per cent of the land book was lost, while the remaining 90 per cent was in poor condition. [260] Damage to other land documents, such as the cadastral map, was estimated to be at about 80 per cent. It is estimated that approximately 300,000 land parcels were affected—170,000 in urban areas and 130,000 in rural areas.[261]

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[255]. Ibid.
[256] Musa Al'ala, Syamsidik, Teuku Muhammad Rasyif, and Mirza Fahmi. "Numerical Simulation of Ujong Seudeun Land Separation Caused by the 2004 Indian Ocean Tsunami, Aceh-Indonesia." *Journal of Tsunami Society International* 34, no. 3 (2015): 159.
[257]. Data analysis based on empirical findings of this thesis—Aceh from November 2012 to May 2013.
[258]. Ibid.
[259]. Hasanuddin Z. Abidin, D. Santo, Tony S. Haroen and E. Heryani, 'Post-Tsunami Land Administration Reconstruction in Aceh: Aspects, Status, and Problems', *Survey Review* 43, no. 323 (2011), 439–50.
[260]. Data analysis based on empirical findings of this thesis in Aceh from November 2012 to May 2013.
[261]. Ibid.

More than 40 BPN staff lost their lives in BA. The human casualties had a significant impact on the recovery process for land-related issues. [262] The rehabilitation of the BPA in Aceh received US$28.5 million from the Multi-Donor Trust Fund for Aceh and North Sumatra (MDTFANS).[263] Reconstruction of the land office involved the BPN, BRR and the Aceh provincial BPN. The projects took three years to complete (2005–2008), which hindered the process of settling land issues and claims. [264]

3.4.3 Analysis: Effect of Delayed Land Issues on Economic Climate

The delays in land rights and ownership issues in the ERR phase had a domino effect on the socio-economic climate in the RR phase. The delay in resolving land issues affected the PHR, which was only valid for two years. ACs were at risk of rebuilding under NGOs' housing aid programs. As PHR was crucial for ACs to restart their lives, land issue delays hampered PHR and created economic disruption. Temporary accommodation had to be built on land legally owned by ACs. The delayed resolution of land issues affected their transition from *tenda* to temporary accommodation. This further delayed PHR projects, which should have started six months after the tsunami. [265]

Data show that prior to the tsunami, most of the land was owned in Aceh, either through family inheritance or by purchase. Only about 10 per cent of the population had lease agreements. As of 2017, there are four categories of landowners in Aceh: landowner, *wakaf* land,[266] renters and no land ownership. From these categories, almost 80 per cent of the ACs in Aceh were landowners. Only about 5 per cent were renting. [267]

Almost 80 per cent of ACs lost their homes and belongings. Many lost nearly all of their family members. Landowners in Aceh who lost their homes or land certificates because of the tsunami could only identify their homes based on existing roads, the recognition of the ruins or remembering the approximate location of their homes. The

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[262]. Ibid.
[263]. Matsumaru et al., 'Reconstruction of the in Aceh Region', 11–9.
[264]. Data analysis based on empirical findings of this thesis in Aceh from November 2012 to May 2013.
[265]. Ibid.
[266]. *Wakaf* land is owned by the government. Communities are allowed to occupy and use the land but do not own it legally.
[267]. Data analysis based on empirical findings of this thesis in Aceh from November 2012 to May 2013.

survivors marked them with brightly coloured cloth flags. In addition to marking the land, the flags served as an acknowledgement to others that some residents had survived. Some villagers were fortunate that their *Geuchik* survived and helped them locate their homes and manage land claim conflicts with other survivors. If the *Geuchik* was deceased, survivors had to apply to the BPN office to resolve their grievances, resulting in added costs and delays.

This marking tactic helped survivors reclaim their properties and avoid the problem of illegal claims from relatives in other regions. This land ownership issue arose when the owner of the land was displaced or considered deceased. Many families from other parts in Aceh wished to reclaim the ownership of land on behalf of their dead relatives. After the tsunami, almost all survivors in BA were entitled to housing aid, which also prompted relatives of deceased owners (or those missing or thought to be deceased) from other districts to claim housing aid. Problems re-emerged much later when displaced survivors, swept miles away from nearby islands due to the tsunami waves, returned.

The research findings indicate that most local BPN offices were located five to 10 km from homes in BA. However, some respondents in BA had to travel almost more than 50 km to the nearest BPN office in Jantho. Because of the tsunami, most government offices for BA have been relocated to Jantho, which has a mountainous landscape. The cost for travelling to Jantho was estimated to be IRP100,000 to IRP300,000, not including the land certification processing fees. In addition to this expense, survivors had to prepare documentation for their claim, including land measurements. It cost landowners IRP1.5–2 million to measure land parcels. Most respondents visited the BPN at least twice a year to process land certificates. The high cost of this process was the primary reason many respondents took almost 10 years to resolve land issues. [268]

Nearly all ACs in the entire WA district joined a program called Perona, which was a land certificate program supported by the local BPN. Perona hastened the processing of land and house documentation. In BA, respondents relied on NGOs to help them navigate house and land issues. This illustrates the strong collaborative relationship

[268]. Data analysis based on empirical findings of this thesis in Aceh from November 2012 to May 2013.

between NGOs and local administration office in WA. The BPN in Meulaboh was the mediator in overlapping land claims and other ownership-related issues in WA.

According to BPN, NGOs funded the cost of retrieving land parcels, while the local BPN accelerated the process in WA. In BA, the scenario was entirely different. Most beneficiaries in WA claimed that in most cases, NGOs dealt directly with the local government and assisted ACs with documentation costs. The BPN offered local expertise and knowledge to assist ACs. This was another example of effective coordination between local government officials and NGOs.[269]

In BA, some rural communities did not receive any form of assistance in retrieving their land and house certificates. This was the case with Ujong Pancu, a coastal village in Aceh Besar (a district in BA). In this village, no survivors had any form of land documentation, even after the end of the RR phase.[270] A female leadership award winner (2012) identified the problem and supported villagers' claims that the *Geuchik* was irresponsible and offered no assistance.[271] NGOs and BPN representatives did not visit this village to resolve land issues due to its location. The LRRD report indicates that aid was directed according to how easily ACs could be accessed, which may explain why Ujong Pancu lacked assistance.[272] Access and geographic barriers impeded the delivery of aid in rural areas. People's needs were not prioritised, which meant land certificates were delivered to ACs almost 10 years after tsunami.

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[269]. Action Against Hunger worker (formerly from CARE International during the tsunami), interview by research team, 16 November 2012, transcript. Efforts focused on land issues. The government handled property rights issues immediately. As part of reconstrution, the technical team studied the soil to ensure its stability. Arrangements were coordinated with remaining ACs and the land office. Survival rates differed depending on the size of affected areas.

[270]. Beneficiary, interview by research team, BA, 4 December 2012, interview BA7, transcript. The interviewees have not received land or house certificates, which means the community cannot use the land as collateral for a loan.

[271]. Beneficiary, interview by research team, BA, 3 December 2012, interview BA6, transcript. Certificate problems persist for villagers. Even the BPN had not tackled the issue until the day of the interview.

[272]. Burke, 'Evaluation of the Linkage of Relief, Rehabilitation and Development', 112.

Chapter 4:
ERR Phase: Analysis of Issues and Challenges from the NGOs and beneficiaries' perspectives.

4.1 Introduction

This chapter discusses the findings and analysis of AC participation in programs in the ERR phase found in Chapter 3. Factors that dampened participation rates in the RR phase will be discussed, including their ultimate effects on CB in Aceh communities. Chapter 1 of the thesis has explored how low AC participation during ERR and RR led to vulnerability in both stages. This chapter will illustrate how factors impeding participation in ERR had a knock-on effect on participation in the next phase. The discussion in this chapter will examine the issues raised and challenges from both NGOs' and beneficiaries' perspectives in the ERR phase.

4.2 Program-Related Issues in The ERR Phase

This chapter addresses four main sectors related to the ERR phase: livelihood; medical, health care and psychology; shelter; and land tenure and rights (see Figure 3.1). Programs during the ERR phase can be characterised into the same four groups mentioned above. Further, programs correspond to three sectors: human, economic and social development.[273] Participation of local communities in these three aspects subsequently contributes to CB in long-term programs.

The first sector, livelihood, includes three types of socio-economic programs: CBA, in-kind assistance and CFW. Meanwhile, the second sector, medical and healthcare services, includes psychological programs. The third, shelter programs, include tents, barracks and temporary accommodation. The final sector encompasses land rights and tenure programs.

From an economic development perspective, socio-economic and livelihood sectors can be divided into three types of programs: CBA, in-kind assistance and livelihood programs (such as CFW initiatives). There were several kinds of CBA: *wang hibah* (compensation), remittances and micro-credit financial assistance from NGOs. The

[273]. See Chapter 1 for further discussion on these three sectors in PTR.

government also offered a grant program known as *Jatah Hidup* (JADUP). In-kind assistance included food and non-food items that were delivered in the first few weeks after the tsunami.

During the recovery phase, social and human development initiatives such as mental health services were offered. Other programs aimed to restore land tenure and rights and temporary accommodations, including tents, barracks and shelter. These two programs were crucial during the recovery phase, giving ACs vital support in recovering from the disaster.

Land tenure and ownership involved the process of resolving land issues in the aftermath of the tsunami. Most ACs searched for their land and loved ones within hours of the tsunami in Aceh. Land identification usually began with the placement of markers, such as flags. Later, after villages were cleared of debris (which took weeks or months depending on the damage), ACs measured and divided land based on information from their *Geuchik* or head of village.

Local village leaders and elders were critical in assisting ACs in asserting their rightful ownership of land. In cases in which the *Geuchik* was affected or deceased, local ACs relied on the BPN to measure their land. The efficiency of this procedure was dependent on the capacity of ACs to fund travelling costs, land processing fees and documentation payments. This process needed to be completed before the PHR stage began (in the RR phase).

For temporary accommodation, ACs were given tents or *tenda* as shelter before being relocated to barracks. There were three main types of temporary shelter or accommodation during the recovery phase. Tents, which are portable shelters made of cloth and secured by ropes and pegs, were the first form of accommodation provided for survivors. The second form of shelter was barracks, long houses with separate plywood units used to house individuals and families. Some barracks accommodated women and men separately, while others accommodated families. Finally, before the reconstruction of permanent housing began, temporary shelters made of wood and steel frames served as transitional accommodation.

The effectiveness of these programs depended on local participation from ACs in the planning, designing and implementation stages. Livelihood sustainability in the

developmental phase depended largely on ACs' acquisition of ISK from NGO programs. This was crucial to ACs' wellbeing in the developmental phase.

The active participation of ACs could have reduced the vulnerability of both tsunami- and conflict-affected communities after the tsunami hit Aceh in December 2004. In terms of the four sectors in Figure 3.1, the findings indicate that NGOs played prominent roles in planning, designing and implementing programs. To ensure effectiveness, NGOs' community-based development programs adopted a bottom-up approach that prioritised people. This included efforts to encourage AC participation (see Table 4.1) and integrate LRRD into programs in the ERR phase (see Figure 2.2 and 3.1) to maximise CB.

4.3 Beneficiaries' Priorities in ERR

Findings identified at least eight aspects of humanitarian assistance that were the priority of beneficiaries in BA and WA. Elements such as food and shelter, medical care, psychological support, house reconstruction, compensation, religious livelihood and others provided the benchmarks to explore beneficiaries' priorities in post-tsunami ERR. Table 4.1 indicates the aspects beneficiaries believed contributed most to their welfare in ERR. AC feedback indicates that shelter and livelihood programs contributed profoundly to the socio-economic development of the community. Some sectors also have soft and hard components of development. Hard components refer to as in tangible (e.g., shelter and food) and 'soft' refers as in psychological and religious support.[274]

The findings shows that housing reconstruction and psychological assistance was the most needed assistance during the ERR phase. However the big differences between WA and BA was due to the difference scale of the destruction and different numbers of casualties in both regions that had affected how they responded to the questions.

[274]. Action Against Hunger staff member (formerly with CARE International during the Tsunami), interview by research team, 16 November 2012, transcript.

Table 4.1: Beneficiaries Priority in ERR[275]

Region Type of assistance	BA (%) (34 respondents)	WA (%) (34 respondents)
House reconstruction	65	35
Medical assistance	62	44
Food and shelter	59	50
Psychological assistance	41	12
Compensation	24	6
Others (education, public facilities, etc.)	6	9
Livelihood	6	3
Religion	3	0

Table 4.2: Psychological Impact (Level of Recovery)[276]

Rate	Good (8–10) (%)	Average (4–7) (%)	Bad (1–3) (%)
BA	57	27	15
WA	67	33	0

In terms of psychological and mental health programs, beneficiaries identified several methods as the best support for recovery. They include open discussion among survivors, sharing stories, performing prayers and *solat*, overcoming trauma by remaining occupied with work, religious talk and seminars, and mental and psychological strengthening programs.

Table 4.3: Most Beneficial Assistance[277]

Region Type of assistance	BA (%) (34 respondents)	WA (%) (34 respondents)
Temporary shelter and accommodation	85	60
Medical assistance	50	17
Public facilities (school, hospital, communities etc.)	46	23
Education	38	20

[275]. Data analysis based on empirical findings of this thesis in Aceh from November 2012 to May 2013.
[276]. Ibid.
[277]. Ibid.

4.4 External Actors: Donors' Influence and Expatriates

As mentioned previously, NGOs often prioritised their upward accountability over their lateral accountability. NGOs funded by donors were obliged to fulfil their upward accountability by following donor instructions on funding use. Other problems, such as a lack of local and central government resources, logistics and support, also affected recovery efforts.

Common grievances from NGOs include the inflexibility of donors' criteria, which do not allow spending on disaster mitigation and training programs in the PTR phase. During ERR, donors focused primarily on providing ACs with immediate humanitarian assistance. There was no integration of LRRD for long-term reconstruction. Researchers such as Burke explained the importance of integration of LRRD for long-term benefits rather than spending tsunami funds on individual projects. [278]

The LRRD report explained the need to focus on project perspectives while also prioritising people in development by including local governments and INGO development agencies in the process. The limited focus on single projects fulfilled NGOs' upward accountability but overlooked beneficiaries' needs. Further, the report stated that agencies should not venture into sectors in which they have no expertise.

In Aceh, a high percentage of programs and projects failed to transition into the development phase due to a lack of INGO skill and strength at the implementation stage. These scenarios were common in PTR Aceh, particularly in projects in which NGOs lacked the appropriate expertise. Most relied heavily on the hiring of expatriates to undertake programs, which caused further problems. ACs perceived expatriates are as foreigners who do not understand the importance of local knowledge and culture in implementing programs. Despite this, INGOs hired many expatriates to maintain a positive reputation among donors.

A local consultant attached with Caritas outlined further disadvantages of hiring expatriates. According to this participant, some NGOs allocated more funding for their operations (such as 90 per cent) than for their programs (only 10 per cent). The

[278]. Burke, 'Evaluation of the Linkage of Relief, Rehabilitation and Development', 111–2.

CRS allocated more than 50–70 per cent of their operational costs for expatriate wages. Conversely, Caritas spent 70 per cent on PTR programs and projects in Aceh and only 30 per cent on operational costs. Caritas had smaller operational overheads due to a strong local partnership that reduced running costs. The savings were used to hire local staff for monitoring programs and projects. This enhanced local benefits and offered greater transparency to its local partner.

Some INGOs that hired expatriates from home countries with high wages eventually helped those in their country of origin more than ACs in Aceh. For example, PUP, an organisation from the Netherlands, had retirement schemes that allowed retirees to relocate to Aceh free of charge. These schemes were partly a requirement for retired workers to receive the pension in return for their contribution. Eventually, the genuineness of PUP's work in Aceh was compromised to suit their interests rather than the needs of ACs.[279]

Conversely, some NGOs claimed to focus only on areas in which they had specialist knowledge to avoid the risk of failure. MC Indonesia, for instance, claimed that it was not involved in any other assistance programs, such as temporary shelters, permanent housing, roads or transport.[280] This is a sign of good practice. Nevertheless, there were many international agencies, including INGOs, that struggled in areas in which they had no expertise. However, some still achieved successful outcomes. In some cases, expatriates concealed a lack of knowledge. INGOs usually hired expatriates on high wages from their countries of origin to assist with projects. This practice did not contribute to CB and caused more money to flow out of Aceh. ACs were left with high inflation, few employment prospects and no way to sustain their economic climate.

4.5 Logistics

Logistics in Aceh were critical after the tsunami. The massive wave damaged all facilities, including roads and transport infrastructure, leaving ACs reliant on NGOs for mobile medical services. For example, one local NGO explained how Johnson & Johnson Co. supplied mobile clinics by providing the necessary funding and

[279]. Former NGO/consultant, interview by research team, BA, 15 December 2012, transcript.
[280]. Mercy Corp, interview by research team, Jakarta Indonesia 14 November 2012, transcript.

equipment. The funding was used to start the mobile clinic's services as soon as possible to meet the objective of providing free medical service (*pengobatan gratis*)[281] in refugee camps and temporary shelters for two years. With the assistance of mobile clinics, Ambulance 118 managed to remain in each camp for three weeks. During each stay, the team operated without radiologists and laboratories, relying only on doctors and nurses. In addition to a lack of resources, the team also had to handle a high volume of patients.[282]

After the tsunami, PUSKESMAS took over medical services phase by phase. From this NGO's observations, almost no patient that visited the mobile clinic was from coastal areas. While only five to 10 per cent of coastal communities survived the disaster, this did not reduce the number of patients seeking help from this NGO. Due to the badly damaged medical facilities, the team had to provide services to all local communities, resulting in long working hours and a shortage of medical experts, doctors and nurses during the ERR phase.

4.6 Tsunami Funding and Disbursement Methods

In general, there were two types of funding aid for the 2004 tsunami: funding for post-disaster recovery efforts and funding for PDR. Funding was provided through many different channels, such as G2G, international donors and public and private funding.[283] G2G funding was also known as MDTFANS.

A Plan International (Jakarta) representative[284] outlined the allocation of funds in the RR phase and the parties responsible for managing expenditure.[285] According to the representative, the damage in Aceh was estimated at US$55 billion. The Indonesian government (through BRR) received US$65 billion in aid from more than 20

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[281]. Ambulance 118 (local NGO), interview by research team, Jakarta Indonesia, 12 November 2012, transcript.

[282]. Ibid. On average, the mobile clinic assisted 20–30 people per day. The mobile clinics helped survivors in the refugee camp and assisted people from the village. The villagers commuted to the mobile clinic, which was stationed at the refugee camp, by motorcycle and other transportation available at the time. The damage was only in coastal areas. Townspeople also visited the mobile clinic because the shelter was built far from the coastal area and closer to the city. Most patients were from the city; only five per cent of survivors were from coastal areas.

[283]. McCawley, *The Asian Tsunami Aid*, 4.

[284]. This Plan International staff member was previously associated with the Yogyakarta Committee for Aceh Recovery (YCAR).

[285]. Plan International, interview by research team, Jakarta Indonesia, 7 June 2013, transcript.

countries through a G2G multi-donor trust fund administered by the World Bank. The government had at least US$10 billion for the RR phase. This excludes money directed from INGOs to beneficiaries. The National Planning Agencies of Indonesia and Ministry of Finance were responsible for the administration of the trust fund.[286]

BRR also shared this responsibility. The amount of funding received by the BRR was so significant that no aid was dispersed during the ERR phase. The BRR was established towards the end of ERR and focused only on RR in Aceh. It was concerned only with the rehabilitation and reconstruction of houses, which began at least six to 12 months after the tsunami.

The plentiful funds meant that development agents were not burdened with capital shortage problems. However, the generous aid available did have adverse effects on AC participation levels. Indirectly, low participation of ACs has long-term implications on livelihood and socio-economic climate in the developmental phase.

4.6.1 Cash-Based Response

There are a few methods of distributing recovery funds to beneficiaries in most post-tsunami countries.[287] The most common mechanism was cash-based response (CBR) initiatives, in which beneficiaries received cash. CBR methods were introduced to tsunami projects after much disagreement among donors. There was three methods set out for the CBR: the local banking system, local money transfer companies and direct payment through an agency.[288] In Aceh, under the 'thousand-a-family' program, each family was granted IRP1,000 as a recovery grant.[289] The advantage of this type of grant is that it empowered survivors to use funds according to their individual needs and priorities. This is possible if local markets are not affected by the disaster. CBR through banks and other financial institutions potentially reduces security and corruption risks.[290] Where banks do not exist, aid agencies use a variety of innovative

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[286]. Ibid.
[287]. Brusset, *A Ripple in Development?,* 1-154.
[288]. Paul Harvey and Lesley Adams, *Learning from Cash Responses to the Tsunami* (London: Humanitarian Policy Group, September 2006), 1–5.
[289]. De Ville de Goyet and Morinière, *The Role of Needs Assessment in the Tsunami Response*, 44.
[290]. Harvey and Adams, *Learning from Cash Responses to the Tsunami*, 2.

delivery mechanisms, including mobile banking services, subcontracted security companies and remittance and money transfer companies.[291]

However, in regions such as Aceh, market conditions are weak and poorly integrated, making the area vulnerable to conflict or natural disaster. For CBR to work, local markets must have adequate capacity to cope with the supply and demand of the ACs. In Aceh, the domestic market's capacity to support ACs' needs in a post-disaster environment was doubted. In BA's city centre, especially Pedayung, the market was among the most affected by the tsunami, which explains why CBR methods were not possible.

In addition to damaged banking facilities, the security and privacy issues prevalent in temporary accommodation camps made cash storage problematic. Another downward risk of CBR was its implementation, in which resources are at risk of corruption, looting and theft.[292] Further, the findings indicate that the risk of corruption was high in CBR because cash-based aid was more easily detected and captured by the local elite. Thus, there was also a high risk of fund diversion in the case of corruption-prone states.

The capacity of the local market to support ACs' demand differed between WA and BA. Research data from Aceh explained the different levels of destruction in the two tsunami-affected cities. For example, BA is the province's capital where the primary financial institutions and most industrial establishments are located. The coastal area is the main hub for economic and market activities, including fisheries and agriculture. Further, BA is the most highly and densely populated town in Aceh. Another main city in WA, Meulaboh, has different geographical advantages. While economic activities are similar in most Acehnese regions, the density of Meulaboh is slightly different than BA. At the time of the tsunami, there were 21 villages in Kecamatan Johan Pahlawan; 17 were severely affected by the tsunami in WA. The city had a

[291]. Paul Harvey, 'Cash Based Responses in Emergencies', *IDS Bulletin* 38, no. 3 (May 2007): 81.
[292]. Ibid., 79–81.

population of approximately 70,000; 10 per cent of these people (7,000) were casualties of the disaster.[293]

Meulaboh, the capital city of WA, is the centre of administrative, financial and commercial industries. Fortunately, it is located far from the coastline. The tsunami hit cities in both coastal regions. However, the levels of destruction meant the cities were affected differently. BA, the capital of the province, was badly damaged and everything was in a state of total collapse, including local market activities. Conversely, while Meulaboh had equally high casualties as BA, it did not collapse entirely and was cut off only in terms of land routes and communication. Meulaboh had some industries and local markets that survived the disaster. Therefore, CBR in this city was a more viable option because domestic market capacity was adequate to support ACs. In BA, CBR seemed impractical due to complete devastation; in-kind assistance was more suitable during the ERR phase.

The findings indicate that CBR is only suitable during the emergency phase and not for developmental or livelihood programs in the RR phase. CBR is not readily applicable in the aftermath of large-scale disasters. It requires a thorough preliminary NA to justify its suitability. CBR should only be implemented after a proper NA supports its use and when physical facilities are restored. CBR was not the best method for RR because Aceh lacked the industrial-based economic development to support the method and ACs could not use CBR to sustain their economic climate.

4.6.2 Remittance

Remittances were another form of CBR that did not suit the post-tsunami environment. The post-conflict status of Aceh meant that payment systems had to be restored before they could be used as channels. Findings indicate that distributing remittances via banks and financial institutions was difficult in isolated rural areas

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[293]. Dadek, '*Buku* Tsunami', 19. *Acut juga mengatakan tidak pantas aku selaku orang yang berasal dari keluarga terpandang dan selaku pemimpin berputus asa, aku harus kembali ke kota, pimpin kembali kecamatan kota yang sudah luluh lantak itu. Bagaikan Hiroshima dan Nagasaki, kecamatan kota yang aku pimpin itu hancur, dari 21 desa dan kelurahan yang aku pimpin, 17 diantaranya terletak di bibir pantai dan teluk dan kecamatan inilah yang paling parah terkena stunami di Aceh Barat, kota dengan penduduk 70.000 orang itu, sepuluh persen penduduknya tidak jelas. Korban diperkirakan berjumlah 7000 orang dan tidak mudah mengangkat mayat hanya dengan semilan orang anggota PMI*, 16.

due to the lack of proper street names and addresses.[294] Due to reparations to all banking and financial institutions in Aceh, remittance was not a viable option in the ERR phase. The obstacles in the delivery of aid led most international agencies to use other forms of distribution channels, such as in-kind assistance.

There are a few channels of remittance. In the case of Aceh, the first form was compensation from the government (JADUP). Another form, from NGOs, was *wang hibah* (bonus money). The last form was funding directed to ACs by development agencies during the RR phase for PHR and facilities reconstruction, and livelihood and socio-economic programs. In both cities, most beneficiaries claimed to have received some form of compensation from the government and NGOs. In BA, 90 per cent of respondents claimed to have received JADUP for at least six months to two years, while only 10 per cent claimed otherwise.[295] In WA, all 34 respondents confirmed they had received JADUP for a period of three to six months after the tsunami.[296]

One respondent from BA claimed to have not received any form of JADUP. Respondent BA22 is a school teacher who lost her entire family and her nephew who lives with her, had severe lung and ear infections and who needed immediate medical attention. She claimed she did not receive any JADUP or other types of CBR. The main reason was that after the tsunami she stayed at her husband's family home in Ulee Kareng for two months, which means that she did not remain in the barracks.[297]

Only ACs in temporary shelters were entitled to JADUP. Further, there is something akin to an agreement reached between ACs and NGOs that assistance will continue as long ACs occupy the barracks. This also indicates that the assistance had been

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[294]. T. Wu, *The Role of Remittances in Crisis: An Aceh Research Study* (London: Humanitarian Policy Group, 2009), 1–27.
[295]. Thirty-three respondents and one respondent respectively.
[296]. Harvey and Adams, *Learning from Cash Responses to the Tsunami,* 5. The Indonesian government tried to provide monthly cash transfers to displaced households through the JADUP scheme. Cash disbursement was managed by government authorities at each level, with village leaders responsible for distributing the cash to the community. In practice, the movement of the cash from national to local government and then to disaster-affected households was extremely patchy.
[297]. Beneficiary, interview by research team, BA, December 2012, interview BA22, transcript. Assistance was not given because she did not stay in the barracks, was already considered housed and was not registered for aid in *LamJabat*. Occasionally, she received assistance from the orphanage for her nephew. No SEMBAKO and JADUP aid was provided. The interviewee survived without assistance because she worked as an SMA schoolteacher.

prioritised to the least fortunate survivors. Those who were assisted by family members did not receive any form of CBR. Beneficiaries of this type of CBR are required to remain in their village to be entitled to the assistance.

4.6.3 In-Kind-Assistance

There were two kinds of conventional in-kind assistance in BA and WA: food items and non-food items (NFI) and SEMBAKO. An example of food item assistance is SEMBAKO.[298] NFI included medical care, basic living kits, health kits, kitchen kits and so on. These kits are essential for survival in the aftershock of a disaster. MC International staff emphasised the importance of different types of NFI assistance to ACs in the early hours and days after the tsunami in Aceh.[299] They also described that in-kind assistance was the best mechanism to distribute aid in Aceh because all economic activities were severely affected. The state of total collapse in BA disrupted most socio-economic activities due to the disaster impact. The choice to deliver food items or NFI depends on the magnitude of the catastrophe.

Most conventional guidelines determine the most appropriate kind of assistance based on Sphere standard operations for emergency response and humanitarian aid. Burke asserted that the immediate focus was disaster recovery, which necessitated the delivery of food and NFI by INGOs in the ERR rather than CB.[300]

Sphere had no mechanism in place to guide the implementation of ERR. The basic guide for humanitarian response was too general and focused on humanitarian assistance alone. In Aceh, the main aim of NA was to evaluate existing assets and human capital that could be used by ACs to build local capacity. Capacity was interpreted differently by stakeholders in Aceh. These varied interpretations resulted in limited efforts to undertake a coordinated and proper NA, which could have been

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[298]. Aid was given in the form of *Bahan Pokok* (nine plant-based food ingredients).

[299]. Mercy Corp, interview by research team, Jakarta Indonesia, 14 November 2012, transcript. 'We continue with the distribution of NFI, such as kitchen kit, cleaning kit and hygiene kits after 72 hours. In the case of emergency response, this kind of ready kit is being dispersed after the disaster. Most families receive a jargon and trampoline, which are usually used for sleeping. Each family is given this big bed made of plastic, which can accommodate up to 4–5 people. [We] continue to distribute NFI for one to six months'.

[300]. Burke, 'Evaluation of the Linkage of Relief, Rehabilitation and Development', 102. Further, there is no agreed international system available for promoting capacity to respond to and recover from large-scale disasters. Most standards and quality assurance measures are aimed at delivering water, sanitation, shelter, and increasingly, livelihood and complaints mechanisms.

used to establish local capacity.[301] At the early stage of ERR, CB was not considered a priority. The supply of food and NFI to ensure survival was the main focus, rather than CB. While the LRRD framework suggested that the integration of CB through AC participation should start at the beginning of ERR, it was considered too early to determine CB needs at this stage in Aceh.[302]

The Sphere standard guide only accommodated 'lifesaving' interventions. The disaster emergency response guide was not tailored for recovery-based interventions that analysed existing local resources to increase CB. Guidelines such as Sphere and the 'Good Enough Guide' need to be revised periodically, because disasters have unique needs and characteristics. Integration based on local capacity was necessary in the case of Aceh as the continuity of legitimacy and ownership was vital for CB in ERR and RR.

4.6.4 The Effects of Funding Disbursement Method on Participation in ERR

This section explores the effects of grey areas between cut-off times in each phase and funding disbursement mechanisms on AC participation in Aceh. The grey areas and fund management affect participation levels in the ERR phase. Further, funding moulds program planning (for conventional and achievable types of programs). Under standard programs such as CFW in ERR, ACs were assigned a passive role: accepting the program without the need to participate. In this stage, the importance of NA was again clear. The absence of integrated information from NA meant local knowledge and capacity were not built into planning. Additionally, time constraints and pressures to spend funding quickly reduced incentives to participate in ERR programs.

The large influx of funding did not require ACs to contribute to the implementation of programs. The substantial funding also meant that ACs expected to be paid without the need for genuine participation. The failure of NGOs to use pre-existing ISK, local

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[301]. Despite the mention of participation in Sphere standards (Humanitarian Charter and Minimum Standards in Disaster Response), there are no standards for supporting local capacity to manage water, sanitation or shelter recovery needs, especially through development stages. These are low on donors' agendas. Capacity development continues to mean many things to many actors over time.

[302] De Ville de Goyet and Morinière, *The Role of Needs Assessment in the Tsunami Response*, 34. The lack of perceived added value has been particularly true of humanitarian 'life-saving' interventions compared to recovery programs. The contrast between the two types of assessments is due to the distinction between the natures of the needs (human v. economics). Further, it reflects the lack of compilation, thorough analysis and prioritisation of emergency needs in the first few weeks.

resources and assets supported the argument that excessive funding encourages minimal participation from ACs. Therefore, ACs received only short-term benefits and programs did not contribute to long-term socio-economic sustainability.

A local fishery NGO explained that overstretching recovery programs reduced the quality of assistance to temporary benefits. For example, a boat was built for fisherman affected by the tsunami. Under normal circumstances, the boat would take one year to complete. However, during emergencies, these boats are ready in less than a month. After the tsunami, the contractor was highly paid and rushed into building the boat for ACs. The new boat failed to meet the needs of beneficiaries because it was not suitable for local fisheries. This is a clear example of how a lack of local input can compromise the quality and sustainability of assistance in long-term development planning.

4.7 Organisation and Actors in Recovery Phase

Many organisations were involved in the Aceh reconstruction. Almost 120 countries and nearly 70 NGOs worldwide assisted in the province from the moment of emergency, recovery, rehabilitation and reconstruction. These included the Red Cross and Army Red Cross from various countries such as the US, Canada, Australia, Japan, Germany, the Netherlands and France. In addition, Oxfam, MC, Care Indonesia, Plan International, Uplink Germany, Buda Tsu Zhi, UN Habitat, US Aid, Mercy Malaysia, World Vision, *Lembaga Ilmu Pengetahuan Indonesia* (LIPI), Swiss Contact, Federation of Red Cross, Muslim Aid, IOM (UN), Mamamia France, GTZ German and WK India assisted ACs.[303]

International agencies also partnered with local NGOs such as *Yayasan Rumpun Bambu*, *Palang Merah* Indonesia, BA (Indonesian Red Cross), *Yayasan Peduli Bangsa* and Serasi. In WA, YPK was among other locally based NGOs that actively collaborated with various INGOs, such as Cafod and other developmental-based groups. Local NGOs' partnerships with INGOs helped international agencies with the early assessment process to direct humanitarian assistance according to need. Local NGOs have the advantages of having worked closely with local communities. During

[303.] Data analysis based on empirical findings of this thesis in Aceh from November 2012 to May 2013.

the post-tsunami immediate response, local NGOs served as a bridge between the INGOs and their beneficiaries.[304]

4.8 *Badan Rehabilitasi dan Rekontruksi*, Logistics and Visa Issues

The Indonesian government had not prepared a disaster mitigation blueprint to handle such large-scale disasters.[305] The first form of assistance from Jakarta was the relaxation of some bureaucratic procedures. For example, the government lifted restrictions on visa processing, logistics for medical and food items and transportation taxes, which improved access to Aceh.[306]

However, the transportation tax-free status was almost a fairy tale, according to one INGO in Jakarta. It had only been lifted for a couple of years and problems began at the end of the RR phase. The government reapplied the tax, causing it to double within three to four years. Most vehicles that were tax-free on entry to Aceh were now subject to outstanding tax before they could renew their insurance and road tax. Most international agencies left Aceh simply by abandoning these vehicles, while some arranged to donate them to local government or governmental agencies.[307]

Further, the Indonesian government was rather focused on managing and coordinating the direct influx of tsunami fund for Aceh. It was not until later in May 2005 that the government established the highly mandated BRR, also known as the Reconstruction and Rehabilitation Agency for reconstruction in Aceh and Nias Island. The establishment of BRR followed decentralisation laws in Indonesia related to public expenditure policies, such as *Law No. 25/2004* on the *National Development Planning and Regulation No. 21/2004* (Line Ministry and Agency Budget Work Plan). The BRR was established with dual aims within the Aceh Recovery Framework.[308]

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[304]. Ibid.
[305]. Former NGO/consultant, interview by research team, Banda Aceh, 15 December 2012, transcript.
[306]. Ibid.
[307]. Islamic Relief, interview by research team, Jakarta Indonesia, 6 June 2013, transcript. This interviewee worked from 2005–2008. He was the last to leave the region due to revocation of waived vehicle fees that had to be settled before leaving. Most INGOs abandoned their vehicles due to lengthy bureaucratic procedures, creating another burden for the BPN in Aceh. This issue should have been resolved during the RR phase. Excessive road tax fees rendered most vehicles unusable.
[308]. Brusset, *A Ripple in Development?,* 43–46. At the request of the Governor of Aceh and the director of the BRR, the Aceh Recovery Framework was developed to connect vital elements of Aceh's transition: ongoing peace processes and reintegration efforts, rule of law, good governance and

As an ad hoc national agency with high mandates and an operational lifespan of just a few years, the BRR had limited time to implement PTR programs and projects. It was awarded ministerial power for its responsible coordination in Aceh. This followed the creation of MDTFANS and its consistency in meeting the principles of the Paris Declaration. The consistency and success of MDTFANS was reinforced at the Accra High-Level Forum on Aid Effectiveness.[309] Despite such high-level authority, BRR was challenged with primary responsibilities to manage and monitor existing and new reconstructions in Aceh. It was also responsible for coordinating and managing the MDF fund and organising programs during the rehabilitation and reconstruction phase in Aceh and Nias Island.[310] The establishment of BRR was driven by local governors and administrators in Aceh, who claimed they were not prepared to manage the massive transfer of funds for public policy projects. Thus, BRR managed development funding from government and international donors.[311]

Data from interviews with NGOs and beneficiaries indicate the primary responsibility of this agency was fund management for the reconstruction of public facilities and house reconstruction for local communities. The BRR did venture into housing and public infrastructures reconstruction.[312] However, the agency was accused by some NGOs of lacking transparency and engaging in corrupt, profit-oriented business practices.[313]

Further, lengthy bureaucratic procedures greatly affected INGO operations in Aceh. For example, the Temporary Stay Visa issued by BRR only provided INGOs with a six-month to one-year extension, depending on the contract with their donors. If the extension was not granted, they had to fly to the nearest destination (Kuala Lumpur)

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democratic decentralisation, economic development, infrastructure and housing reconstruction, basic social services and cross-cutting issues, such as environment and gender.

[309]. Ibid., 45.

[310]. Ibid., 43.

[311]. Ibid., 37. BRR managed the US$300 million from the Indonesian government and ensured that the multi-donor fund (MDF) and other development programs (valued at more than US$400 million) were completed by 2012. This includes Asian Development Bank (ADB), Agence Française de Développement (AFD) and Japan International Cooperation Agency (JICA) loans.

[312]. Ibid. Seventy-four BRR officials have praised the fact that at the time of the evaluation, more than 120,000 homes, 3,500 km of roads, 266 bridges, 20 ports, 12 airports, 954 health facilities, 1,450 school buildings and 979 public offices had been reconstructed. However, the process remains incomplete.

[313]. Ibid., 51.

to renew their social visa.[314] There were also reports that INGOs with limited one-month visas did not provide groups with ample time to even set up their office. For example, Caritas had CFW for only one month. In this case, Caritas representatives were only issued one-month social visas.

Due to visa constraints, INGOs rotated staff monthly. Caritas operated without an office. Staffs were responsible for managing security, administration and management of programs. After six months in Aceh, Caritas finally set up a management office. As legal requirement from Ministry of the Interior in Jakarta, INGOs must establish an office in Aceh through their local counterparts. The approval for INGO activity registration and visas were greatly delayed by bureaucracy.

Most international agencies were required to inform Jakarta about their funding and plan budgets, and whether they required a memorandum of understanding with the Social Department in Jakarta. Additionally, INGOs were required to present all these to Seknet, intelligence and seven other bodies to obtain the legal rights to operate in Aceh. Approval for funding depends on the donors' decisions, based on preliminary NA results in ERR.[315] The government view of the procedure of NGOs obtaining funds for Aceh was that NGOs were 'selling' Indonesia to the world for their own gain.[316]

Time constraints forced some NGOs to spend the funds allocated for ERR within this limited time frame to meet their upward accountability. This did not factor in the long-term effect on beneficiaries, which was part of their downward accountability. The local consultant that worked with various INGOs in BA shared this information, which was supported by LRRD reports:[317]

> The evaluations concluded that there was a tendency 'to worry more about how an activity would appear "back home" (i.e., where donors are) than its relevance for affected populations'.[318]

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[314]. Former NGO/consultant, interview by research team, Banda Aceh, 15th December 2012, transcript.
[315]. Ibid.
[316]. Ibid.
[317]. Ibid.
[318]. Brusset, *A Ripple in Development?,* 110.

It seemed almost impossible for most international agencies to wait for the results of preliminary assessment before making decisions. The LRRD evaluation team reported that decision-making for immediate disaster response was predominantly influenced by media coverage and political and institutional factors.[319] Pressures from the media combined with visa issues had a dire impact on the planning and designing of appropriate programs. Thus, the results of preliminary assessment were not prioritised in the planning and designing of programs. These factors prompted INGOs to use a direct approach in reaching beneficiaries without the benefit of an NA.

Further, the lack of trust from INGOs towards the highly decentralised BRR was due to ongoing corruption scandals in Aceh. This led to complete distrust, even at the village level. There was a lack of coordination and mistrust by international agencies towards the government due to the ongoing investigation of corruption scandals in Aceh. This was the impression INGOs held for the Indonesian government.[320] This distrust affected BRR coordination efforts. When all international agencies were required to submit their plans and budgets for programs and projects in Aceh, most INGOs were reluctant to share their financial plans. This resulted in inaccuracy in the BRR database (known as the Rand database).[321]

Trust issues also led INGOs decision to opt for the direct approach in reaching beneficiaries. Despite suggestions from most LRRD reports that TEC viewed the BRR as an example for future disaster management practice, the empirical findings did not support this. The LRRD reports asserted that there was a 'lack of a strong national authority: the disaster management office in the affected country, often weak before the disaster, is further marginalised and out-resourced by the international community'.[322]

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[319]. De Ville de Goyet and Morinière, *The Role of Needs Assessment in the Tsunami Response*, 38.
[320]. Former NGO/consultant, interview by research team, Banda Aceh, 15 December 2012, transcript. 'During the tsunami, the present Governor of Aceh was in prison due to corruption conviction and this made trusting the local authority out of question for NGOs in Aceh. So the NGOs used a direct approach to help the community. They don't even trust the HOV or Geuchik, but rather request the community appoint a member of the village to lead the PHR project. This organising committee was in charge of administrating the fund of housing reconstruction. After BRR, most NGOs agreed to coordinate aid in the community'.
[321]. Ibid.
[322]. De Ville de Goyet and Morinière, *The Role of Needs Assessment in the Tsunami Response*, 49.

4.9 First Form of Assistance

Aceh was the biggest recipient of humanitarian aid and assistance after the 2004 tsunami. No other tsunami-affected areas, including Sri Lanka and Thailand, received such massive amounts of financial and humanitarian aid. The support and assistance brought an influx of international governments and NGOs to Aceh with an absence of a blueprint to handle such a large-scale disaster. The response was also partially due to the declaration of a state of emergency by the Indonesian government. According to one very experienced local consultant in BA who worked with various NGOs, the absence of a blueprint caused the failure of coordination of INGO aid. This prompted NGOs to opt for direct communication and interaction with ACs.

In both cities, beneficiaries stated that their first form of humanitarian assistance was received within 48 hours of the tsunami from local communities in their region.[323] Other than the local communities, NGOs and the AMCROSS (in the form of G2G assistance) arrived first, within three days to two weeks of the tsunami. The LRRD reports stated that at least 16 per cent of respondents in Aceh claimed that their friends and family offered valuable assistance in the first 48 hours after the tsunami.[324]

Other forms of early recovery assistance for ACs came from the local rebel group Aceh Freedom Movement (GAM), which was occupying the interior land in the mountain area known as Gunong Seulawah (Pidie region, WA) before the tsunami.[325] Most GAM military personnel survived the disaster due to the geographic location of their fort in the mountainous area. ACs seeking refuge in the mountainous area claimed that GAM was also involved in helping clear dead bodies in the early days after the tsunami.[326] Besides GAM in WA, the surviving *Tentera Nasional Indonesia*

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[323]. Empirical findings show that the first form of assistance received by ACs in Aceh came from local coastal communities that survived the wave (in the case of BA).
[324]. Brusset, *A Ripple in Development?,* 83.
[325]. This mountain area refers to Mountain Seulawah.
[326]. De Ville de Goyet and Morinière, *The Role of Needs Assessment in the Tsunami Response*, 29. 'Government authorities, military, and private enterprises were also the first to provide immediate food rations and other assistances to affected individuals. In the most affected country, Indonesia, the earliest international assessors consistently reported some relief already being systematically distributed by the Armed Forces'.

(TNI) in BA also helped survivor communities. A beneficiary in BA (BA20) explained:

> I stayed on the mountain for two weeks due to more earthquakes and did not receive any assistance due to the location that is close to GAM's conflict area. Only local NGO Serasi helped in rebuilding houses. I received livelihood and business funding for conflict widows from the government. During their stay in the mountain, they did not receive food and medication. They ended up eating whatever they had, and some came down from the mountain to get some food that was left over from the tsunami.[327]

As explained by BA20, NGOs' assistance in these areas only reached ACs after two weeks, and some only came for NA and never returned with aid. Generally, in post-tsunami areas in BA, NGOs' direct assistance came three days after the tsunami. There was no assistance from local government agencies due to the total collapse of administration and governmental bodies in BA. All administrative bureaus and offices were centrally located in BA. When the tsunami hit, the capital of Aceh was ruined and there was no emergency response that could reach BA. Due to this, the government in Jakarta declared a state of emergency in the capital city. Overall, beneficiaries claimed that the first form of assistance came from local volunteers.[328]

In WA, the first immediate assistance was provided by the local army (both GAM and TNI), which was limited to clearing corpses. While this unaffected community claimed to have assisted local victims of the tsunami, there are some elements of the story that seem inconsistent. Most tsunami survivors, local consultants and INGO representatives that arrived in the early recovery phase mentioned that unaffected communities took advantage by stealing and looting valuables from the dead. Some landlords increased rental rates and demanded to be paid higher labour charges. Rental charges for vehicles increased by almost 200 per cent and natural resources, such as timber and other building equipment, became scarce. This explains the high

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[327]. Beneficiary, interview by research team, BA, 10 December 2012, interview BA20, transcript.
[328]. De Ville de Goyet and Morinière, *The Role of Needs Assessment in the Tsunami Response*, 29. 'As stated by the Save the Children Alliance (SC), "in the early days, planes to Aceh were overwhelmingly full of volunteers from all over Indonesia, not international organizations and/or expatriates" '.

inflation rate in Aceh, which led to economic sustainability problems in the aftermath of the tsunami.[329]

Among the first to reach Aceh with assistance was the Army Red Cross and military from various countries.[330] Their early response and presence were helpful when the assistance reached the communities just in time to clear corpses to prevent the spread of contagious diseases, such as cholera. Further, these groups attended to survivors and those injured and severely wounded. They also supplied food, clean water and first aid kits to ACs.

Most NGOs distributed survival kits on arrival in Aceh. Within three days of the tsunami, most NGOs began to distribute food items and NFI. NGOs believed NFI were essential in the ERR phase to help survivors continue living in adequate conditions.[331] Another INGO explained that the first type of assistance delivered to ACs was in the form of NFI, which was issued to each family.[332]

NGOs stated that the primary form of assistance during ERR came from within and outside both regions and not from the Indonesian government. ACs in both regions had already encountered a long history of violence and conflict with the government, especially the TNI. After the tsunami, ACs in both areas began to open to foreign agencies, strengthening their confidence in NGOs and international government armies.

The quotation below indicates there was inconsistency in aid delivery between post-conflict and post-tsunami areas. There were also slight differences in JADUP payments. Beneficiaries explained that JADUP was reduced in conflict-affected communities to fund those who had experienced severe loss due to the tsunami. The

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[329]. Beneficiary, interview by research team, WA, 17 May 2013, CM15, transcript. The interviewee 'received assistance from US Navy three days after the tsunami. The INGO assistance came after three to four days'.

[330]. The most direct and immediate humanitarian assistance (other than from NGOs) was provided by the AMCROSS and armies of various countries that reached Aceh three days after the tsunami. Some survivors in WA claimed that US Navy ships stationed in Thailand's coastal areas were among the first to arrive at the west coast of Aceh.

[331]. ECB CRS, interview by research team, Jakarta, 13 November 2012, transcript. First, the CRS distributed the NFI (i.e., family kit and mosquito kit). It was important to provide for ACs' basic needs.

[332]. Mercy Corp, interview by research team, Jakarta, 14 November 2012. Mercy Corp focused on humanitarian assistance in Aceh, such as CFW and distribution of NFI. After 72 hours, hygiene kits were distributed.

Geuchik was appointed to determine recipients, and clearly, there were some elements of nepotism and favouritism involved:

> I received JADUP of IRP90,000 over six months. Tsunami victims were paid IRP53,000 and conflict victims were paid IRP40,000.[333]

In WA, the local province government office was still functioning and most aid had been channelled through Pemda. For example, in WA, benefits for ACs from the local government were increased by 18 per cent compared to the nine per cent increase in BA. This somehow reduced the assistance received from INGOs in WA (50 per cent), while BA received 62 per cent of INGOs' direct assistance. BA also had a higher percentage of assistance from local NGOs, political parties and G2G, eight to nine per cent, compared to WA's three per cent for each category.[334]

Most agencies in Aceh PTR reacted based on emergency response conventions. Before the tsunami, there was no handbook or guidelines for managing large-scale disasters such as the tsunami. Thus, the Indonesian government swiftly approved any agencies wanting to help in Aceh without rules and regulations. The provincial-level authority collapsed and there were no any rules in place to standardise collaboration procedures with international agencies. The lack of standard operating practices led international agencies to adopt a direct approach to beneficiaries. The tracking system was absent and there was no governmental coordination of humanitarian assistance.[335]

4.10 Quality of Assistance

In terms of the quality of aid received by beneficiaries, NGOs were rated as delivering good-quality assistance by 42 per cent of WA respondents, compared to 35 per cent of BA respondents. However, 24 per cent of beneficiaries in BA rated NGOs' assistance as 'average', while three per cent deemed it 'inadequate'. In WA, three per cent of beneficiaries rated NGOs' assistance as 'average', while one per cent rated it as 'bad'. Conversely, six per cent of WA recipients ranked government assistance as 'high quality', while BA government assistance scored zero. On average, the quality of

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[333]. Beneficiary, interview by research team, BA, 10 December 2012, interview BA20, transcript.
[334]. Data analysis based on empirical findings of this thesis in Aceh from November 2012 to May 2013.
[335]. Former NGO/consultant, interview by research team, BA, 15 December 2012, transcript.

government assistance was higher in BA (three per cent) compared to WA (one per cent).

The data indicate that INGOs were not only nominated for the highest quality of assistance, they also compared favourably to local agencies. Local government assistance was rated higher in quantity and quality in WA due to convenient geographic location. However, local government in BA was rated lower due to the total collapse of governing bodies during the tsunami. In comparison, WA beneficiaries rated the local government as providing higher-quality assistance than BA beneficiaries did. The findings from both regions demonstrate that INGOs were the best assistance providers in terms of quality and quantity. However, the local governments' figures and conditions of assistance were lower due to logistics, tsunami damage and centralised funding management.

4.11 Channels of Aid and Assistance

There were several methods used to channel tsunami aid and assistance to ACs in both regions: direct approach, via local government or through local NGO partnerships. The most common type was direct approach, which was the preferred delivery method of NGOs and ACs. However, this type of delivery overrode the authority of local leaders in the ERR phase. The problems resulting from this surfaced after NGOs left the region and ACs turned to local leaders to resolve their concerns. This made the matters even more complicated for ACs. Findings from BA and WA show that NGOs' modus operandi of delivering aid during ERR was more direct in BA than in WA. Most beneficiaries raised concerns about the overlapping of assistance between NGOs due to the direct approach.

The second type was delivery through collaboration with local government offices or agencies, such as BPBD or Pemda, which was common in WA. This was deemed the most efficient method because it involved local government in the delivery of aid. When NGOs left Aceh, ACs could access records and easily refer to government agencies for assistance. Finally, the findings show that partnership with locally based NGOs seemed to be the most efficient method in both regions. In fact, this method was the most efficient of all three, particularly in relation to ongoing communication

after PTR. Partnerships between INGOs and local NGOs created a greater sense of local legitimacy and ownership of PTR programs.

Overall, coordination and collaboration between NGOs and local government agencies at the province and local levels made a great deal of difference in both regions. Early coordination between all stakeholders was essential to avoid the overlapping of aid and the wastage of funds. In WA, NGOs, with help from BPBD Meulaboh, had good coordination in place to avoid duplication and overlapping of the same types of programs. According to most participants in WA, the assistance after the tsunami came through the local district office (Pemda). Pemda distributed necessities to ACs from aid provided by NGOs. This coordination was well underway, even during the early hours after the tsunami. The close coordination between local leaders and NGOs eliminated overlapping issues altogether, allowing funds to be spent more effectively.

However, the geographic location of the local administration office in BA (coastal) compared to WA (inland), hindered coordination between the two regions. While the epicentre of the earthquake was closer to WA, the impact on BA's densely populated coast affected NGOs' responses in the immediate aftermath. Another impeding factor was the different conflict intensities in each region and the proximity of conflict areas to tsunami-affected areas.

4.12 Conclusion

This research showed that the first form of assistance after the tsunami came from local communities. In addition to this immediate assistance, the first agencies to provide an emergency response were INGOs, which managed to reach ACs before the Indonesian government did. Almost 98 per cent of respondents received a first aid kit and necessities from NGOs instead of government agencies. Only 20 per cent expected some assistance from the government when they were in the emergency and recovery phases. As the Indonesian government did not have a disaster mitigation blueprint before the tsunami, the presence of NGOs and other international agencies was essential. However, after the disaster, the government provided financial assistance in the form JADUP. Some families received JADUP a couple of months after the tsunami, while others received it after one year. The payment ranged from

IRP70,000 to IRP100,000 per head. This compensation was paid to every survivor in the family.

Most respondents claimed they were satisfied with the assistance rendered by NGOs after the tsunami. They received SEMBAKO,[336] also known as nine types of basic food items (including rice and other ingredients) for two years. Most SEMBAKO were provided by NGOs and ACs continued to receive them during their stay in temporary accommodation.

SEMBAKO made a significant difference to ACs, especially in sustaining life after the tsunami. However, this long-term assistance created a dependency syndrome in Acehnese communities. Due to the large scale of the disaster and high casualties in Aceh, many international agencies assumed that Acehnese communities needed to be taken care of rather than guided and empowered to overcome their traumatic experiences independently. Based on this assumption, ACs occupying temporary shelters became reliant on NGO assistance rather than taking responsibility for rebuilding their lives.

The empirical findings also indicated that most development aspects in post-tsunami management were only integrated on a small scale in both ERR and RR phases, due to time constraints and pressure to spend funds quickly. This thesis argues that long-term development plans need to be integrated as early as possible in the ERR phase through AC active participation towards greater ownership of the PTR.

[336]. SEMBAKO consists of rice, sugar, fruits, vegetables, meat, poultry, butter, cooking oil, milk, egg, petrol, gasoline and sodium or nutriment salt.

Chapter 5: PHASE II REHABILITATION AND RECONSTRUCTION
Socio-Economic Development Programs

5.1 Introduction

This chapter focuses on socio-economic programs planned, designed and administered mostly by NGOs for ACs to improve their socio-economic climate in the RR phase. The discussion on CFW programs in the ERR phase (see Chapter 3) explained how these programs were established as temporary solutions to help improve ACs' economic health after the tsunami. Findings from this research show that this conventional type of socio-economic program generated dependency syndrome among ACs in Aceh. Despite CFW's target to improve the severely affected physical conditions of ACs, it instead disrupted the existing social fabric and structure of the community.

Aceh's pre-tsunami economy was already in a vulnerable state due to underdevelopment, which can be linked to 30 years of protracted conflict in the region. This vulnerability increased after the tsunami. PTR in Aceh needed to consider these pre-existing factors. The dual human-made and natural disaster added greater complexity to planning and implementing humanitarian action, recovery and development. Further, before the tsunami, there was no international consensus on how humanitarian support and development should be integrated[337] into the LRRD framework.

Discussion on concepts such as participation and CB and their link to economic health can be found in Chapter 2. Exploration of these concepts highlights the importance of participation as a vital part of CB in PTR. These terms will be discussed further to examine the link between integrated approaches in these programs using the LRRD framework as the main base for PTR analysis.

[337]. Lloyd-Jones, *Mind the Gap!*, 12.

5.2 Programs in the Rehabilitation and Reconstruction Phase

Phase II of PTR was mainly divided into three types of programs: social development programs, psychological development programs and physical development programs. These initiatives contributed to long-term development in Aceh.[338] Physical development programs encompass land rights and ownership issues, PHR, reconstruction of public facilities (including TM facilities), schools, hospitals and other public infrastructure. Psychological programs include physical and mental health services.

This chapter focuses mainly on socio-economic programs from the beneficiaries' perspectives. Chapters 6, 7 and 8 will elaborate on psychological and physical development programs. Under the social development programs, there are three main sectors: fisheries, agricultural and small to medium business entrepreneurship. These three programs were the main schemes that affected the economic health of ACs after the tsunami. These three sectors were badly damaged due to their proximity to the coast. Tables 5.1 and 5.2 illustrate the beneficiaries' needs, interests and level of participation in these programs.

Table 5.1: Most Beneficial Programs in Rehabilitation and Reconstruction[339]

Region	BA (%)	WA (%)
What kind of program has been offered to you in assisting you after tsunami?		
CFW programs	77	83
Socio-economic development programs	66	22
Psychological development programs	42	39
Physical development programs	62	50

[338]. Brusset, *A Ripple in Development?*, 84.
[339]. Data analysis based on empirical findings of this thesis in Aceh from November 2012 to May 2013.

Table 5.2: Response of Overall Benefits and Advantages of Rehabilitation and Reconstruction Socio-Economic and Livelihood Programs[340]

Livelihood and socio-economic	Responses	BA (%)	WA (%)
Improving overall socio-economic	Y	88	89
and livelihood	N	12	11
Improving general wellbeing	Y	92	83
	N	8	17
INGO livelihood program benefit	Y	88	72
to general wellbeing	N	12	28

The importance of programs to beneficiaries was measured by the extent to which they helped ACs sustain a steady socio-economic climate. AC participation was determined by how long the programs required input, ACs' satisfaction levels and how the programs assisted in the overall outcome of the long-term RR process. Using empirical findings as evidence, this chapter will also analyse the role of main stakeholders (local government, government agencies and NGOs) in the programs. The combined efforts of these stakeholders to integrate these programs as part of regional and national developmental planning was important in building a sustainable post-tsunami economy.

The importance of integrating LRRD framework was supported in the literature and by early assessment reports on program outcomes in Aceh. For example, the roles of all agencies were performed more effectively when program planning and implementation was coordinated.[341] The lack of an integrated approach in both phases in adapting LRRD into long-term development affected the sustainability of ACs' post-tsunami economy.

5.3 Socio-economic Programs

In relation to economic sustainability, the findings indicate that ACs in both regions had different preferences, often based on socio-economic factors, which affected their decisions on whether to return to their pre-tsunami employment. Socio-economic

[340]. Ibid.
[341]. Jon Bennett et al., *Coordination of International Humanitarian Assistance in Tsunami-Affected Countries* (London: Tsunami Evaluation Coalition, 2006), 57.

factors influenced ACs' job choice after the tsunami. There are two types of socioeconomic activities that had been the preference of ACS in Aceh, namely fisheries and enterepreneurship. The findings show that, in BA, 65 per cent of people remained employed in their pre-tsunami industries. A further 35 per cent, mostly fisheries workers, were employed in other sectors, such as entreprenuerships, social security service, due to fears of returning to the sea. Meanwhile, in WA, 89 per cent of survivors continued in their pre-tsunami roles; only 11 per cent changed employment. In BA, most coastal communities, especially fisheries workers, were traumatised by the tsunami, prompting them to seek alternative employment after the disaster.[342]

5.3.1 Fisheries

The coastal communities in Aceh mostly relied on fishing and aquaculture as their primary income sources. The tsunami damaged almost 90 per cent of the fisheries and aquaculture sectors. This includes fishing equipment such as boats, nets and aquaculture farming ponds. For the fishing industry, workers encountered problems with the replacement boats received in the RR phase through livelihood recovery programs. There were also issues with the material and time frames for boat reconstruction. These two issues affected ACs' decisions on whether to continue with fishing as their source of income. While these problems might not have seemed significant to NGOs and donors, the disruption to beneficiaries' business activities was extreme and affected the long-term development of the broader Aceh fisheries sector. The tsunami also altered most geographic landscapes, including coastlines, which were cluttered with debris. After the tsunami, traumatised fisheries workers halted their usual activities. It took three to six months for fishing activities to return to normal.

The following discussions are based on primary research data. The analysis includes an examination of the type of boat, the materials used to construct the vessel and the time needed to build a high-quality boat. Inappropriate asset replacement and its effects on the participation levels, CB, long-term development and livelihood of ACs in fisheries sectors will also be explored.

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[342]. Data analysis based on empirical findings of this thesis in Aceh from November 2012 to May 2013.

5.3.1.1 Type of Boat

In Aceh, there were four types of boats received by ACs during the RR phase. The first was known as '*pancing'*, which is usually shared by fisheries workers. This boat was only suitable for recreational activities, as its size and build did not meet the commercial requirements of survivors. The second type of boat was called '*tunda/tarik'*, which is usually used as a towing boat in deep-sea fishing. In the Mesjid Raya district in Krueng Raya alone, AMCROSS donated 35 *tunda* units. According to the local district office, this boat was quite useful since it met the needs of fishing communities because of its bigger size and greater engine capacity.

The third type of boat, known as '*Labi labi'*, was supplied to ACs through coordination between NGOs and the local Social Development Office. This type of boat was the best option for deep-sea fishing activities and to catch bigger fish (e.g., sharks). The last boat is known as '*Tarik Palo*'. It is used by fisheries workers to transport smaller boats to the port for repairs. This boat was also donated by AMCROSS to fishing communities.[343]

Past literature concurs with the inappropriateness of the boat size. For example, as reported by Indonesian relief organisations, the boat donated by the Kuwait Red Crescent Society failed the test. Local fishers checked 10 boats out of the 118 donated to ACs in Lhok Plimbang (Bireun district). Boats did not survive the waves and a few engines were lost during the test. Further, the 23-horsepower engine was too powerful; ACs only needed 5.5 horsepower engines. The boat design, width and depth were also unsuitable. According to the PLA secretary, if the boat was 9 m long, it should be 2 m wide and 1.2 m deep. However, the boats were 9 m long, 80 cm wide and 60 cm deep, with a flat bottom from the front side to the rear that caused water to seep into the boat whenever waves hit.

Further investigation found that the boats by the Kuwait and Saudi governments were never used by fishing communities for commercial activities. They were only used for occasional fishing activities, due to their inappropriate size and engine capacity. These boats were ordered from Makassar South Sulawesi. The design should have

[343]. SEKDA *Kec. Krueng Raya, Mesjid Raya Aceh Besar Burhanuddin* 52 Secretary *Kecamatan* (SEKCAM), interview by research team, Banda Aceh, 12 December 2012, transcript.

included input from local communities.[344] The efforts by the Kuwait Red Crescent to provide fishing equipment failed to meet ACs needs. Interestingly, research data indicate that many small fishing boats were stranded along the coastline in Krueng Raya, Aceh Besar.

MC, an INGO that actively assisted the fisheries community, explained the reasons it did not venture into boat replacement as part of rehabilitation efforts. First, MC lacked expertise in fishing equipment. Second, fishing boats were too expensive. There were many cases in which NGOs tried to assist ACs without proper expertise in the field. This ultimately created more long-term economic obstacles for ACs.[345]

Instead, MC focused on building ISK and local capacity in the aquaculture sectors by assisting farmers to support fish ponds (*tambak*/*kolam ikan*) to restart their fisheries and by providing them with fish seedlings (*bibit ikan)* to support breeding projects. With most coastal communities owning fish farms that were destroyed by the tsunami, ACs needed more assistance with the *bibit* for fish, prawns and crabs to restart their fish breeding projects. The fish, prawn and crab harvesting cycles occur every six months. Stocks were mostly sea-breed fish, bred in *tambak* near coastal areas. A few months after the harvesting cycle, harvested fish are sold to the nearest market. The profit from the harvest is recycled as funds to purchase more *bibit* for their *tambak* business. This provided sustainable growth for the fish breeding sector.

MC prioritised ISK and human capacity development in delivering assistance to fishers. It coordinated with other more experienced local NGOs, such as the fisheries-focused PLA, to acquire expertise and monitor fishing boat reconstruction. Due to its lack of expertise in boat reconstruction, MC focused solely on providing fish farmers with soft skills while coordinating with other NGOs on other types of assistance.[346]

These examples illustrate how crucial it is for NGOs to use existing local human capacity and assets. The Aceh fisheries sector is only one part of the ACs' economy. Providing physical assistance, such as fishing equipment, did not guarantee CB in

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[344]. Indonesia Relief, 'Kuwait Red Crescent Donated Boat Unusable', ReliefWeb, 10 April 2005.
[345]. Mercy Corp, interview by research team, Jakarta Indonesia, 14 November 2012, transcript.
[346]. Ibid.

ACs. In Aceh, the boats were not desired by ACs because they did not meet the unique needs of local fishers.

According to Jin Sato, homogeneity was one of the reasons ACs did not benefit from the boat aid. In the case of these boats, assistance was less desired because 'individual units of any commodity are indistinguishable with respect to features that make the commodity desirable'.[347] Essentially, the same solution is not suitable for unique recipients. The boat assistance was supposed to identify and distinguish the different needs of fisheries communities by conducting NA. The data from NA would have helped NGOs to ensure the vessels were suitable for ACs.

5.3.1.2 Impact of Relocation on Fisheries

The relocation of ACs to new settlement areas also affected sustainable economic development. For example, most relocated families in Neuhen today were fishers and farmers with a small income. Only a small percentage of relocated communities in Aceh Besar were government workers. After the tsunami, there were about 1,500 families with 11,000 survivors. In 2013 these numbers have doubled. The population increase was mostly fuelled by migrants from Pidie, Sigli and East Aceh, from fisheries villages. However, after migration to Aceh Besar, migrants faced economic challenges due to difficulties in adapting to the local environment.[348]

The problem was largely related to a lack of economic sustainability. Income was scarce and insufficient to support households. Relocated families also faced transportation problems due to the distance between relocation areas and workplaces. Most were farmers who used to own farms and paddy fields on their land. Now, surrounded by sea and mountains, they were forced to adapt with little employment choice. Due to an unsustainable socio-economic climate, relocated communities relied on doing odd jobs after the relocation. This economic uncertainty is the main reason funding requests still continue in Aceh.

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[347]. Sato, 'Matching Goods and People', 77.
[348]. Beneficiary, interview by research team, BA, 12 December 2012, interview BA25, transcript.

5.3.1.3 Fisheries and Socio-economic Climate

As illustrated in Section 5.3.1.1 and 5.3.1.2, the main socio-economic difficulties in the fishing sectors were due to a lack of local ISK integration. Many issues raised in socio-economic development programs were caused by the failure to conduct NA. For example, in the fisheries sector, it was evident that some boat recipients were not fishers, which explains why they sold their donated boats.[349] Further investigation at the district office in Mesjid Raya Krueng Raya (Aceh Besar) showed that most of these boats were sold because they did not meet the needs of workers. The community sold the boats and made use of the profits.

This indicates a lack of assessment by NGOs. The local *Sekretariat Daerah* (SEKDA) suggested that NGOs to consult with local communities before initiating aid programs. Liaising with local NGOs would have improved the economic health and long-term viability of the fisheries sector.[350]

5.3.1.4 The Setback of Group-Based Projects

Findings indicate that Acehnese communities disapproved of group aid or sharing programs. NGOs' socio-economic programs developed group assistance schemes that affected individual commitment in undertaking the programs. For example, 'group syndrome' caused some boat recipients to sell their equipment and spend the proceeds on motorcycles and cars. The lack of local ISK integration resulted in the misuse of funding.[351] Some beneficiaries in fisheries communities explained that the idea of sharing boat assistance was not ideal for ACs.

The fishing asset replacement assistance from Serasi and Pasca local NGOs failed to contribute to long-term economic growth. Each family was supposed to receive a boat, but this village only received four boats. The boats were unsuitable for local fishing activities. Further, the group-based program was perceived as a disadvantage. For example, two families had to share a boat that cost up to IRP1 million. Due to unsettled grievances among group members and the unsuitability of the boat, they

[349]. SEKDA *Pak Reijane* from *Paya Kameng* (victim and *Ketua posko* after the tsunami), interview by research team, BA, 12 December 2012, transcript.
[350]. Brusset, *A Ripple in Development?*, 63.
[351]. SEKDA *Pak Reijane* from *Paya Kameng* (victim and *Ketua posko* after the tsunami), interview by research team, BA, 12 December 2012, transcript.

sold the boat for only IRP300,000. This was another factor that contributed to the failure of some livelihood programs.

According to local PLA (BA), the actual cost of building a proper fishing boat, complete with all equipment, was approximately IRP3 million. However, the downsizing of construction costs and speedy completion[352] caused the boat to be incompatible with ACs' fishing needs. The problem began when the elected representative of the village for the program tender bought the boats from Medan. Boats manufactured in Medan did not meet the fishing requirements of Aceh. The ongoing boat issues disrupted the socio-economic climate in Gampong Genting.[353]

The group-based socio-economic programs also failed to benefit locals, who preferred individual funding. The findings indicate a higher preference for individual-based livelihood programs compared to group-based initiatives.[354]

In the aquaculture sector, an entrepreneur explained that repairs to fish ponds (*tambak ikan*) should have been conducted by locals to encourage greater community participation.[355] Participation among local communities would have built a sense of ownership and responsibility. Repairing, scaling and measuring was the main setback faced by the local fishpond entrepreneur because each process took longer to complete. These processes were quite complicated and required heavy machinery, such as backhoes, to restructure the *tambak* landscape.

Local elders suggested the combination of heavy machinery and local participation in aquaculture was the best way to ensure that the project contributed to economic sustainability. According to ACs who participated in this program, NGOs paid IRP40,000 per day to rent the machine to clear tsunami debris. This encouraged local participation to help the community reconstruct the aquaculture, fish and farming local capacity. The main aim of the RR phase was to assist all communities without

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[352]. The boat was constructed within a month and cost less than IRP1 million.
[353]. Current *Geuchik* (head of village) *Gampong Genting Timur Sigli Pidie Jaya*, interview by research team, Pidie Jaya, 12 December 2012, BA24, transcript.
[354]. Beneficiary, interview by research team, WA, 14 May 2013, CM10, transcript. Past studies report cases of misused INGO aid. For example, one INGO assisted the AC with the reconstruction of large fishing boats that cost almost IRP1 million each. Today, there is no evidence of this project in the Mesjid Raya communities.
[355]. Beneficiary, interview by research team, BA, 5 December 2012, BA9, transcript.

discriminating between tsunami or conflict-affected communities. Both communities were equally affected by the tsunami and development for all groups was economically advantageous.

Conversely, there were also difficulties resulting from the failure to conduct NA (e.g., the failed attempts to replace fishing boats). Asset replacement did not fit into the process of reconstructing the fishing industry.[356] The lack of understanding of local fisheries was partly caused by time constraints. As suggested by the *Geuchik* from the Pidie Jaya region, including ACs in the process of fishpond reconstruction would have benefited ACs, while nurturing a sense of ownership and legitimacy that would encourage economic development.[357]

The lack of understanding of the importance of local knowledge led to the creation of ineffective fisheries programs. From the LRRD perspective, the asset replacement scheme had undermined local capacity development and added a new problem of overfishing in Aceh waters.[358] LRRD analysis indicates that fishers have no secure network in which to market their produce, which again was triggered by overfishing. The effect of too much aid led to overfishing, creating an unstable market for fisheries workers.

Flaws in the flow of aid and funding affected the realisation of LRRD elements in the fisheries sector. Figure 2.3 (see Chapter 2) illustrates the importance of setting long-term targets. NGOs' immediate moves to replace fisheries assets did not aim to improve CB in local communities. Providing ACs with fishing gear alone, without a clear long-term target, led to many problems later. Local participation is important when trying to establish a sense of ownership and sustainability.

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[356]. Brusset, *A Ripple in Development?*, 110.

[357] This mishandling of funds by the previous *Geuchik* in *Gampong Genting* (*Pidie Jaya* district) affected the economic health of the fisheries sector. For example, a Korean INGO allocated funding for the fishing communities to buy fertiliser. However, the fund only benefited preferred individuals. Another INGO awarded IRP400 million for facilities and irrigation rehabilitation. However, the ex-*Geuchik* failed to repair the irrigation system in the village and there was no record of how the remaining funds were spent. The donors have provided sufficient livelihood reconstruction aid to help 50 per cent of the AC. However, the local middle manager of the funds undermined this effort due to a lack of monitoring.

[358] Brusset, *A Ripple in Development?*, 110.

As discussed earlier in the chapter, group-based programs failed to consider social network dynamics. Apparently, the failure rate was high for new group members compared to that of genuine pre-tsunami fishing groups. Analysis led to the conclusion that new groups were established based on perceptions of mutual benefits from aid and funding alone. The success and failure of group-based programs is reliant on pre-existing local fishing networks and well-established supply chains and distribution channels.

Another issue in sustainable climate in fisheries was the failure to establish a system for marketing the produce. ACs claim that NGOs did not provide proper sales channels or marketing strategies. The findings show that in the development phase in Aceh, successful fisheries groups received individual aid. Alternatively, successful groups were those who had existed before the tsunami.

Due to a lack of coordination and observation, ACs manipulated aid and funding for other purposes. NGOs' failure to coordinate had been an advantage for ACs, resulting in wasted funds without any real long-term benefit or CB for recipients. This also led to the overlapping of aid for some beneficiaries, while other ACs went without funding. Some ACs were deprived of assistance due to limited access to areas, such as Pulo Aceh, which was virtually inaccessible after the tsunami. There were also issues in the capabilities of INGO that were limited to their expertise and specialisation area. Most NGOs were forced to enter areas in which they had no experience.

NGOs need to be prepared with sufficient local information to understand the unique needs of individual communities and sectors. For example, a thorough NA should include the fish catching season as a factor that determines the amount of debt incurred by fishers during the low-catch season. Analysis should also include the effects of seasonality factors on the ability of fishers to repay debt. The findings show that due to time constraints, NGOs did not wait to examine the finer issues of the fisheries sector. NGOs do not have the expertise to study and understand fishing activities.[359]

[359]. Brusset, *A Ripple in Development?*, 63–64.

5.4 Small–Medium Entrepreneurship Programs

Under the small–medium entrepreneurship programs (SMEP), ACs were given micro-credit financial aids in the form of interest-free short-term loans. This program was collaboration between local MFI and banks. Funding aimed to assist local small and medium entrepreneurs to develop businesses in Aceh. The business funding mostly came from NGOs. About 54 per cent of BA households and almost half the households in WA claimed to have received some form of business funding.

There were two types of funding under the SMEP in Aceh. First, micro-credit assistance (MCA), a type of loan, was offered by NGOs with Memorandum of Agreements with local financial institutions or MFI to help monitor the progress. Another type of funding was *wang hibah*, which was given to ACs without any collateral or conditions to repay the sum. Most beneficiaries in Aceh received direct CBA under the second type of arrangement. According to active NGOs in Aceh, MC's RR programs (MCA) operated in BA for five years. MC programs in BA provided short-term loans to ACs through MFI for small and medium business entrepreneurs. This type of funding assisted ACs with their economic activities in various sectors, including agriculture, home industries and fisheries.[360]

The amount of this funding ranged from as low as IRP500,000 to IRP3 million. According to NGOs, most business funding offered through the repayment system arrangement was later converted into *wang hibah*. Failure to establish proper coordination and observation arrangements led to the difficulties ensuring that funding was being used appropriately. Due to this, ACs spent the funds on individual expenses, which forced NGOs to convert the loans to *wang hibah* with no requirement for repayment.[361]

At the time of the interview, beneficiaries did not own any business despite receiving business funding during the RR phase. They switched back to their previous source of income when the new businesses failed. This indicates that business funding without

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[360]. Mercy Corp, interview by research team, 14 November 2012, Jakarta Indonesia, transcript.

[361] BA21 and BA10 received business funding from *Mitra Fakir Miskin*. BA10 lived in the barracks from late-2004 until September 2011 (seven years). Electricity and water were free during this time. BA10 also received funds from CARE International (IRP2 million). BA19 received Uplink business funding of IRP2.5 million, which was later converted to assistance.

any collateral or conditions in place for repayment may not lead to business development. Another downfall of this type of funding was the limited marketing knowledge to promote products. Most SMEP entrepreneurs attributed the failure of their businesses to a lack of marketing strategy, demand and supply issues and an oversaturated market.[362]

The misuse of funds provided for entrepreneurship can be partially traced to a failure to integrate NA input into program planning. In Aceh, information from NA was not included in the planning of programs. Good participation practice emphasises the importance of including local knowledge in the design, planning and implementation stages to produce an economically sustainable program. Input from the NA would have helped donors understand the hurdles in assessing existing market capabilities. The assessment should have studied the possibility of bringing in investors to boost and develop Aceh's already weak economic conditions (due to prolonged conflict). Without any investment plans for Aceh's economy, SMEP did not survive.

Some beneficiaries of the funding used appropriate marketing strategies and managed to succeed. For existing business owners, the funding was an added benefit to expand their enterprise, and they managed to venture into new activities to improve their financial position and the broader Acehnese economy.

ACs in Aceh have close-knit relations and strong communal networks that were an advantage to SMEP. ACs found support and strength by staying close to their local communities during their stay in temporary shelters and their transition to permanent housing.[363] Those with skills and experience were able to manage the funds well and enhance their socio-economic status. Additionally, the newly acquired ISK benefited the community. However, almost 70 per cent of ACs spent the funds on daily expenses and were unsuccessful in their business ventures.

Despite the many obstacles facing primary stakeholders in SMEP, the number of successful entrepreneurs rose due to an increase in loans secured through collaboration between MFIs and NGOs. A well-prepared business proposal with loan

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[362]. Burkey, *People First: A Guide to Self-Reliant Participatory Rural Development*, 104.
[363]. Researcher and senior lecturer from the Faculty of Agriculture at Syiah Kuala University, interview by research team, BA, 16 December, transcript.

repayment plans was the primary requirement to be eligible for this funding. Upon NGOs and bank approval, site visits and evaluation were also included as eligibility conditions. Based on findings in BA, most successful business owners received MFI financial credits from NGOs to help expand their businesses. For example, there were a few sectors that MC had assisted in the development phase, such as brick industries, tailoring businesses, bakeries and fish farmers.[364]

One respondent mentioned how the brick industry in his village grew when aid was provided by NGOs under a group-based program. Despite the poor success of group-based programs, MC helped establish the brick industry by *kelompok* in Aceh Besar Kecamatan Baitus Salam. MC also supported ACs to set up domestic-based small industries, such as bakeries and tailor shops. MC's Jakarta office estimated that ACs in Aceh required approximately 70 per cent support for full asset replacement to reconstruct their livelihood.

The discussion indicates that NGOs tried a few methods before determining the best strategy to support the local economy. This was quite costly since there was no method to recover unpaid loans from ACs, because there was no monitoring or observation between NGOs and MFI institutions.

Another participant received IRP3 million as business funding from Oxfam to start a tailor shop.[365] In addition, a local NGO, Mataraja, also gave IRP700,000 per head of household (KAKA). With this support, she started the tailor shop and later expanded into other small businesses, such as bakeries and clothing enterprises. The main problem facing small businesses like these is the difficulties in sustaining income. Apparently, supply largely exceeded demand and a lack of marketing strategies caused the businesses to be in deficit all year.

There were also cases in which former fishers did not receive boat assistance. Others who were more fortunate switched from fisheries to SMEP and expanded their businesses with support from NGOs. However, small amounts of IRP1 million were

[364]. Other INGOs were mentioned by the AC, such as Oxfam and World Vision. Local NGOs YPK and MATARAJA were active in assisting and supporting SME programs.
[365]. Beneficiary, interview by research team, BA, 10 May 2013, CM1, transcript.

usually spent on personal interests rather than business investments.[366] These are further examples of the incompatibility between ISK and attempts at new CB. The design, planning and implementation of the programs did not match existing local capacity. The next sections illustrate how ACs benefited from SMEP. Most ACs managed to expand their businesses due to continuous support from NGOs or by placing their assets as collateral for credit.

5.4.1 Successful Entrepreneurs from Tsunami Socio-economic Programs

This section illustrates how participation and a sense of ownership can encourage the development of a sustainable economic climate. The cases selected show how genuine participation in SMEP produced fruitful and independent entrepreneurs.

5.4.1.1 BA5

Salawati is a fish floss entrepreneur from Merduati, BA. She and her husband have run a small–medium fish floss business since before the tsunami. This respondent had a remarkable business expansion within six months. The updates provided during the study acknowledged that this respondent had managed to buy the neighbouring property for IRP70 million to expand her fish floss factory. She mentioned during the first visit that she had been unsuccessful in her first few attempts. In 2005, she received credit of IRP38 million from LIPI, a government research agency. The business funding was in the form of fish floss processing machines to help develop her business. In terms of ISK development, the participant received assistance from a Swiss contact in her fish mongering training. The only training assistance from the government was from the Fisheries Department (*Dinas Perikanan*). BRR provided the fish floss packaging machine. Before the tsunami, she started the business by hiring 18 employees; only a few survived the disaster. She now has an additional 12 workers.

This participant claimed that her business was successful due to assistance and continuous support from NGOs and the government. The loss of her children had a psychological impact on her. However, she lifted her self-confidence and spirits to overcome her grief. Despite her loss, she fought against the odds and expanded her business to be stronger than it was before the tsunami. The key to her success was her

[366]. Beneficiary, interview by research team, BA, 4 December 2012, BA8, transcript.

determination to increase her ISK. She was awarded the entrepreneurship awards at national and international levels, including recognition from Japan.

This is evidence of integration of ISK in SMEP. It indicates that increasing ISK among ACs helped developed entrepreneurship capacity. This participant prioritised ISK development over funding. Undoubtedly, the business funding boosted her motivation and psychological strength.

5.4.1.2 BA13

Amirizal from Meuraxa Gampong Pie (BA) is a young man with a disability who has run a small coffee for 1.5 years in his village. The Program Nasional Peberdayaan Masyarakat Mandiri (PNPM), a local business organisation, funded his business from the beginning through a one-time short-term loan. To expand his coffee shop, he submitted his house certificate as collateral for IRP10 million from Bank Mustaqim via the Institute of Micro Financial. Apart from the *rumah bantuan* (housing aid) certificate, he was not supported with any SMEP funding. The land and house ownership made him eligible to be granted credit from the bank. He emphasised the importance of securing legal ownership.

The road to success for this participant was not comfortable. After the tsunami, he was physically challenged after having three unsuccessful amputation procedures on his feet. The disability did not stop him from becoming successful. As an individual with a disability, he was included in physiological programs by the government. However, the assistance did not help him develop ISK. This young man refused to be categorised as disabled and refused all disability assistance offered. He believed that he could only sustain his livelihood by self-employment as the job opportunities for people with disabilities were limited. He found his happiness and was married after the tsunami. The adaptability of this young man is an inspiring success story, and undoubtedly helped support his socio-economic development. Courage and commitment to success were the key factors in this success story.

5.4.1.3 BA2

Shahrizal Yusof from Meuraxa Ulee Lee (BA2) was a full-time fisherman who sold ginger water as his side income before the tsunami. Presently, he is still doing the

same business, and has expanded his small hawker-based business to a full shop. He received business funding from NGOs to start his business. This father of two, who lost his two-year-old daughter to the tsunami, had already begun his business two months after the disaster. The key to his resilience was self-recovery and healing. He commented that 'it is up to us to move forward with the assistance given by the NGOs. We should not be held back by the past'.

He gave up being a fisherman due to the psychological trauma of the tsunami. Today, focusing on his restaurant for a more sustainable livelihood has helped him overcome this trauma. This story is an example of how NGOs' direct CBA was used for a good purpose. After all, CB and ISK development is reliant on the ability to adapt and the willingness to learn: personal motivation with genuine intention.

5.4.2 Beneficiaries' Responses to Business Funding Program on Livelihood

There are various responses from ACs on how business financing affected their socio-economic sustainability. Some ACs had problems with business funding that affected their long-term socio-economic development. Further, some succeeded in maintaining a stable livelihood but found it difficult to sustain business funds without depending on continuous financial support. Relocated communities found that distance separated them from their source of income. Moving their economic activities to a new place was also not easy.

In this environment, local NGOs that understood ACs' needs, capacity and ISK level made a significant difference. YPK, a local socio-economic development NGO, focused on assisting the relocated communities. This group stated that economic issues were the main challenge that had to be overcome by relocated ACs. YPK emphasised the importance of including economic factors in the planned relocation area to help support Economic Development Resources (*sumber daya ekonomi*).[367] Relocation also forced beneficiaries such as fishers to rely on small business opportunities for survival.[368]

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[367]. Beneficiary, interview by research team, WA, 18 May 2013, CM18, transcript.
[368]. Beneficiary, interview by research team, WA, 11 May 2013, CM3, transcript.

A participant who owned a tailor shop at Pedayung in BA before the tsunami was now forced to continue his tailoring business in barracks in Bakoi. This survivor received IRP5 million in business funding after the tsunami to start his tailor shop. The business was disrupted when he was relocated to barracks and failed to repay the loan, which forced him to remain in the barracks. Saudi housing aid took seven years to complete, and the recipient was finally allowed to occupy the property in September 2011. The location of the barracks was about 20 km into the mountains, which was not conducive to SMEP. This participant now expects more business resources to help him set up his tailor shop. This is an example of dependency syndrome.[369]

NGOs discriminated against communities in conflict areas due to their proximity to formerly dangerous areas. A widowed respondent claimed that she did not receive any assistance from NGOs despite numerous assessments in her village. The village was close to the GAM hub in Pidie Jaya. Most NGOs had limited operations due to difficulty in accessing conflict areas. Tsunami-affected areas were easier to access and aligned with donor requirements for tsunami response.

Due to limited foreign agency access to GAM's main operational area in Pidie Jaya, only local NGO Serasi dominated the rehabilitation and house reconstruction projects. The monopoly of one local NGO led to limited funding for restoration of homes, leaving some survivors to fund repairs on their own. Conflict widows were entitled to receive livelihood and business funding under a government scheme for conflict widows.[370] However, the findings show that in most female-run households, the leader requires more business funding. This was may be due to the limited access to international NGOs and the monopoly of a single local NGO in the conflict-affected area.[371]

There were also factors that affected the livelihood continuity of ACs. First, without a proper NA, NGOs failed to determine the best form of assistance to suit ACs' unique

[369]. Beneficiary, interview by research team, BA, 8 December 2012, BA17, transcript.
[370]. Beneficiary, interview by research team, BA, 10 December 2012, BA20, transcript.
[371]. Beneficiary, Interview by research team, WA, 12 and 20 May 2013, CM 6 and CM21, transcript. Interviewees received assistance from the business fund. CM7 *Unggas* was provided with livestock to start a business that still exists. CM30 found it difficult to find work and had no funds to begin a business. BA26 stated that when NGOs gave business funding or livestock, recipients sold the stock or misused funds. Further, the community continues to be reliant on aid.

socio-economic needs. The second factor was that lack of assessment caused business funds to be wasted. For example, the funding used to provide all families with IRP1 million should instead be directed to ACs with ISK development and CB potential. A successful business sector requires ACs to be more assertive and have a genuine commitment to self-improvement rather than profit.[372]

5.4.3 Analysis

Most beneficiaries that participated in the research indicated the need to be compensated for sharing their experience and knowledge. This study faced obstacles finding volunteers among ACs to participate. Most interviewees expected something in return. Upon undertaking the fieldwork, the research team was warned of this expectation. To encourage participation in the interview sessions and avoid resentment, the team adopted an Acehnese custom of bringing a pack of sugar during visits to friends and relatives. This strategy worked and changed the mindset of ACs, as it revealed the genuine intention of the research to help find solutions for their problems. It was a simple gesture but sent an important cultural message. Further, it is best for the social researcher to assist the community to understand that a 'foreigner' does not always guarantee support or money.

The tsunami had created dependency and drastic changes in the socio-economic structure of the Acehnese community. For example, before the tsunami, house rental was only IRP100 million a year. After the tsunami and the influx of local and international volunteers, rental charges rose to as much as IRP200 million per annum. This was due to low supply and high demand from NGOs and development agencies.[373]

NGOs were bound by donor criteria. The funding had to be spent exactly within the timeline of the donor, leading to a sudden increase in housing demand, and a 100 per cent rise in the rental rate. Funding was not an issue, but it became a problem in the developmental phase when rental prices continued to rise despite almost no demand for renting. It is a normal cycle of the economy that when there is demand, there should be supply. However, the demand during the short-lived RR phase had altered

[372]. Beneficiary interview by research team, BA, 5 December 2012, BA9, transcript. The household made efforts to obtain business funding from the Mercy Corp Wetland project to plant mangroves.
[373]. Ibid.

the community's social structure in an unconstructive way. Today, the rental rate keeps increasing and causing problems for the local community. [374]

The rental hike affected local institutions and NGOs that had limited resources. International and domestic NGOs had to compete to offer ACs lucrative benefits to encourage them to join the programs. There was a high inclination for ACs to choose NGOs with more lucrative packages rather than those with limited funding.

Local NGOs such as YPK offered strong CB and ISK development programs that will eventually help ACs sustain a stable socio-economic climate. The Acehnese society today is reluctant to opt for independent ISK development or CB programs over high incentive programs. This environment has nurtured the dependency syndrome, in which most ACs would rather passively wait for assistance. Incentive-based programs had a dire impact on public activities such as *gotong royong*. CFW programs also created dependency syndrome in the Acehnese community. While CFW was initially meant to alleviate trauma and loss, it indirectly disrupted the local culture and social structure of ACs. CB development in Aceh requires local participation in programs to empower the community. This is why CB programs are crucial in PTR.

Given the scale of the destruction and the amount of assistance received by the Acehnese, the plentiful aid had negative effects on long-term development in the ERR phase. The assessment of RR programs on was best evaluated once the community was self-sufficient. The period of comfort and ease during the ERR and RR phases formed a dependency on aid and delayed ACs ability to sustain their own economies.

Thus, the INGOs and agencies need to coordinate with local NGOs to build local capacity. According to Kenny, some local NGOs had already established a CB process through community development before the tsunami. This should be continued.[375]

The requirement to conduct NA initially should be a condition for NGOs to understand the reality of local living conditions in gampongs and villages. The challenges were not only to re-establish after the tsunami, but also to overcome local

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[374]. Ibid.
[375]. Kenny, 'Reconstruction in Aceh', 210.

distrust of foreign assistance. Programs such as CFW, which is paid daily, have encouraged the development of dependency syndrome. Long-term livelihood and socio-economic programs (such as micro-credits, grants and soft loans)[376] provided via SMEP have resulted in better outcomes from a CB perspective.

5.5 Conclusion

Socio-economic programs were the backbone to CB in Aceh. There are many examples that indicate that AC participation increases CB. For example, overstretching CFW programs minimised CB, despite the high level of participation due to incentives. Dependency syndrome later affected the level of involvement of ACs in another socio-economic program, in which ACs should have been encouraged to participate voluntarily rather than based on the offer of incentives.

NGOs did not conduct proper NA to identify pre-existing economic problems in Aceh. Implementing conventional disaster reconstruction programs did not guarantee the desired outcomes. Factors such as social structure, local knowledge (people knowledge), local capacity and ISK development need to be prioritised in the planning of programs to encourage CB. Overlooking NA data created problems with the implementation of programs. NA information should help NGOs better understand the economic needs of ACs.

Socio-economic programs in Aceh were only partly effective in achieving their objectives. The participation of ACs was taken for granted in CFW. ACs need to participate for the benefit of economic sustainability. CB in this area needs to consider marketing strategies, the sustainability of economic activity and the ability of ACs to independently use ISK to enhance their CB.

Another weakness in NGO's program implementation was the lack of evaluation. There were no monthly or annual monitoring activities scheduled to evaluate the benefit of the program for the communities after the implementation phase. According to a local researcher, NGOs left the follow-up process to field staff who lacked the experience to manage evaluation. Most field staff divides funds into a 20:80 ratio, in which 20 per cent of the aid is reserved for them. There were also

[376]. Ibid., 211.

negotiations between local staff and beneficiaries in which ACs were forced to accept the ratio, or risk the program moving to a nearby village.

Coordination between NGOs and government bodies is necessary to ensure programs continue to run after they are transferred from INGO management. Most local NGOs and ACs suggested that after these transfers, there should be constant monitoring and evaluation every three to six months. Continuous monitoring and observation from NGOs is crucial to the success of the programs.[377] For example, the continuous support and assistance offered by YPK, a local NGO in Meulaboh (WA), provided ACs with support in the form of training and development to allow the community to continue the programs.

Lack of partnership with local NGOs was the reason most INGOs did not continue with after-program support. Local NGOs play an important role to filling the gap left by departed INGOs. Beneficiaries need to be continuously assisted throughout the RR phase for better *sumber daya manusia*[378] development.[379] Discrimination between tsunami-affected and conflict-affected communities results in inequalities between the two segregated groups.

Some beneficiaries took advantage of the lack of coordination between primary stakeholders. The communities were not transparent on the aid and assistance that they had received and kept informing NGOs that they have not received any aid. As a result, there were overlaps and some beneficiaries received more than they deserved, while others were overlooked. The lack of coordination between stakeholders contributed to problems in the development phase, especially the government's failure to coordinate the transition process into the developmental phase.[380]

Local government administration should be involved in asset replacement schemes and knowledge transfer processes. It is the responsibility of the local government to ensure that the all fish markets, buildings, roads and other valuable infrastructure assets have been developed to support ACs' livelihood.

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[377]. Beneficiary, interview by research team, WA, 12, 16 and 18 May 2013, CM13, CM18 and CM6, transcript.
[378]. This refers to human resources development.
[379]. Beneficiary, interview by research team, WA, 25 May 2013, CM30, transcript.
[380]. Researcher and senior lecturer from the Faculty of Agriculture at Syiah Kuala University, interview by research team, BA, 16 December 2012, transcript.

Most ACs thought that better development programs and greater investment in industries would ensure the steady flow of money into Aceh to support the local economy. The lack of heavy industries was the main reason most contractors imported reconstruction materials, such as boats, from Medan. This caused aid funds to flow from Aceh to Medan and other places, leaving the Acehnese economy in a state of stagnation.[381]

ACs assumed that NGOs had the capacity to attract investors to further develop industries, thereby creating new employment opportunities and reducing inflation. The narrow focus on sectors such as fisheries and agriculture led to environmental issues like overfishing and no marketing network for ACs to sell their produce outside the Aceh region.

Gas and oil industries and palm oil plantations were located on the east coast of Aceh, while the northern Lhoksamawe played host to heavy industries (excluding fisheries and agriculture). When the focus of the RR phase was overwhelmingly placed on tsunami-affected regions, conflict-affected regions in the east and north with greater prospects for industrial investment were abandoned. Most communities did not flourish after the tsunami. Rather, they stagnated and relapsed into underdevelopment once the tsunami funding stopped.[382]

Aceh's economic situation did not improve, despite the influx of funding. Most NGOs focused on assisting ACs' micro-economic development, while the macro-economic development was left unchanged. After the NGOs programs ended, there was no existing industrial development in Aceh to support entrepreneurs to market their products. The government tried to secure foreign investment for large-scale industries with the hope that this would support micro-level economic development. The findings indicate that all tsunami aid was provided in vain. The region needed more industrial support to build a sustainable economy.[383]

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381. Beneficiary, interview by research team, WA, 25 May 2013, CM30, transcript.
382. Ibid.
383. Brusset, *A Ripple in Development?*, 59–60.

Chapter 6:
Permanent Housing Reconstruction

6.1 Introduction

PHR was one of the main activities in the RR phase that had a significant effect on the socio-economic climate of ACs. It was the only project in this phase that gave ACs a sense of ownership and legitimate participation. This community-based reconstruction gave ACs the opportunity to participate through *Kredit Pemilikan Rumah* (KPR), a local housing committee selected due to its trustworthiness and transparency to monitor contractors with the assistance of NGOs. However, the findings show that PHR experienced many problems, such as labour shortages and building material issues. The lack of human capital, resources and skills in Aceh attracted an influx of contractors from other parts of Sumatra, especially Medan.

This pattern of foreign employment caused funding to flow out of the region into other areas, depriving the local market of sustainable business activity. This section discusses the issues, problems and challenges faced by the main stakeholders in PHR (the beneficiaries representing ACs, local government and NGOs). Beneficiaries were the main recipients of PHR projects. NGOs' role was to serve as a medium between ACs and the Indonesian government. As the most observable physical RR project, PHR generally stands out as having the most successful programs and projects in the RR phase.

The findings from the research shows that the ability of individuals to make choices about the design and construction of their new home, and the engagement of communities through local committees identified as the two most appeling example of how direct participation affect long term socioeconomic sustainability in PTR in Aceh. The chapter also compared how does the choices given between contractor based and community based house recontruction effect the ACs satisfactory and livelihood sustainability. For example, community based reconstruction PHR recipient has higher level of satisfactory compared to contractor based PHR. However, this satisfactory level led back to whther they were given the choice or the choice was made for them. The following discussion in section 6.2 referring to table 6.1-6.3

explains why this two example of participation affect long-term socioeconomic sustainability.

On the other hand the findings also shows that NGOs and government agencies faced many specific issues in managing PHR in the RR phase. Problems originated from the lack of coordination between agencies and the need to spend funds immediately. These obstacles eventually affected ACs' long-term ownership of their houses. This chain of problems kept them vulnerable to disaster, which later affected their CB and livelihood sustainability.

This section will discuss issues with basic infrastructure directly related to PHR projects such as:

- the selection of seismic-resistant material and house design (and its effects on construction quality)
- misuse of PHR funding by local government agencies
- unskilled labour issues
- BBS v. BBB
- a lack of BBS in government planning
- socio-economic security
- conflict issues in PHR
- issues of coordination between the main stakeholders of PHR
- the impact of relocation on socio-economic/livelihood sustainability of ACs

These issues indirectly affected the wellbeing of ACs in the development phase. Despite this, most development agencies claimed that PHR was the most successful and visible physical reconstruction in PTR. This was partly true because PHR was a good foundation for the development of economic self-reliance. Under PHR projects, ACs could rightfully occupy their houses with legitimate ownership rights.

6.2 Beneficiaries' Satisfaction and International Non-Governmental Organisations in Permanent Housing Reconstruction Projects

Most ACs claimed that PHR was in fact a *hikmah*, or blessing,[384] from the tsunami and were grateful to NGOs for assisting with PHR. However, the combination of impetuous spending without NA data and the lack of integration and multisectoral approach in planning had dire effects on the long-term socio-economic development of ACs. The findings indicate that ACs' satisfaction levels were the highest in PHR projects compared to other programs in the RR phase.[385]

The main stakeholders involved in PHR in Aceh can be divided into several categories: NGOs, G2G, BRR and ACs. In BA, NGOs comprised more than 54 per cent of the main contributors to PHR funding, followed by G2G at 35 per cent, BRR at 12 per cent and a further four per cent from other direct public or private donors.[386] In WA, NGOs represented 56 per cent of PHR funding, followed by G2G and BRR at 22 per cent each. There were almost no private funders for PHR in WA; this region was an excellent example of PHR coordination. ACs received bigger houses (48 m^2 rather than 36 m^2 in BA) and there were no overlapping issues, unlike in BA. To measure the level of satisfaction among recipients of PHR, ACs rated the quality of their houses as 'good', 'average' or 'bad'. Table 6.1 presents the results from both regions.

Table 6.1: Satisfaction with the Quality of Permanent Housing Reconstruction in the Main Regions of Aceh[387]

Quality of houses	Good (8–10 %)	Average (4–7 %)	Bad (1–3 %)
BA	62	27	11
WA	72	17	11

In general, WA had a high percentage of 'good' quality PHR compared to BA. However, on average, the quality of BA was 10 per cent higher than WA. In both

384. Burke, 'Evaluation of the Linkage of Relief, Rehabilitation and Development', 82.
385. In interviews, the affected population indicated that changes in housing and livelihoods, rather than specific DRR interventions, had the biggest impact on their vulnerability to disaster hazards.
386. Data are extracted from the empirical findings of this research, conducted between November 2012 and June 2013 in Aceh.
387. Ibid.

regions, 11 per cent of ACs rated the quality of PHR as 'bad'. The evidence of the better-quality houses in WA was quite observable during empirical visits. For example, in BA, the Turkish, Saudi Arabian, Uplink (German), Canadian Red Cross (CRC), and Oxfam homes were rated as 'good' quality. The 'average' quality was attributed to NGOs such as UN Habitat, Canada, Germany and the Japanese Red Cross in BA. The 'bad' quality homes were mostly managed by BRR.

Conversely, the 'good' quality PHR in WA was different compared to BA in terms of the NGOs involved. Caritas, CRS, the Salvation Army and even BRR houses were among those were rated as 'good' in WA. Most ACs rated housing from *Buda Tsu Sze*, the Singaporean government, BRR, IOM, UN Habitat and HH as 'average'. The 'bad' quality houses were mostly from G2G donations, such as Qatar and Kuwait. BRR PHR was rated as 'bad' by almost 90 per cent of ACs in BA, mostly due to the lack of basic structure and facilities such as kitchenettes and washrooms.[388]

Good-quality PHR, built mostly by Turkish and Saudi Arabian teams, had direct and close monitoring processes with quarterly evaluation throughout the reconstruction process by engineers from the organisation's country of origin. For example, Saudi Arabian and Turkish PHR projects were 100 per cent owned and staffed by expatriates from these countries. This was a strategy by the donors from these countries to ensure satisfaction among ACs. Despite such strict evaluation measures, Saudi Arabian houses in BA took almost seven years to complete. Most other PHR projects were completed within one to two years.[389]

The difference in PHR quality between both cities in Aceh was affected by other factors, such as geographic location. For example, there are a few advantages in WA that are not present in BA. In WA, the main city of Meulaboh is located further inland from the coast. BA communities were located only a few km from the coastline. Tsunami waves reached between eight and 10 km inland in BA, while waves in WA surged 2 km inland.[390]

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[388]. Ibid.
[389]. Ibid.
[390]. Former head of administration in *Kec*, *Johan Pahlawan, Meulaboh BPBD Meulaboh*, interview by research team, WA, 13 May 2013, transcript.

6.3 Incomplete Basic Infrastructure

Incomplete infrastructure within PHR refers to projects that failed to include kitchenettes and bathrooms. Lack of these basic features led ACs to rate their houses as 'bad' and lacking in MSD. Multisectoral development refers to an integrated approach in PHR projects. A good MSD considers socio-economic factors in the planning stages. Failure to use this planning approach had serious implications on ACs' socio-economic conditions.

Table 6.2: Effects of Multisectoral Development on the Occupation of Permanent Housing Reconstruction in Aceh[391]

	WA		BA	
	Yes	**No**	**Yes**	**No**
Does your house have basic infrastructure such as primary and secondary connection of water, sanitation facilities and drainage?	88	12	100	0
Does primary and secondary infrastructure affect your occupation of your new house?	83	17	100	0

According the *Geuchik* in Desa Suak in Nagan Raya (Aceh Barat Daya District), the village's PHR project was aided by several agencies in 2006–2008. In the first phase, the Kuwait government built 101 units in 2006, BRR built 91 in 2007 and IOM built 31 in 2008. In the second phase, IOM built seven units and BRR built five. CRS built 10 houses, which were among the best in the village. The PHR project in this village built 240 houses. The *Geuchik* stated that each PHR project integrated different factors into the design. Most PHR projects installed prepaid electricity meters. PHR projects by IOM installed a well for WASH facilities. However, BRR and Kuwait did not build WASH facilities, leaving recipients to install this infrastructure at their own cost. The construction of wells cost ACs another IRP3 million.[392] Houses with

[391]. Data are extracted from the empirical finding of this research, conducted between November 2012 and June 2013 in Aceh.
[392]. Beneficiary, interview by research team, BA, 12 December 2012, BA24, transcript.

incomplete basic infrastructure were not the result of inadequate funding. The main culprits were intermediaries and contractors. In the absence of an effective monitoring and evaluation process, there were no quality control checks conducted throughout the process.

Sadly, most agencies chose to delegate all communication with beneficiaries to contractors, thereby excluding input and participation from ACs. *Pak mukim*[393] asserted that problems arose after the reconstruction, when agency representatives returned to evaluate the PHR and deliver keys to ACs. Donor agencies were dissatisfied with the results and the way their funding had been spent. The unmonitored spending of funds by contractors resulted in incomplete homes.[394]

Most G2G agencies, such as Kuwait and the Qatar governments, were highly suspicious that contractors had embezzled PHR funding and refused to continue assisting the communities. PHR funding was originally allocated to provide ACs with houses complete with basic infrastructure and tiled floors. Contractors were required to build a well and WASH facilities for ACs. Exclusion of these features forced ACs to renovate their houses before they could move in. The lack of community-based reconstruction led to the mishandling of PHR funds and resulted in poor-quality construction.[395]

By devolving all communication with beneficiaries to contractors, ACs were powerless to influence builders to consider their needs. The exclusion of ACs as primary stakeholders in PHR undermined the quality and delivery of homes. One local NGO agreed that corruption had caused PHR sponsored by the Qatar government to be delivered without kitchens and bathrooms. According to this INGO, the cost of homes was estimated to be IRP6.5 million. However, some PHR projects cost up to IRP70 million.[396] Thus, there were no standard prices; donors determined the cost of PHR units. Further, high-cost homes did not necessarily guarantee excellent quality. The IRP70 million unit was not deemed of high quality. Houses built by BRR carried the tagline 'Build back better', leading to expectations of high

[393]. This refers to the village leader.
[394] Burke, 'Evaluation of the Linkage of Relief, Rehabilitation and Development', 83.
[395]. Ibid., 81.
[396]. Plan International staff (previously with YCAR), interview by research team, Jakarta Indonesia, 7 June 2013, transcript.

quality. However, BRR units were considered low quality compared to other housing projects. For example, YCAR built houses of much greater quality for just one per cent (IRP7 million) of the cost of BRR houses (IRP70 million).[397]

Beneficiaries in BA complained mostly about the small size of bathrooms of their PHR unit. The inadequate WASH facilities delivered often did not match the house plan given to ACs in the planning stage. For example, in BA, one recipient was given a display house with an incomplete bathroom and kitchen. The house was built by BRR and was ready within three months, but the quality was only rated 'average'[398]

In WA, Meulaboh's BPBD office stated that local PHRs were mostly provided by Singapore. The Singaporean Red Cross built 1,500 homes, a local hospital and a port. Habitat for Humanity, a Singaporean INGO led by well-known former politician Suppiah Dhanabalan, partnered with Arisan, a local cooperation, to build houses of good quality.

6.4 Safety and Security Issues in Permanent Housing Reconstruction

Safety and security issues in PHR had drastic implications for AC settlements in Aceh. For example, houses constructed by the Saudi Arabian and Turkish governments were of much higher quality than BRR homes. The good-quality housing had attracted hoarders to the homes, who contested the possession rights of the legitimate owners. The huge difference in the quality of PHR projects triggered additional communal problems after the RR phase.

Another common concern among beneficiaries was the safe construction materials used in PHR. In BA, ACs were worried about the use of asbestos. Due to lack of communication between stakeholders and beneficiaries meant that agencies could not explain that the materials were not as harmful as they were claimed to be. As rumours and discussion spread quickly, the use of asbestos was also controversial in WA. The community was misinformed that houses built with asbestos, such as the *Buda Tsu Zhi* project, were medically harmful. Houses were abandoned by locals when other NGOs offered better-quality houses. UN Habitat faced the same issue at the beginning

[397]. Ibid.
[398]. Beneficiary, interview by research team, BA, 9 December 2012, BA18, transcript.

of the RR phase. However, the confusion was resolved when NGOs clarified that the asbestos was certified and did not pose a health risk. The district officer from BPBD Meulaboh, Pak Dadek, confirmed that extensive research on the use of asbestos had shown the material to be safe. The district office in WA gave thorough instructions to ACs in Meulaboh on the safe use of asbestos.

The resolution of this issue illustrates the value of good communication and coordination between stakeholders and beneficiaries. Further, it shows how two-way communication can have mutual benefits for all stakeholders. The same problem was handled differently in both regions. In BA, the lack of community consultation led ACs to abandon their homes. In contrast, WA ACs were assured of the safety of asbestos and remained in their houses.

At the beginning of first PTR phase (ERR), ACs were relocated to barracks while awaiting delivery of permanent homes. During the first two years, the occupants of barracks enjoyed free SEMBAKO and utilities. Once PHR was complete, ACs had to pay for their own resources.

However, further investigation at barracks in Bakoi indicated that some ACs remained in the barracks because of hoarder problems or incomplete PHR projects. These occupants continue to expect assistance from foreign aid agencies and NGOs. There were genuine cases in which ACs could not occupy their houses. For example, most ACs in Bakoi barracks were recipients of Saudi Arabian and Turkish housing. These homes featured three bedrooms, a kitchen and bathroom and were known for their high quality. However, they took over seven years to complete. During the empirical visit, the Saudi Arabian government distributed the keys to owners.

Organised crime in the form of land, insurance and housing 'mafias' was another major problem in Aceh raising security issues foe ACs. These groups were part of the hoarding problem. While their occupancy was considered illegal, the rightful owners of the houses (who were mostly widowers and renters who did not own land before the tsunami) had little recourse.

According to *Kecam* at the Mesjid Raya district, the *Geuchik* ordered the villagers to stay in these houses temporarily. When the matter was brought to *Kecam* to arbitrate, the illegal occupants of the house were required to vacate the property. As a fair

solution, the *Kecam* divided the houses equally between the villagers and the relocated community. These measures were taken to avoid the escalation of further problems relating to hoarders. However, the illegal hoarders refused to vacate the houses and took advantage of the situation.[399] ACs were forced to pay between IRP2–5 million to mafias before they could occupy their rightful homes.[400]

6.5 Misuse of Permanent Housing Reconstruction Funding

PHR projects in Aceh faced many challenges. The findings indicate that 50 per cent of ACs experienced the mishandling of funds at the village level and some at the INGO level. Mishandling of funding does not necessarily refer to corruption. It also relates to the immediate use of funds by NGOs to fulfil upward accountability, rather conducting an NA to ensure targeted spending. Input from NA is very important to ensure that local knowledge is integrated into the planning and implementation of programs. Almost all levels in the Aceh region were affected by the mishandling of tsunami funds.

For example, the current *Geuchik* of Gampong Genting Timur (Pidie Jaya district), claimed that the village had just IRP15 million left to fund the construction of 250 units. The current *Geuchik* claimed innocence and without access to the spending ledger, he could not explain how the funds had been spent. Previously, he was a member of KPR and conceded that funding had been mismanaged by the previous *Geuchik*.[401] This experience made ACs sceptical about appointing Serasi to lead a second generation of PHR project. Instead, ACs accepted an offer from UN Habitat to build 36 m^2 homes complete with tiles and bathrooms.

The research found that some first generation of Serasi homes were delivered without tiles. Conversely, UN Habitat had a standard requirement that foundations (*pondasi*) had to be at least 1 m deep. However, the project adopted contractor standards, resulting in a decline in quality. Only the display house was built to standard because it was monitored by the INGO during construction. The rest of the housing had

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399. PMI, International Red Cross (local NGO), interview by research team, BA, 29 November 2012, transcript.
400. Plan International staff (previously with YCAR), interview by research team, Jakarta, 7 June 2013, transcript.
401. Beneficiary, interview by research team, BA, 12 December 2012, BA24, transcript.

shallow foundations that were not deep enough to be seismic resistant, leaving them vulnerable to future disasters. It is fair to estimate that of 100 homes, only 25 met the original standards.

ACs were promised to be supplied with housing materials to assist them with self-repairs. However, these materials have never reached the ACs. Further, owners of tsunami-damaged homes claimed that they did not receive the promised amount of IRP20 million payment from UN Habitat because this funding was absorbed by intermediaries. Despite this, the overall quality of housing built by UN Habitat was much higher compared to the homes delivered by Serasi.[402] The findings show that unfulfilled promises were common in this part of Aceh, apparently due to its proximity to GAM's operations. According to ACs from this area, many NGOs promised to return with housing aid and conducted NA to gather data and information, but never followed through, presumably due to safety concerns.[403] In addition to the risk of conflict, the remoteness of this region may also have been a factor. These broken promises left a bad impression of NGOs on ACs.

Mismanagement of funds by Indonesian government bodies increased the level of mistrust among NGOs and beneficiaries in Aceh. The high number of corruption cases combined with a lack of transparency and coordination between the main stakeholders further damaged this trust. During the tsunami, the governor of Aceh was in prison for corruption allegations, which added to the perception that NGOs could not trust local authorities. These obstacles made it difficult for NGOs to properly coordinate with local stakeholders, prompting them to opt for a direct approach. NGOs did not trust the head of village (HOV) or the *Geuchik*. Instead, they requested that the community appoint a committee comprising the most trusted members of the village to lead the project. This organising committee (known as a KPR) was later appointed to manage the fund and monitor PHR on behalf of the AC.

It was only after BRR was established in early 2005 that most NGOs agreed to coordinate with local stakeholders to avoid problems and produce maximum benefits

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402. Ibid.
403. Beneficiary /Red Cross, interview by research team, BA, 10 December 2012, BA20, transcript.

for ACs.[404] Before the establishment of the BRR, NGOs used the direct approach to assist their beneficiaries. This led to other problems, such as the overlapping of aid creating several abandoned units in PHR settlements. Despite this, there were many more houses under construction, exceeding the actual number of houses damaged by the tsunami.

In total, there were about 300,000 people who lost their homes in the tsunami in Aceh. However, the housing data collected after the tsunami indicates that the request for new housing exceeded this number. In fact, more than 400,000 houses were built during the RR phase.[405] NGOs in Aceh focused on housing aid as the main target in the RR phase. Overfocusing on PHR as a way to instantly spend the tsunami aid led the ACs offered more than one unit of PHR due to a lack of coordination between NGOs.

6.6 Water, Sanitation and Hygiene and Multisectoral Integration in Public Housing Reconstruction

WASH was an integral part of MSD in PHR. There were three types of WASH systems in Aceh: ring wells and drilled wells (*sumur boor*), water pipelines and natural sources, such as rivers. Almost 80 per cent of ACs still rely on ring wells for their WASH needs. There were two types of well. Ring wells were dug just far enough to reach the natural spring water source. The *sumur boor*, best described as a proper well, was dug a few metres deep using heavy machinery. The *sumur boor* was a bigger well, usually built by the community as a shared-cost project. Sometimes a few families shared one *sumur boor* as their WASH source. Aceh was lacking in good pipeline systems and was still very much underdeveloped. Only about 10 per cent of ACs used the second type of WASH facilities in Aceh. The data indicate that approximately 10 per cent of Aceh communities still rely on the third type of water source: rivers or spring water.[406]

Most ACs cited the lack of multisectoral integration as the cause of their difficulties settling into their PHR. Multisectoral implementation is an integrated approach in RR

[404]. Former NGO/consultant, interview by research team, BA, 29 November 2012, transcript.
[405] Former NGO/consultant, interview by research team, BA, 29 November 2012, transcript
[406]. Data are extracted from the empirical findings of this research, conducted between November 2012 and June 2013 in Aceh.

programs and is only possible through close coordination between main stakeholders. In BA, almost 100 per cent of beneficiaries of PHR projects claimed an integrated or multisectoral approach would have increased the comfort of their home and helped sustain their livelihood after the RR phase. In WA about 83 per cent identified the significance of multisectoral integration to PHR projects. The remaining 17 per cent claimed that multisectoral integration was used to develop their homes or that it was not necessary for sustainability.[407]

The lack of WASH facilities was clearly the main concern of respondents in both cities. About 73 per cent of ACs in WA believed that a lack of integrated development had socio-economic consequences. This was much lower than the disruption perceived by BA participants (85 per cent). This difference was partly due to effective coordination between the district office in WA and NGOs working in RR development programs. The district office in Meulaboh was proactive and offered effective solutions to communal problems.[408]

The WASH management system in Krueng Raya Kecamatan Mesjid Raya (Aceh Besar) was nominated as one of the best in Indonesia. Productive coordination between NGOs and the local district office was the key to helping ACs in Krueng Raya enjoy better WASH infrastructure. According to the secretary of the district office in Mesjid Raya, ACs were assisted by numerous NGOs after the tsunami. These agencies coordinated to help ACs build a proper water pipe system, managed by responsible local government agencies known as Perusahaan Daerah Air Minum (PDAM). BRR bought the land, while the AMCROSS Cross and CRC started the pipe instalment for houses built as part of multisectoral cooperation in PHR projects. Plan International, US Red Cross, Islamic Relief, Logica and Australian Red Cross were also involved in the initiative. [409]

Good coordination between agencies and the inclusion of local communities also produced a local WASH committee known as *Perkumpulan Aluie Pop Chik*. This community-based organisation managed the WASH system in Krueng Raya before a

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[407]. Ibid.
[408] Beneficiary, interview by research team, *Kec. Mesjid Raya Aceh Besar* BA, 12 December 2012, BA25 and BA26, transcript.
[409]. Ibid.

government agency took over. NGOs provided the land entitlement and built the water facilities system that was later run independently by the community. This WASH committee was later hired by the local government to manage the water system in Aceh Besar. It was named the second-best water management facility in 2012 at the local and national levels.[410] The WASH system was awarded for having the best administration and management of water facilities and water quality.

Despite the success of the Krueng Raya WASH system, the community did face some challenges during its development. Similar to other tsunami-affected regions in Aceh, the Krueng Raya did not have standardised water management facilities. Even after the tsunami, this problem continued to worsen due to the mass destruction caused by the disaster. At the community level, self-interest and greed caused water shortages. Some members of the community fixed large pipelines to their supply to secure a greater volume of water. To resolve these issues, the community appointed the *Perkumpulan Aluie Pop Chik*.[411] After the tsunami, most houses in Krueng Raya had their own WASH infrastructure managed by a meter system.[412]

In WA, the WASH system was built through a multisectoral approach in PHR. Most houses were provided with complete water pipe systems and septic tanks. Conversely, in BA, only a few NGOs managed to include WASH facilities as part of PHR. Most recipients of Caritas PHR in WA stated that their house featured a complete WASH system, due to coordination between Caritas and PDAM.[413] The PDAM was a government agency that had an active collaboration with NGOs in WA.[414] In WA, Caritas homes included WASH, electricity and water supply (*boor sumur*).[415] On average, one *sumur boor* could accommodate the WASH needs of five households at a time.[416] Regardless of the type of WASH system, functional water and sanitation

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[410]. Beneficiary, interview by research team, *Kec. Mesjid Raya Aceh Besar* BA, 12 December 2012, BA25 and BA26, transcript.
[411]. Best WASH system in 2013.
[412]. Beneficiary interview by research team, *Kec. Mesjid Raya Aceh Besar*, BA, 12 December 2012, BA25 and BA26, transcript.
[413]. CARITAS / Beneficiary, interview by research team, in *Kec. Johan Pahlawan Meulaboh* WA, 16 May 2013, CM14, transcript.
[414]. Ibid.
[415]. CARITAS, France/Beneficiary, interview by research team, in *Kec. Johan Pahlawan Meulaboh* WA, 17 May 2013, CM15, transcript.
[416]. Ibid., CM18.

facilities seemed to be the highest priority of ACs. Bathrooms, WASH systems and electricity supply were considered part of basic infrastructure.[417]

In BA, 100 per cent of ACs claimed that a lack of multisectoral coordination affected the functionality of their house. Further, 85 per cent reported difficulty in accessing basic WASH systems in their PHR project. In WA, 88 per cent or respondents claimed that a lack of MSD was an important factor in their decision to occupy their home. A further 12 per cent depended on rivers or other natural water resources. Almost 73 per cent of ACs in WA rated the effects of WASH and other multisectoral integrations as important factors in PHR occupancy.

Many ACs were still reliant on the rivers for their daily WASH needs. An Oxfam-led PHR recipient claimed that his family depended on a well for their household needs, but the water was not suitable for drinking. This was due to the proximity of villages to the river. The river, which was the main water source, was only 20–50 m away from their homes. Most people depended on the river as a water resource and worked together by *gotong royong* to build access to the river for communal benefits.[418]

In many rural areas in WA, there were PHR projects (such as those sponsored by the Kuwait and Qatar governments) that lacked a WASH system. One PHR recipient from the Naganraya district claimed that villagers had to build their own well at a cost of IRP3 million. Only the IOM PHR projects were complete with electricity and WASH facilities.[419] The BRR PHR project recipients had to rely on well water for household consumption for almost one year before they had enough money to afford a proper pipeline-based WASH system. Without built-in wells in PHR projects, ACs had to drill and build their own ring well (*sumur cincin*) as an immediate solution.[420]

There are many examples of NGOs outsourcing to other agency to provide WASH for their PHR projects. Habitat for Humanity collaborated with water company Medair to

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[417]. Salvation Army/Beneficiary, interview by research team, in *Kec. Johan Pahlawan Meulaboh* WA, 18 May 2013, CM7, transcript.
[418]. Beneficiary, interview by research team, in *Kec. Johan Pahlawan Meulaboh* WA, 12 May 2013, CM6, transcript.
[419]. Beneficiary, interview by research team, in *Kec. Johan Pahlawan Meulaboh* WA, 16 May 2013, CM13, transcript.
[420]. Beneficiary, interview by research team, in *Kec. Johan Pahlawan Meulaboh* WA, 14 May 2013, CM10, transcript.

subcontract the water supply and provide WASH facilities for its PHR rather than building a well.[421] The German Red Cross also outsourced WASH facilities development as part of multisectoral coordination with PDAM.[422] However still few agencies of PHR that fail to provide WASH for ACs. The PHR project by the Army did not provide any WASH infrastructure, which forced ACs to spend their own funds on pipeline installation.[423] Communities that cannot effort to install the pipelines and without WASH facilities relied on the well for their daily water supply.[424]

6.7 Quality of Permanent Housing Reconstruction

Data from Aceh indicated that the quality of houses varied greatly. Most houses built through NGOs in BA were of much better quality and cost less to build than houses constructed by BRR. For example, two-bedroom houses built by NGOs like CRS and Caritas cost approximately IRP40 million, but houses of the same size built by BRR cost about IRP70 million and were of lower quality. While BRR disputed any suggestions of corruption, there was physical evidence of low-quality housing reconstruction led by government agencies. This was a common problem faced by the Aceh community. It was the poor quality of the pre-tsunami houses that created the need for reconstruction, so replacing those homes with low-quality substitutes leaves the community just as vulnerable as it was before the disaster.[425]

Beneficiaries in BA commonly complained of living in cracked and damaged houses due to the high frequency of earthquakes in the region. Seismic-resistant houses are the safest option for this area. Due to the lack of seismic resistance in housing designs, a UN Habitat PHR recipient claimed that his house continued to crack during earthquakes. The houses built during the first phase of UN Habitat construction were

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[421]. Beneficiary, interview by research team, in *Kec. Johan Pahlawan Meulaboh* WA, 25 May 2013, CM30, transcript.
[422]. Beneficiary, interview by research team, in *Kec. Johan Pahlawan Meulaboh* WA, 24 May 2013, CM28, transcript.
[423]. Beneficiary, interview by research team, in *Kec. Johan Pahlawan Meulaboh* WA, 11 May 2013, CM3, transcript.
[424]. Beneficiary, interview by research team, in *Kec. Johan Pahlawan Meulaboh* WA, 10 May 2013, CM2, transcript. In reference to one ex-*Geuchik* from *Desa Lhok Timon kec. Setia Bakti Aceh Jaya*, his village received two PHR projects from IOM and Habitat for Humanity (HH) with different strategies of MSD. The IOM PHR came with a well and the HH PHR was provided with a water supply from MEDAIR. However, wells did not always provide ACs with an adequate hygienic supply of water.
[425]. Islamic Relief staff, interview by research team, WA, 6 June 2013, transcript.

of poorer quality than its later homes.[426] Beneficiaries in both regions frequently raised concerns about the lack of seismic-resistant features included in the designs.

A *Geuchik* in the Pidie Jaya district complained that UN Habitat and Serasi projects in his village produced low-quality houses. The act of outsourcing all communication with beneficiaries to contractors left his community with continuous problems with their houses. While the village had a KPR, a lack of monitoring by NGOs led to disputes between the *Geuchik* and KPR. This delayed the PHR process and left ACs with little recourse. The *Geuchik* declared that housing aid did not support the villagers' needs. The houses were in very bad condition, especially during heavy rains, which was a clear indication of poor quality. Continuous repairs on PHR units increases community resentment of foreign aid organisations.[427]

Another contributor to low-quality PHR was the commonly accepted practice of nepotism. Favouritism was prevalent in the determination of who should benefit from tsunami aid. Theoretically, the aid should have been distributed fairly among ACs. However, the Indonesian government failed to clarify the criteria for eligibility, prompting many ACs to contest decisions.[428]

Once the RR phase ended, NGOs left the region and the local *Geuchik* was left to manage complaints of deteriorating homes. The rehabilitation of houses after the departure of NGOs meant that there were no funds to assist ACs. Communities had supposedly been provided with assistance and necessities during the RR phase that would help them live independently in the future. However, a few years later, houses had already started to crack due to the lack of seismic-resistant materials used in construction. Basic infrastructure was incomplete, especially in PHR led by Serasi. ACs were left with no choice but to rely on unhygienic well water for their WASH needs. When problems arose after the RR phase, the *Geuchik* could do little to help his community.[429]

The recurrence of PHR-related problems placed the *Geuchik* in a difficult situation. The cost of repair from frequent earthquakes and other problems such as termites

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[426]. Beneficiary, interview by research team, in BA, 3 December 2012, BA5, transcript.
[427]. *Geuchik*/Beneficiary, interview by research team, in BA, 12 December 2012, BA24, transcript.
[428]. Burkey, *People First: A Guide to Self-Reliant Participatory Rural Development*, 83.
[429]. *Geuchik*/Beneficiary, interview by research team, in BA, 12 December 2012, BA24, transcript.

(*anai-anai)* has continued to rise. A recipient of housing built by the CRC claimed that she has continuously had to repair the house due to termite problems, costing her IRP20 million thus far. Most ACs complained about the use of low-quality timber in their homes, which they believe is the cause of the termite issues.[430] In some cases, ACs who are unable to afford repair costs have abandoned their homes. Others have left to avoid living in constant fear of earthquake damage.

It is also important to note that most beneficiaries chose to endure the lack of seismic resistance and bear the rehabilitation costs themselves. These ACs were grateful for shelter and stated that all other factors were not priorities.[431] Many problems were not highlighted due to the passive nature of some beneficiaries, who found it difficult to express their concerns.

6.8 Building Back Better Versus Building Back Safely

BBS and BBB were the two main principles applied in PHR. This section will examine the effects of these principles on participation levels in Aceh PHR projects. The successful application of these principles depended on the level of participation and the inclusion of local knowledge in the planning and implementation stages.

Factors such as livelihood sustainability, education and good access to health services fell under BBB. It is essential that ACs are provided with useful ISK to guide them and the government should have a method in place to measure ACs' post-disaster capabilities and skills. With the appropriate ISK, ACs can assess their requirements and the resources required to fulfil them. Most ACs in Aceh did not have a channel through which to direct their complaints, especially during PHR. ACs asserted that most Red Cross and G2G PHR projects lacked communication channels because the NGOs were only meant to operate during the first few months of ERR phase.

A shortage of skilled workers was another concern among beneficiaries. Trained labour was of the highest priority in PHR projects. In BA, ACs rated the importance of skilled labour to PHR quality at 46 per cent. In WA, 72 per cent of ACs were merely concerned with the issue of labour in their PHR. This claim was particularly

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[430]. Beneficiary, interview by research team, in BA, 7 December 2012, BA14, transcript.
[431]. Brusset, *A Ripple in Development?*, 82.

directed at NGOs that outsourced all AC communication to contractors. In the absence of a monitoring process, ACs were forced to accept low-quality houses. Another issue during PHR was the many layers of contractors and subcontractors involved. The selection of subcontractors for PHR varied among NGOs. CRS (Jakarta), which built 10,000 homes in WA, claimed that only a few NGOs selected reputable contractors in Aceh. Local small contractors tended to subcontract to other locals, who lacked expertise and did not meet the standards of the original design.

Additionally, there was a high level of turnover among construction workers due to the contractors' failure to provide them with proper payment arrangements. This problem was not exclusive to CRS projects. To avoid the same issues in the second phase, CRS hired many expatriates, including technicians and engineers, to observe and monitor the quality of work of the major contractor and subcontractors. By hiring expatriates to ensure a higher quality of construction, CRS increased AC's satisfaction levels regarding housing quality. CRS also provided maintenance services for up to six months. This gave beneficiaries the opportunity to address any problems with their PHR units. Contractors were usually responsible for the maintenance, which was a practical decision given their familiarity with the projects. The reconstruction of houses by CRS took place one year after the tsunami.

The issue of contractor quality falls under the BBB principle. Other BBB issues include land ownership disputes, distance (500 m) from the coastline and socio-economic challenges for relocated communities. Relocated communities were concerned that the government did not calculate the suitability of the new settlement areas in terms of socio-economic needs. For example, fisheries workers expected to be relocated near the sea. There was no existing strategic plan to guide these decisions. According to most NGOs, a fishing-based village should be located one to two km from the coast.

Conversely, in Padang, temporary shelters adhered strongly to BBB principles and encouraged community participation in the construction and maintenance of facilities. Temporary shelters in Padang were built using bricks and timber, while in Aceh, shelters were built completely from wood (*rumah panggung*). Permanent houses were

constructed using 100 per cent brick materials.[432] CRS allocated US$2.5 million for temporary shelter construction in Padang and the community contributed the rest using salvaged materials.[433] A post-construction survey by CRS indicated that homeowners in Padang preferred the brick and wood houses. ACs in Padang earthquake had learned that units built of these combined materials were safer and more seismic resistant than full brick houses. Most of these homeowners considered the temporary shelters their permanent houses. Some extended the shelters into permanent dwellings. To ensure the accuracy of information, research interviews focused on women who spent most of their days at home with children.[434]

The different types of shelters and housing materials were determined by funding availability and INGO discretion. In the case of Aceh, funding was plentiful and many NGOs were involved directly with the community-based reconstruction process. In Padang, there was less funding and fewer NGOs. While the funding was modest in Padang, competent management in integrating local knowledge and encouraging community involvement led to good results. Padang communities used salvaged materials and worked together to build the homes. In Aceh, the community was more passive, preferring to demand housing rather than participate in the reconstruction process.[435] This example highlights the importance of community participation in establishing a sense of ownership and independence.[436] According to beneficiaries, community-based house reconstruction was the best method to guide an effective recovery process (see Table 6.3).

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[432]. Wahyu Widayanto (ECB CRS), interview by research team, Jakarta Indonesia, 13 November 2012, transcript.
[433]. Ibid.
[434]. Ibid., 27–28.
[435]. Ibid., 27–28.
[436]. Mercy Corp, interview by research team, Jakarta, Indonesia, 14 November 2012, transcript. Padang refers to the Padang earthquake in 2009.

Table 6.3: Contractor-Based and Community-Based Permanent Housing Reconstruction[437]

Question	BA (%)	WA (%)
Were you given a choice between community and contractor-based reconstruction?	Yes 50 No 50	Yes 6 No 94
Did you make your own choice?	Yes 50 No 50	Yes 13 No 87
Do you think this affected the quality of your house?	Good 42 Average 42 Bad 16	Good 72 Average 17 Bad 11
Was your house built by (a) community-based reconstruction (b) contractor-based reconstruction	 (a) 19 (b) 81	 (a) 11 (b) 89
Which type of PHR was the best for you? (a) community-based reconstruction (b) contractor-based reconstruction	 (a) 31 (b) 69	 (a) 67 (b) 33
Do you think any parties or agencies are responsible for shortcomings in your PHR?		
Government (BRR)	4	57
Contractor	70	43
Local labour	7	0
NGOs	19	0

Most beneficiaries in both regions were given housing built by contractors. In BA, 19 per cent of ACs participated in the reconstruction, while 81 per cent relied on contractors, which allowed them limited input. Table 6.3 indicates that in WA, 89 per cent of PHR was contractor-based and only 11 per cent was community-based. Community-based reconstruction was usually led by NGOs and the KPR. The KPR was a channel through which ACs could express concerns and provide feedback to

[437]. Data are extracted from the empirical finding of this research conducted between November 2012 and June 2013 in Aceh.

NGOs. This committee allowed ACs indirect participation because ACs voted on KPR membership. The formation of KPR lowered the *Geuchik's* position at the village level, which helped eliminate favouritism and the mishandling of funds.

Only 31 per cent of ACs in BA preferred community-based reconstruction while 69 per cent favoured contractor-based reconstruction. However, the scenario was the opposite in WA, where 67 per cent of ACs claimed that if they were given a choice, they would have opted for community-based reconstruction. Only 33 per cent of ACs in WA preferred contractor-based PHR. ACs were also asked to rate the quality of their PHR based on the choice they had made or that was made for them: 72 per cent of ACs in WA believed their choice had given them a 'good' quality home, 17 per cent rated their homes as 'average', while the remaining 11 per cent claimed the choice left them with 'bad' quality PHR. In BA, 42 per cent believed their decision had given them a 'good' quality PHR. A further 42 per cent deemed the quality 'average' and 11 per cent rated their PHR as 'bad' quality.

While ACs in both regions were not given a choice between contractors or community-based reconstruction, this decision affected how ACs perceived the quality of their PHR. Table 6.4 indicates that the highest priority of ACs in PHR was the quality of the house, followed by its seismic-resistant factor, the involvement of skilled technicians/engineers, experienced and skilled labour, trained labour and the safety, security and livelihood factor.

Table 6.4: Priorities of Affected Communities[438]

Criteria Affecting the Quality of Permanent Housing Reconstruction in Aceh								
Region	Quality (%)	Seismic Resistant (%)	Skilled technician/ engineers (%)	Experienced/ skilled labour (%)	Trained labour (%)	Safety security/ livelihood (%)	Agencies (%)	Other (%)
BA	84	58	46	42	31	31	4	4
WA	89	83	72	11	11	5	0	0

[438]. Ibid.

ACs were not overly concerned about the agencies that led their housing projects. Table 6.3 shows that 70 per cent of ACs in BA rated the contractor as the main actor that affected the quality of PHR. Another 19 per cent blamed NGOs for any shortcomings. In WA, only 26 per cent of ACs blamed quality issues on government agencies, while two per cent cited contractors as the cause. Therefore, most ACs blamed contractors for the low quality of PHR.[439] One participant claimed that non-skilled labour did not promise a good-quality or seismic-resistant house.[440] These data are supported by past LRRD studies conducted between Aceh and Sri Lanka.[441]

The requirement to hire highly skilled labour for PHR should have been a contractor priority rather than profit. For example, some PHR workers mixed cement with seawater instead of fresh water, which made homes more prone to corrosion. Without proper monitoring, shortcomings such as these were not noticed by NGOs. This is why PHR requires the supervision of a reliable representative or committee such as KPR. Due to a lack of monitoring, houses were poor quality in many aspects.[442]

Time constraints forced PHR projects to rely on existing human capital, mostly tsunami survivors. As a result, NGOs had no choice but to hire unskilled labour to meet the strong demand for PHR. There are cases in which PHR quality was compromised by greed. Sometimes, the intermediary or contractor compromised the quality of houses for monetary gain. For example, BRR houses were declared to cost up to IRP70 million, but the actual cost was only IRP30 million. Another factor that affected PHR occupancy rates was the decline in the value of homes due to quality issues.[443] Even when NGOs vigilantly monitored construction, only average-quality houses were produced.

Table 6.4 indicates that seismic resistance was the most important element affecting PHR quality. The BBB principle emphasises the value of helping ACs engage in sustainable development activities.[444] In BA, 58 per cent of interviewees claimed that

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439. Burkey, *People First*, 84.
440. Beneficiary, interview by research team, in BA, 3 December 2012, BA6, transcript.
441. Burkey, *People First*, 84. In Aceh and Sri Lanka, community dissatisfaction with the work of contractors is high in some locations. However, a lack of contact with the original aid agency provides no recourse for their complaints.
442. Beneficiary, interview by research team, in BA, 11 December 2012, BA22, transcript.
443. Beneficiary, interview by research team, in BA, 6 December 2012, BA12, transcript.
444. Burke, 'Evaluation of the Linkage of Relief, Rehabilitation and Development', 92.

seismic resistance was important to them. In WA, the response rate was 83 per cent, 25 per cent higher than BA. At the beginning of the RR phase, most NGOs choose to adopt a direct approach to reach beneficiaries, resulting in varying standards of PHR quality in terms of construction and livelihood. After six months, BRR took over coordination from UNOCHR and quality began to decline.

Overall, the findings indicate that community-based reconstruction usually manages PHR through a KPR. The input from locals results in higher-quality PHR. Greater AC participation led to higher levels of satisfaction among beneficiaries. Contractor-based housing tended to deny ACs participation in the PHR process, leading to quality issues and an inability to communicate concerns. Beneficiaries were left to fund their own repairs, hampering their ability to focus on their livelihoods. From a long-term development perspective, this lack of participation deprived ACs of a valuable CB opportunity.

6.9 Coordination

Coordination is the most important element in managing disaster aid and funding.[445] In Aceh, the PHR lacked proper coordination, leading to a greater risk of fund mismanagement due to ineffective spending. Coordination issues were the main factor affecting both ACs and NGOs in Aceh's PHR. The lack of AC participation also contributed to the ineffective allocation of funds.

Several factors prompted NGOs to spend their money immediately in post-tsunami Aceh. First, high competition between the agencies to fulfil donor criteria forced them to spend funding quickly, which affected interagency coordination. Most agencies were competing to produce visible results and enhance their international reputations[446] rather than working to maximise benefits for ACs.

Second, in the early days of the RR phase, most agencies booked areas for their programs. There were issues with booking or claiming certain areas of affected regions as NGOs' operation territories. This pattern of booking indicated a serious lack of interagency coordination. Further, the overlapping of aid that resulted from the

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445. Masyrafah and McKeon, 'Post Tsunami Aid Effectiveness in Aceh', 3.
446. Sato, 'Matching Goods and People', 70–84.

poor coordination meant that conflict-affected areas did not benefit as much as tsunami-affected areas.

Third, the overlapping issue meant that some landowners received more than one home. The emergence of a new KAKA within the same land complicated the matter further. This led some ACs to manipulate the loophole to their advantage. The main drawback from this dual home ownership was that it deprived those in conflict-affected communities of the chance to own a house. Due to the large amount of funding available during the RR phase, some NGOs offered funds to attract more ACs to their PHR. For example, approximately IRP35 million was needed to build a home, but some NGOs offered up to IRP50 million. This prompted many ACs to choose NGOs that offered a higher amount with the expectation that more funding would equate to better-quality housing.

This was also how single households were able to construct two to three houses on one block of land for their children or siblings who were not entitled to housing aid. One INGO claimed that the egocentric nature of NGOs prevented them from exchanging information or coordinating efforts. There were cases in which NGOs were forced to close their operations due to a lack of transparency.[447]

The lack of coordination also affected other community infrastructure and facilities reconstruction. For example, joint efforts to construct schools wasted valuable resources because classrooms were too large and ACs could not fully utilise the facilities. Further, most villages lacked the qualified teachers required to manage the administration of the school.

It was the same scenario in other public facilities construction projects. For example, YCAR wanted to build a children's centre that also functioned as a community centre. Many NGOs came to the camp (*pusat pengiungsi*) to conduct meetings with beneficiaries. YCAR believed a community centre would provide an ideal place to host these meetings, while also providing a temporary solution for children. YCAR supported the project with materials and tools, and the community participated in

[447]. Plan International staff (previously with YCAR), interview by research team, Jakarta Indonesia, 7 June 2013, *Yusra Tebe*, transcript.

building the centre.[448] The budget for the centre was about IRP25 million, including the learning materials, such as books, *al Quran*, stationary and playgrounds. Other NGOs also wanted to build a centre. There was no objection from the community, which always welcomed new facilities. However, there were no suitably experienced people to run the centre. A great deal of infrastructure was built during PHR, but there was a lack in ISK and CB to ensure the sustainable operation of such facilities.

Further, NGOs paid an extra IRP10 million to build a similar community centre. According to YCAR, the funding spent on the extra centres could have been used more effectively elsewhere. Due to the lack of coordination, agencies did not communicate on the costs of building the community facilities.[449]

However, there were a few isolated examples of good coordination in PHR. In the Mesjid Raya district (Aceh Besar), PHR projects were built on ACs' original land. The local SEKDA assisted the community by confirming temporary proof of ownership. They were given confirmation of land ownership (CoLo) based on recognition from their *Geuchik* or *kepala dusun*. Coordination between SEKDA and NGOs solved many land title disputes among ACs in this district. Most houses built by Jacky Chan, Buda Tsu Sze and Cinta Kasih were provided with house and land certificates. Local communities with existing land titles needed authorisation from the SEKDA and other village leaders before NGOs agreed to construct their houses.[450] This was coordinated between agencies to avoid conflict between ACs. Most communities currently in Kecamatan were not part of the original population. There are migrants from Sigli (Aceh Timur) who are fisheries workers. It is common for fisheries communities to accommodate migrant groups from other fisheries communities. These migrant groups usually rent houses or build small temporary shelters.[451]

Some NGOs such as the CRC built houses for the migrant groups and BRR hastened the process by releasing land titles. This is an example of good coordination between NGOs and BRR. Other coordination between agencies included joint efforts by the

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448. Ibid.
449. Ibid.
450. Beneficiary, interview by research team, in *Kec. Mesjid Raya Aceh Besar*, 12 December 2012, BA25 and BA26, transcript.
451. Ibid.

CRC and BRR, where the first built the houses and the latter bought the land from Pemda.

With sound interagency coordination, more than 6,000 houses were built by various agencies in the Masjid Raya district. However, some ACs were left without homes due to other reasons, such as migrating to other regions before the tsunami. Those who claimed their PHR unit two years after the tsunami were refused aid.

In the case of the Mesjid Raya district, there were no coordination problems in the Kecamatan due to the active role of SEKDA and its twice-monthly meetings. Two months after the tsunami, the communities had rebuilt their lives and coordination meetings were held every fourth night by the local people.

However, not all NGOs sought the assistance of SEKDA. Most NGOs were sceptical and suspicious of the local *Kecam* due to perceptions of corruption and bureaucracy issues in the Indonesian political system. In Krueng Raya, most NGOs did not coordinate with the *Kecam* until they faced problems with the local communities, especially in terms of ownership issues.[452] These NGOs had difficulties understanding local politics and manipulation. These findings indicate that partnership between local agencies and NGOs is important to ensuring effective outcomes in the RR stage.

In the later part of the RR, NGOs such as CRC, Plan International, American Red Cross and Islamic Relief offered to build houses from Lum Nga to Lum Re. Some NGOs coordinated by reporting to the SEKDA office about their activities, but most refused to acknowledge the SEKDA. Most only consulted the SEKDA when they encountered difficulties. There were also cases in which NGOs requested detailed information from the SEKDA, promising to build houses. However, they did not return with aid. The SEKDA took alternative initiative to help those affected by these NGOs' empty promises. Within one year, NGOs started building barracks for ACs with the assistance of SEKDA. By this stage, most ACs already had houses, even those who had lived abroad during the tsunami.[453]

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[452]. SEKDA, interview by research team, *Kec. Krueng Raya, Mesjid Raya Aceh Besar, Burhanuddin* Secretary *Kecamatan* (SEKCAM), 12 December 2012, transcript.
[453]. Ibid.

NGOs such as Islamic Relief, CRC and Logica built housing in Kecamatan Mesjid Raya and provided materials to build the SEKDA office. With the SEKDA office fully operational, coordination was a simpler task. Due to continuous coordination between stakeholders, the new pipeline system was integrated into a metered pipe system.[454]

An experienced consultant estimated that an effective NA could be undertaken in approximately three months.[455] However, individual agencies take different amounts of time to conduct thorough assessments and implement programs, which created further issues. The uncomfortable living conditions in the barracks led some ACs to change NGOs in the hope of receiving permanent housing sooner, leading to further overlapping of aid. Some NGOs detected the overlapping claims of PHR units, which further delayed reconstruction.

Some NGOs encountered challenges when communities that had accepted their offer of aid also sought assistance from other NGOs. In these cases, NGOs usually withdrew their aid due to a lack of transparency from the community. However, ACs tended to blame NGOs for breaking their promises. Caritas experienced a similar issue with BRR. BRR developed a PHR program, but found that NGOs had already reserved most of the land. To ensure it received funding, BRR manipulated the data by nominating multiple KAKAs within the same households. This is because the funding for each unit of BRR's project was estimated at IRP40 million.[456]

Caritas For example was building 400 houses in Senduk (North Aceh), where there were already about 200 homes.[457] ACs in this community did not have land ownership entitlements so they requested land from the local government. The BRR attempted to manipulate the situation by buying and building 200 more houses in the same area without coordinating with Caritas. This raises doubt among NGOs questioning the effort to coordinate with BRR when the organisation itself did not seem to value cooperation.

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[454]. Beneficiary, interview by research team, in BA, 12 December 2012, BA25, transcript.
[455]. Ferry Suferilla, former NGO/consultant, interview by research team, BA, 15 December 2012, transcript.
[456]. Ibid.
[457]. Ibid.

BRR mostly used contractor-based approaches, giving ACs little opportunity to be involved in the process. Conversely, NGOs adopted a more community-based model by integrating local input and closely monitoring contractors. For example, Caritas projects usually factored in livelihood, education and other programs to ensure sustainability. [458]

The findings indicate that recipients of BRR's PHR projects were commonly dissatisfied in terms of construction quality. Since the reconstruction, many houses have been abandoned along the west coast of Aceh due to the lack of livelihood sustainability.

In the Long district in North Aceh, Caritas and other NGOs divided a 2,000-unit housing lot into several smaller projects; Caritas built 1,000 units while the remaining NGOs developed the rest. There were 28 villages in Kecamatan Long, of which only four survived the tsunami. However, there were more houses built by BRR in Long than the community required. NGOs proposed that BRR shift the funds to other necessary public facilities, but this was not possible because the donor had specified that the funding be committed to PHR. Further, the BRR claimed that it had been prevented by the government from using the funds on building other public necessities such as road reconstruction. Many houses in Long district have since been abandoned due to the lack of infrastructure and sustainability.[459]

Conversely, in WA, NGOs and the local district office met weekly to discuss issues related to Christian missionaries, religious interests and land issues. These cases were chaired and mediated directly by district officer Pak Tag. Dadek (Meulaboh, WA).[460] Good coordination in WA resulted in higher-quality PHR and fewer problems between ACs and NGOs. For example, NGOs in Aceh were only required to build 36 m^2 homes. However, due to the strong relationship between stakeholders, most NGOs built 48 m^2 homes in WA. Further, some NGOs built business buildings with TM facilities that could function as evacuation buildings during a disaster. These evacuation buildings had seven flights of evacuation stairs that could accommodate

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[458]. Ibid.
[459]. ECB CRS, interview by research team, Jakarta Indonesia, 13 November 2012, transcript.
[460]. Former head of administration, *Kec. Johan Pahlawan, Meulaboh BPBD Meulaboh*, interview by research team, WA, 13 May 2013, transcript.

up to 5,000 people. While most INGO programs were supposed to be based on Sphere guidelines, strong coordination definitely made a difference in WA. [461]

Coordination in Aceh was difficult because the government did not have experience managing many NGOs simultaneously. In 2007, the Indonesian government declared its blueprint for disaster management under *Law No. 24*. This law was the first set of official regulations on this matter developed by the government. Since it is a newly adopted law, there has been some confusion in differentiating between the various phases of disaster management. [462] This had withdrawal on the coordination level between stakeholders in PHR projects.

6.10 Effects of Design and Material on Livelihood

The findings indicate that the design and choice of materials for PHR projects depended on three factors: material availability at the time of construction, the integration of the BBS concept and the preferred design of ACs. The design of the house was also determined by the geographic location, soil and landscape of ACs' land. Houses called '*rumah panggung'* were common in coastal areas that had been submerged in the tsunami. This type of house was built predominantly of timber and featured a brick foundation. The design of this house resembled *Rumoh Aceh,* a traditional landmark.[463]

One beneficiary of PHR in Ulee Lee Meuraxa (BA) claimed that due to the region's geography, he chose to build a *rumah panggung* on his heritage land. An INGO, Uplink, offered him a choice regarding the house design. Given the close proximity of his home to the sea, he opted for the half-brick, half-timber home, which is a safer option in coastal communities.[464] Another beneficiary from a coastal village in Ujong Pancu (Aceh Besar), opted for a single-terrace brick home, rather than a *rumah panggung*, despite being only 500 m from the sea.[465] The selection of material was a

[461]. Ferry Suferilla, former NGO/consultant, interview by research team, in BA, 15 December 2012, transcript.
[462]. Ibid.
[463]. Ibid.
[464]. Beneficiary, interview by research team, in BA, 9 December 2012, BA19, transcript.
[465]. Beneficiary, interview by research team, in BA, 3 December 2012, BA6, transcript.

controversial issue in PHR projects, because beneficiaries perceived that brick houses were more seismic resistant than half-wood, half-brick houses. [466]

Most ACs preferred bricks to wood for several reasons. First, timber was much more expensive than bricks, due to an increase in the price of building materials. The materials were imported from neighbouring countries, such as Malaysia and Thailand. Second, the delivery of imported goods was delayed due to road damage. Further, the price of imported timber had increased since the tsunami.[467]

According to a participant, one contractor had used unsuitable timber in constructions to reduce expenses. The original timbers intended for PHR projects were *semantok* or *meranti*, which are known for their high quality.[468] However, most ACs' homes were built with lower-quality timber, which later resulted in termite problems. Due to an increased demand for timber, prices rose by almost 100 per cent from pre-tsunami levels. In communities lacking KPR involvement in PHR projects, ACs had no way of monitoring this practice.

A consultant from a locally based INGO in BA explained that the price rise was due to scarcity of the material. The expense of timber prompted many NGOs to opt for bricks, which delayed the PHR process. Caritas's community-based PHR constructed 42 m^2 homes at a cost of IRP24 million (IRP4 million for labour and IRP20 million for materials). Even the head of BRR Konturo was surprised at the low cost of the Caritas project. With the assistance of the local KPR, Caritas secured a local timber supply for a reasonable price. [469]

The World Wildlife Fund stated in a *Washington Post* article that Caritas had logged in Aceh forests. [470] While Caritas was involved in housing projects, it did not engage in any deforestation in Sumatran forests. [471] Wood resources were provided by the local community. This accusation raised concerns in the group's German headquarters, eventually causing a three-month delay. Due to the logging issue, houses were built from a combination of wood and brick, rather than just timber. This material was not

[466]. Beneficiary, interview by research team, in BA, 3 December 2012, BA6, transcript.
[467]. Beneficiary, interview by research team, in BA, 1 December 2012, BA1, transcript.
[468]. Beneficiary, interview by research team, in BA, 6 December 2012, BA12, transcript.
[469]. Former NGO/consultant, interview by research team in BA, 29 November 2012, transcript.
[470]. Ibid.
[471]. Ibid.

available within Aceh, which pushed the cost of construction up to over IRP35 million per house.[472]

Brick houses, which were built inland, far from the coast, were usually single-terrace homes with strong one- to two-metre foundations for earthquake protection. ACs who were relocated further inland were provided with brick houses. While the ACs did not have land entitlements or house certificates, they were allowed to retain the temporary transitional accommodation built on their original land.

The price of timber continued to rise, despite most NGOs opting for wood-and-brick homes. One INGO explained how rising building material costs had affected PHR. BRR houses (36 m^2), which were deemed low quality, cost approximately IRP40 million. Later, this price increased to IRP70 million; however, the building materials were not upgraded. The influx of NGOs and the flurry of construction activity had further destabilised the prices of building materials in Aceh. NGOs usually approached three to four vendors for building material prices and included 10 per cent for the contractor. This calculation was very transparent and was invoiced to NGOs' headquarters. As an indication of price differences, Caritas brick homes cost IRP46 million, while similar houses built by BRR cost IRP70. The reason for this disparity was that most NGOs chose materials from the lowest price range, while BRR chose the highest priced supplies on the governor's price list. In 2005, Aceh gained autonomy from the Republic of Indonesia and the governor's price list became the basic guide for reconstruction material tender pricing. [473] However, prices had been increased to the highest rate to benefit the contractor and BRR. Unlike the Caritas arrangement, 10 per cent was not allocated for contractors, so materials represented BRR's best opportunity to make profit. [474]

There was no official blueprint for housing reconstruction in Aceh, so building activity was largely conducted on a trial and error basis. Designs were not standardised and the integration of DRR measures was not mandated. Eventually, the blueprint produced by the central government's BPBN clearly stated that no homes should be built within two km of the sea. However, this blueprint was endorsed six

472. Ibid.
473. Former NGO/consultant, interview by research team, in BA, 29 November 2012, transcript.
474. Ibid.

months after the tsunami and many homes had already been built less than 100 m from the coast. [475] Prior to the blueprint's release, NGOs had been waiting to begin construction based on community needs. ACs were willing to accept the risks of building close to the sea and refused to be relocated away from their livelihoods. In a Uleu Lheue Lambo village (North Aceh), communities agreed to be relocated. According to Caritas, some villages were better able to accept community-based reconstruction than others, depending on the strength and social links within the community.[476]

An INGO senior consultant stated that during the first phase of PHR, one of its leading contractors formed a group of local contractors. The goal was to unify the contractors to ensure a monopoly that would offer them greater financial benefits. Training and skilled labour was lacking in Aceh at the time, creating opportunities for contractors in surrounding areas, such as Medan.[477] The monopoly held by outside contractors limited CB in the Aceh region.

Similarly, community-based house reconstruction also had weaknesses. Delayed building time frames increased costs, forcing donors to accommodate ACs in barracks for longer periods. Despite the delays, the outcome of community-based projects was far superior to contractor-based reconstructions.

In WA, 1,000 new homes were built in Meureubo (Meuloaboh) by *Buda Tzu Sze*, which was led by female Buddha Master Sin Cheng. This foundation built more houses to encourage the WA population to relocate. There were slightly different building material issues in WA. In this region, red bricks were the preferred option of ACs. However, due to the scarcity of this material, NGOs used inter-bricks (large blocks).[478] This created resentment among ACs whose homes were built of inter-bricks, which were considered a lower-quality material. ACs eventually accepted NGOs' explanations of building material shortages.

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[475]. Former NGO/consultant, interview by research team, in BA, 29 November 2012, transcript.
[476]. ECB CRS, interview by research team, Jakarta Indonesia, 13 November 2012, transcript.
[477]. Former NGO/consultant, interview by research team in BA, 29 November 2012, transcript.
[478]. Building block made of cement and loose sand from the sea.

6.11 Permanent Housing Reconstruction Relocation Impact on Economic Climate and Livelihood

The relocation of ACs was the most common DRR strategy adopted by agencies in PTR. Beneficiaries who had lost their seaside land and villages qualified for PHR relocation programs. The findings indicate that relocation had a significant impact on the sustainability of the ACs' livelihoods. Relocation raised security issues and often forced ACs to find a new income source within proximity to their new home. Survivors who chose to commute to their existing roles had to pay higher travel costs. Most ACs complained that PHR projects had not integrated livelihood sustainability as a priority.

A PHR project involving PMI BA, India's WK and Saudi INGO Norani Mandiri relocated communities to barracks in Hujung Batek. However, the hilly area was highly visible and a fair distance from ACs' livelihoods. While this relocation strategy was sound in terms of DRR, ACs found it difficult to adjust and sustain an income.[479] Other relocated communities, such those moved to the Mesjid Raya district, found it difficult to find employment due to the damaged land and poor socio-economic climate.

ACs' livelihoods should have been considered in PHR planning. After the tsunami, most NGOs relocated ACs to higher and safer ground to prevent against future disasters. However, this was a temporary solution. The hilly areas offered no long-term socio-economic opportunities. These communities found it difficult to commute to their previous jobs due to the hilly terrain and distance. Relocated communities usually chose other occupations or began new economic activities rather than endure long commutes. The principles of BBS undermined an important element of BBB: integration of livelihood aspects. The DRR integration in BBS only promised greater safety measures to protect against disasters.

The lack of livelihood consideration in PHR planning eventually led many ACs to sell, rent out or abandon their homes. The findings show that 50 per cent of house

[479]. There were 1,500 tsunami victims from Mesjid Raya. After the tsunami, the remaining population was 11,000. Relocation of survivors boosted the population by 100 per cent to 22,000. Singaporean NGO High Point (which focuses on education) left BA in mid-2012. Its operation focused on *Paya Kameng, LamRea. Pak Reijane* (victim and *ketua posko* after the tsunami).

abandonment cases were due to socio-economic reasons. A further 30 per cent were attributed to distance, while 20 per cent were due to geographic factors and other aspects. This trend posed problems for local district offices. For example, in the Mesjid Raya district, the *Kecam* had to monitor the status of these houses to prevent ACs selling or renting the homes.

Some ACs decided to return to their original village.[480] ACs only occupied their houses for two years because PHR projects provided free SEMBAKO during this period to help survivors adjust to their new locations.[481] When the support of SEMBAKO and JADUP were withdrawn, many ACs chose to migrate. Some ACs from Lumno Aceh Jaya moved to the Mesjid Raya district after the tsunami. When they were allocated a home by NGOs, they remained there for six months to one year, or until the home was complete. Usually, difficulties sustaining an income forced them to return to Lumno, where they still owned agricultural land. The *Kecam* did not approve of houses being sold or rented to outsiders. This could only be done with the consent of *Kecam* and the *Geuchik*. However, despite this policy, the community continued with this practice.

In June 2013, relocated communities in Neuhen were still travelling to BA to earn a living. Their earning was just enough to support daily transport costs and household expenses with no funds remaining for saving.[482] The data show that ACs spent 30–50 per cent of their income travelling to their workplace. Further, relocated communities had to learn new ISK and CB to adapt to their new living environments. For example, ACs who have only worked in paddy fields would find it difficult to work in the fisheries sector without learning new ISK. In Meulaboh, CRS provided ACs with credit to buy boats to support commercial fishing activities. The ability of the local people to make repayments was dependent on the success of their endeavours. If profits were reasonable, the business activities were sustainable.

Relocated ACs who left their coastal homes claimed that they only returned to the sea after one year. They blamed this on the failure of NGOs and the government to

[480]. Researcher and senior lecturer from the Faculty of Agriculture at Syiah Kuala University, interview by research team, BA, 16 December 2012, transcript.
[481]. Beneficiary, interview by research team, in BA, 12 December 2012, BA25, transcript.
[482]. YPK, interview by research team, Meulaboh WA, 14 May 2013, transcript.

consider socio-economic factors in PHR planning. The importance of livelihood sustainability should be considered when identifying relocation areas.[483] Some fishers only go to sea once a week, some go every day and some take week-long voyages.[484] It is important to understand that fishing activity is dictated by seasons, weather and the tides.

A single mother from Ulee Lee (BA) complained that her Uplink-built home was too far from her workplace, which was about three km away in Lam Jabat. Further, her new house was built in the mountains, close to conflict-affected areas. She and her nephew owned two *rumah panggung* homes, which were rented out for 1.5 years for IRP3.5 million per annum. Being a single parent to her nephew, who was orphaned after the tsunami, she encountered ongoing problems managing tenants and collecting payments.[485]

A similar problem occurred in WA. Some fisheries workers were relocated to a hilly area. The initial plan was to build a river that would link them to the sea, but they disagreed with this idea. These ACs preferred to build homes on submerged land than relocate. Despite the relative safety of the hills, many ACs did not prioritise safety over livelihood factors. This is in sharp contrast with the objectives of NGOs and other agencies. NGOs were primarily concerned with BBS, while ACs preferred to focus on BBB.

One beneficiary in Suak Indra Puri was still living in her transitional shelter home built on her original land. The area was badly affected by the tsunami and almost 90 per cent of the population was taken by the waves. Despite this, the participant refused the offer of relocation and remained on her original land. The suggested relocation home was about 10 km from her office in BPBD Meulaboh, while her transitional accommodation was just one km away. She claimed that socio-economic sustainability had not been considered in the relocation plans. In addition, there

[483]. Beneficiary, interview by research team, in BA, 3 December 2012, BA6, transcript.
[484]. Beneficiary, interview by research team, in BA, 1 December 2012, BA2, transcript.
[485]. Beneficiary, interview by research team, in BA, 11 December 2012, BA22, transcript.

appeared to be little regard for DRR measures. The new houses were built in rural areas that carried a high risk of flood during the rain season.[486]

A local NGO, the YPK, functioned as an AC advocate. YPK collaborated with local government agencies towards the end of the ERR phase and engaged in relocation planning discussions. The main function of YPK was to convey the results of government discussions to donors and funders, who then liaised with NGOs to determine PHR project strategies.

According to YPK, accommodation choice was the sole decision of ACs. Relocation of reluctant communities would only create new livelihood and adjustment issues. In WA, ACs convinced the local government to acknowledge and respect ACs' requests. Some beneficiaries who lost their houses were relocated, while those with existing land were given the right to claim housing aid from NGOs.[487] In Meureubo, some *rumah panggung*[488] houses were built on the bayou landscape at the request of ACs.

YPK's second focus of the RR phase was ACs' livelihood development. Housing reconstruction had fewer chances of success if socio-economic factors were not integrated into PHR plans. During construction, ACs were supported to rebuild their livelihoods. The task of coordinating similar types of livelihood programs in different NGOs was identified by YPK as a difficult undertaking because NGOs have different resources, capabilities, donor criteria and programs. [489]

Participation of beneficiaries in the process from the beginning in ERR phase to the end of RR phase was the most crucial factor affecting their socioeconomic sustainability in the developmental phase. The findings shows that the local knowledge and opinion was always overriden with the more superior opinion of the head of village or elites in the society. Their opinion on how the PHR design and material selection should accomodate the ACs socioeconomic need were mostly not accounted for in final decision of PHR. For example in PHR, the findings identified that the satisfaction level on the PHR was influenced by fact whether the ACs was given any choice between construction based or community based PHR projects. The

[486]. Beneficiary, interview by research team, in WA, 17 May 2013, CM15, transcript.
[487]. YPK, interview by research team, Meulaboh WA, 14 May 2013, transcript.
[488]. R*umah panggung* was built with four high pillars, similar to traditional *Rumoh Aceh*.
[489]. YPK, interview by research team, Meulaboh WA, 14 May 2013, transcript.

ACs participation in the progress of PHR depend on the choice given to them. Those given the option to choose community based PHR projects get the chance to channel any concern and issues directly to the NGOs thru PHR commitee. Whereas those given contractor based PHR projects only rely on their geuchik or head of village to decide for them. Most of the time all the communication between the ACs and the NGOs was devolved to contractors. The satisfaction level of ACs on their PHR unit was determined by the fact whether they were given meaningful choices in the selection of contractor or community PHR. This indirectly rebound them back to being vulnerable. The issues highlighted in this chapter under criteria that affect the Quality of Permanent Housing Reconstruction in Aceh shows that these drawbacks leds the ACs to be vunerable in developmental phase. Issues of repair and rehabilitation after the completion of PHR were the highest concern among the ACs. The lack of BBS (seismic resistance houses) was another contributing factor, which could avoid further damaged caused by frequent earthquakes in the Aceh province.

However, as mentioned earlier the local knowledge and expertise was not taken into account in most contractor based PHR projects. ACs participation in ERR phase was merely a gathering of information during the need assessment (NA) was to ensure that the ACs thought that their ideas was accounted for in the PTR programs and projects including PHR.). The gap in integrating local ISK led the ACs back to being vulnerable. Participation in PHR can be measured on their level of satisfactory: good, average and bad. This is shown in agreement among ACs when asked which parties responsible for the shortcoming of their PHR projects. Contractor and Government agencies (BRR) was blamed for the shortcoming in PHR projects in both region in Aceh.

The CB in PHR had improved compared to pre tsunami period. The PTR in Aceh manages to provide the ACs with new homes and accomodation which stand as a base for them to rebuild their socioeconomic and livelihood. However, due to lack of strong motivation and support to enhance ACs lacks of full participation in PTR which caused the lapse back to being vulberable.

6.12 Conclusion

PHR in Aceh was rated by beneficiaries as the most important sector in RR phase. According to the findings, ACs placed great value on securing permanent accommodation. Further, it was important that they were recognised as rightful owners of their land and houses. Tsunami aid provided ACs with new homes, allowing them to continue with their lives. While PHR was important to securing economic sustainability, the sector did create some problems for beneficiaries in this regard.

PHR projects encouraged local participation through community-based reconstruction. In this approach, the KPR ensured that AC input was considered in projects. As discussed in this chapter, contractor-based reconstruction in PHR limited community participation, leading to quality issues and beneficiary dissatisfaction.

Most contractor-based PHR projects faced problems fulfilling their accountability to donors. In this approach, NGOs devolved all aspects of PHR to contractors who chose not to consult ACs, resulting in community dissatisfaction and economic issues. While NGOs were accountable to beneficiaries, contractor-based projects undermined this relationship.

The integration of LRRD in this sector encouraged the integration of MSD. Providing ACs with new homes without considering other aspects had the potential to disrupt the economic climate. The inclusion of ACs in the NA process would have allowed NGOs to integrate local knowledge and capacity in the planning of PHR projects. The findings indicate that NGOs that conducted productive NAs by establishing a KPR in their projects achieved greater success in accommodating ACs' livelihood needs.

Analysis suggests that ACs who actively participated in PHR projects gained a better understanding of their rights as citizens and beneficiaries. CB in PHR is achievable with the adequate integration of MSD in the planning stage. The integration of local knowledge and capacity creates a greater sense of ownership of the projects.

Chapter 7:
Land Rights and Ownership

7.1 Introduction

In Aceh, land rights and ownership were important factors because the status of land occupants determined their eligibility for PHR aid. In post-tsunami Aceh, there are four types of landowners: landowner, *wakaf* land,[490] renters and those with no land ownership (migrants). Each of these groups experienced issues during PTR that affected the construction of their new homes. After the tsunami, ACs had to endure bureaucratic problems, especially with government agencies at the local and province level, such as BPBD and BPN. Delays in acquiring documentation complicated matters further because this certification was required to prove aid eligibility. Tsunami damage to BPN operations further delayed this process.

The chapter will examine various factors relating to land rights and tenure, such as landowner status, land price, PHR, bureaucracy, hoarder issues and INGO land program Prona. The combination of these factors affected ACs' participation level, CB and ISK development. The land-related issues can be placed under the MSD issues that affect ACs overall socio-economic climate and livelihood.

General land issues were explored in Chapter 3 as part of discussions on the ERR phase. However, these issues were not exclusive to the ERR phase. Problems persisted into the RR phase, creating new challenges for ACs. Most of these issues required immediate resolution to avoid disruption in PHR projects. For example, certification issues emerged when most ACs were ready to occupy their new homes in RR phase. Overcoming certification challenges was particularly important for business owners and aspiring entrepreneurs because it affected their ability to use land assets as collateral for business loans. [491]

The importance of ACs' participation in land-related issues only highlighted in RR phase. Issues such as ownership and land certificates, land price, illegal hoarders,

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490. *Wakaf* land is owned by the government. Communities can occupy and use the land but do not own it legally.
491. Beneficiary, interview by research team, in BA, 1 December 2012, BA2, transcript.

relocation has deep implication on socio-economic climate of the ACs. Their participation in this sector during ERR phase was based on NGOs capacity to help them to own a PHR on their land. The issues such as land rights, land price, and land certificate only prevail in RR phase. These issues should include the active participation of local community representative of the ACs to encourage better socio-economic climate that would promise a better CB.

The findings from this research shows that ACs participation in issues highlighted was determined by the aid and assistance rendered to them by NGOs and government agencies such BPN. If local knowledge was crucial in measuring PHR participation, it is the opposite in land rights. This was because the local ISK of their land status, the land registration process and to to secure land and house certificate was lacking before the tsunami. After the tsunami, the ACs relied totally on the NGOs and BPN to help them to solve all their land related issues. Somehow the ACs participation was guided and improved as they had learn new information on processes involve in gaining their lands rights.

However, given the exception there are several issues such as relocation and hoarder problem that highlighted the NGOs and BPN collaboration in handling these issues for the benefit of the ACs. The participation of ACs in land rights was seen in their effort to seek assistance to gain land and house certificate. Here the ACs ISK was heightened and alertness of the values held in those certificates has rise. The findings show that most ACs was eager to obtain their house and land certificate, which can be placed as collateral and morgages. Many AC has placed their certificate to obtain loans from banks as a start or funding for socioeconomic activities. Here the participation was guided and their ISK was added which contributed to betterment of socioeconomic climates.

7.2 Ownership Issues Affecting Housing Reconstruction

Legal ownership of land was the primary requirement for housing aid eligibility. In cases in which the landowner was deceased, surviving heirs needed proper land documentation from BPN at the district or province level to prove the legitimacy of

their claims. In Aceh, the heir is known as the '*waris*' of the deceased. There were numerous requests from the *waris* who pretended to be legal heirs of tsunami victims.

Without official confirmation of land ownership and legal documentation, NGOs would not fund PHR projects. If the process of obtaining documents from the tsunami-damaged BPN was delayed by more than two years, ACs were at risk of being denied housing aid.[492]

Most ACs in WA complained of uncertainty regarding land ownership and relocation areas during the RR phase. For example, after the tsunami, land in Suak Indra Puri was declared a green zone by the government. A beneficiary who had purchased a property in the now-restricted area wanted to secure a house for her family. She discovered that she was entitled to a relocation house from Caritas. However, there was an issue with the Suak Indra Puri land title. The military claimed the land belonged to it, Pemda and the original settler community in Aceh Barat. The dispute caused delays in the delivery of the beneficiary's PHR unit.

7.3 Land and House Certificates

According to SEKDA records (Aceh Besar), most of the community in that region lost important land documentation in the tsunami.[493] In BA and surrounding areas, 81 per cent of ACs claimed to have lost their documentation, while only eight per cent had proof of ownership.

In WA, 78 per cent of ACs claimed to have lost all land and house documentation. Only 11 per cent had not lost their records in the tsunami. Another 5.5 per cent were still awaiting document from local BPN offices, while 5.5 per cent were completely unsure of the status of their documentation. NGOs and local BPN offices mostly collaborated to resolve land issues during the RR phase. However, ACs were not informed of the ownership status of their properties for more than four years. This uncertainty affected their ability to obtain loans. [494] Relocated ACs who did not possess land certificates were not entitled to PHR aid offered by NGOs.[495] The strict

[492]. Ibid.
[493]. Beneficiary, interview by research team, in BA, 12 December 2012, BA25, transcript.
[494]. Beneficiary, interview by research team, in BA, 1 December 2012, BA2, transcript.
[495]. Beneficiary, interview by research team, in BA, 3 December 2012, BA5, transcript.

documentation requirements were an attempt to prevent claims from fraudulent 'heirs'.[496]

The time taken to acquire certification from the BPN was significantly different in both regions. In BA, 42 per cent of ACs claimed they received the documentation within three months, while 19 per cent stated it took longer than two years. Only eight per cent and four per cent per cent claimed to have received the documentation within six to 12 months respectively. In WA, only 17 per cent of ACs received their documentation within three months, which was much lower compared to BA which was 6 (22%), 12(22%) and 18(22%) months. Another 66 per cent (22% each) received it within 12 months, 18 months and more than 24 months. Only 6 per cent claimed that they received documentation of their house and land within six months after occupying their house and lands.

Some ACs complained about not receiving certification in time to occupy their permanent homes. In these cases, the local government coordinated with NGOs to allow PHR recipients to stay in new houses for two years before the handover of property documentation. In many cases, especially in the BA region, PHR units were abandoned, sold or rented out before the end of the two-year period. The two-year occupancy condition was established to prevent ACs from abandoning their houses as soon ownership was transferred. However, when their socio-economic condition was challenging, some ACs had no choice but to leave their new homes. [497]

Conditions for legal ownership varied across different NGOs and PHR projects. Some ACs did not obtain legal ownership of PHR homes because they did not occupy the property for two years.[498] One Oxfam aid recipient claimed that she received a land certificate in 2006, after occupying the house for two years. Conversely, some Red Cross recipients reported receiving land certificates only a year after the tsunami.[499]

Recipients of Saudi government housing had to wait seven years for their new home.[500] Despite the long wait, these recipients received the best quality homes. [501]

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496. Beneficiary, interview by research team, in BA, 4 December 2012, BA8, transcript.
497. Beneficiary, interview by research team, in BA, 8 December 2012, BA16, transcript.
498. Beneficiary, interview by research team, in BA, 7 December 2012, BA14, transcript.
499. Beneficiary, interview by research team, in BA, 8 December 2012, BA16, transcript.
500. Beneficiary, interview by research team, in BA, 8 December 2012, BA17, transcript.

Although these ACs waited longer than other housing beneficiaries, the two-year rule still applied.[502] During this seven-year period, Saudi PHR recipients had to rely on *Geuchik* acknowledgement as proof of ownership.[503] In some cases, BPN offices delayed the processing of land documentation. A beneficiary from the Pidie Jaya region claimed to have waited three years for certification.[504]

The findings indicate that the majority of Uplink PHR recipients struggled to resolve land certification issues. There was apparently no coordinated effort between Uplink and BPN to resolve this issue.[505] A UN Habitat PHR recipient said that certification is vital to prevent against unwanted land claims. Some ACs managed to obtain their documentation in 2007 by visiting the BPN office several times.

Some recipients resolved land certification issues with BPN and had their documents sent by post.[506] Others delegated the task to the *Geuchik*.[507] However, only a few lucky recipients benefited from such service. While a high percentage of ACs visited a BPN office to resolve their land issues, this action resulted in travel costs and administration fees.[508]

In BA, 46 per cent of ACs were less than 10 km away from a BPN office. Only 12 per cent were between 10 and 20 km away. A further 42 per cent were located more than 50 km away, which made travelling, costs a significant burden. Most ACs in the latter category lived in Aceh Besar; the nearest BPN office was relocated to Jantho, a mountainous area, far away from BA.

In WA, 78 per cent of ACs lived fewer than 10 km away. Only 11 per cent of ACs lived 10–20 km away from the BPN office, while five per cent lived 30–40 km away. The remaining six per cent complained that the distance to the BPN office was over 50 km.

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501. Beneficiary, interview by research team, in BA, 3 December 2012, BA5, transcript.
502. Beneficiary, interview by research team, in BA, 6 December 2012, BA11, transcript.
503. Beneficiary, interview by research team, in BA, 5 December 2012, BA10, transcript.
504. Beneficiary, interview by research team, in BA, 10 December 2012, BA20, transcript.
505. Beneficiary, interview by research team, in BA, 3 December 2012, BA6, transcript.
506. Beneficiary, interview by research team, in BA, 9 December 2012, BA18, transcript.
507. Beneficiary, interview by research team, in BA, 10 December 2012, BA20, transcript.
508. Beneficiary, interview by research team, in BA, 9 December 2012, BA19, transcript.

In the same region, Caritas collaborated closely with local government agencies to resolve certification issues. In the Caritas project, ACs acquired documentation due to the joint venture between Caritas and BRR (RR) in Meulaboh.[509] Sadly, the original landowners from these relocated communities were forced to apply for replacement certificates at their own cost, leaving most with no proper legal documentation.

Most relocated ACs knew the whereabouts of their new homes and were simply made to wait to acquire the relevant documentation.[510] In one district near Calang (WA), some ACs refused to be relocated. These families were granted land certificates, despite insisting on rebuilding their homes on their existing land, which was either severely affected or on unstable land.[511] Upon receiving land and house certificates, no CRS or Caritas recipients visited BPN offices.[512]

7.4 Land Price

Another common issue for ACs was the sharp increase in land and property prices. Due to the scarcity of land, prices had tripled within just a few years after the tsunami. Some ACs claimed that property prices rose by almost 100 per cent compared to pre-tsunami values.[513] The price increase was attributed to the influx of international agencies searching for a base to set up their local offices. These agencies were willing to offer high rental charges. Local people manipulated this opportunity and raised the rents and land prices. One beneficiary from BA claimed that in 1995, agricultural land cost approximately IRP3 million an acre. However, as of 2017, that price was over IRP120 million for the same size land. This beneficiary cited the high land prices as an obstacle in his goal to acquire a chicken farm.[514] Another AC complained that during the RR phase, land cost IRP700,000 per m. Many ACs' land registration processes had been delayed. When the task was devolved to the *Geuchik*, the process

[509]. Beneficiary, interview by research team, in WA, 16 May 2013, CM14, transcript.
[510]. Beneficiary, interview by research team, in WA, 17 May 2013, CM15, transcript.
[511]. Beneficiary, interview by research team, in WA, 11 May 2013, CM4, transcript.
[512]. Beneficiary, interview by research team, inWA, 11 May 2013, CM3, transcript.
[513]. Beneficiary, interview by research team, in WA, 20 May 2013, CM20, transcript. The land price rose by almost 100 per cent.
[514]. Beneficiary, interview by research team, in BA, 3 December 2012, BA6, transcript.

was delayed further. As a solution, ACs established a KPR to lead community-based PHR projects.[515]

Another example is that of a widowed single parent, who bought a house that she claimed would have cost IRP45 million before the tsunami. She estimated that after the tsunami, the same house cost up to IRP150 million. She had to acquire a loan for the home and was able to pay off the mortgage within 10 years. Further, she spent another IRP100 million repairing the house. Most rental rates in Ajun increased by more than 20 times their pre-tsunami levels.[516]

7.5 Measurement Costs

During the RR phase, measurement costs were borne by NGOs. However, those who were absent during the RR phase had to fund this process independently. A beneficiary in BA made arrangements with BPN for the measurement process. This cost him approximately IRP3 million. ACs could only acquire land certificates once measurements were taken. This process was lengthy and frequently delayed by ACs who could not afford the charges. In many cases, BPN's bureaucracy caused unnecessary delays.[517]

In some cases, ACs delegated this task to the *Geuchik*. However, the *Geuchik's* supervision of this process often caused problems in later stages of PHR, when inaccurate measurements were discovered. Villagers affected by this oversight had to refer to BPN and repeat the same process.[518] The additional measurement charges were borne by ACs.

Most ACs paid IRP15–20 million for land measurement services and a further IRP1–2 million for certificate processing fees.[519] Additionally, travelling costs were

[515]. Beneficiary, interview by research team, in BA, 2 December 2012, BA4, transcript.
[516]. Beneficiary, interview by research team, in BA, 10 December 2012, BA20, transcript.
[517]. Beneficiary, interview by research team, in BA, 9 December 2012, BA19, transcript.
[518]. Beneficiary, interview by research team, in BA, 10 December 2012, BA20, transcript.
[519]. Beneficiary, interview by research team, in BA, 3 December 2012, BA6, transcript. It cost her IRP1.75 million to settle on land with BPN. BA22 paid IRP1.2 million.

IRP10,000–30,000, depending on the distance ventured. According to one AC in Lum Ujong (Aceh Besar), it cost IRP10,000 for the one-hour trip to the Jantho BPN.[520]

7.6 International Non-Governmental Organisation Programs

During the RR phase, some NGO-initiated programs were established to resolve land rights and ownership issues. This includes collaborations between local BPN offices, the local district BPBD and NGOs. These NGO programs helped ACs apply for land and house certificates after the completion of PHR projects. In these schemes, ACs lodged an application and simply waited for the document to be sent to their home. INGO representatives then visited the BPN on ACs' behalf to resolve the land issues. All costs were borne by NGOs.[521] This was a typical arrangement during the RR phase. These programs returned land documents within two to three days at an estimated cost of IRP3 million. Further, NGOs paid the land tax to avoid unnecessary processing delays. Without NGOs' assistance, ACs had to fund all costs and wait for up to three weeks for the certification.[522]

In Neuhen (Aceh Besar), most ACs benefited from relocation programs led by Jacky Chan and Buda Tzu Chi or Cinta Kasih. Most of these agencies provided ACs with certification immediately after their homes were ready to be occupied. In Krueng Raya (Mesjid Raya), the local authority produced the CoLo as a proof of land tenure and ownership.[523] However, some ACs from Aceh Jaya claimed that most properties in the area had no certificate and relied only on *Geuchik* acknowledgement as proof of land ownership.[524]

Most ACs in Aceh considered documentation extremely important. In some cases in rural areas, there were no certificates before the tsunami. Some landowners in this category claimed to have not understood the importance of official certification until the disaster. After the tsunami, ACs in rural areas devolved the process to NGOs

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[520]. Beneficiary, interview by research team, in BA, 5 December 2012, BA10, transcript. If travelling on her own, the cost would be IRP1.5 million.
[521]. Beneficiary, interview by research team, in BA, 4, 5 and 8 December 2012, BA9, BA8 and BA 18 transcript.
[522]. Beneficiary, interview by research team, in BA, 5 December 2012, BA9, transcript.
[523]. Beneficiary, interview by research team, in BA, 12 December 2012, BA25, transcript.
[524]. Beneficiary, interview by research team, in BA, 5 December 2012, BA10, transcript.

because they were unsure how to navigate the system. This explains the high percentage of AC that reported never attending a BPN office.

In BA, 50 per cent of ACs claimed to have never visited a BPN office in relation to land certification. In WA, the percentage was much higher: 83 per cent. This difference is due to the careful coordination between NGOs, the Meulaboh BPBD, BPN and the local district office. Land-related issues in this region were coordinated under a program called Prona.[525]

In the absence of land certificates, the government can lodge a claim for the property. Rural ACs without land and house certificates from BPN obtained CoLO to prove their legal ownership. NGOs assisted ACs to secure CoLo while they waited two years to obtain ownership papers for their new homes.[526]

Some ACs from Pidie Jaya in Sigli claimed that ownership papers for new homes were simply empty promises from NGOs.[527] The ACs had not received housing certificates and were deprived of most forms of housing aid due to the proximity of their village to conflict-affected areas. Easy access and proximity to public facilities were key determinants in how and when ACs received aid. A beneficiary in Sigli claimed that she and her family received PHR assistance and land certificates less than a year after their homes were completed.[528] This indicates discrimination by NGOs based on their preference for easily accessible communities.

7.7 Government

BPN was an active government agency that assisted ACs to resolve land issues. In the Aceh Besar district of Mesjid Raya, the *Kecam* office provided the community with CoLo, which was authorised by the *Geuchik* and *Kecam*. The HOV and other local leaders endorsed this letter as evidence of ownership of community land after the tsunami. NGOs only built houses on land with legal CoLo from the *Geuchik* or district office.[529] Tenants who had been renting before the tsunami were assisted by

[525]. Beneficiary, interview by research team, in BA, 4 December 2012, BA7, transcript.
[526]. Beneficiary, interview by research team, in BA, 4 December 2012, BA8, transcript.
[527]. Beneficiary, interview by research team, in BA, 10 December 2012, BA20, transcript.
[528]. Beneficiary, interview by research team, in BA, 10 December 2012, BA21, transcript.
[529]. Beneficiary, interview by research team, in BA, 12 December 2012, BA25, transcript.

various agencies. For example, in Krueng Raya, BRR bought land for renters, while CRC built them new homes.

ACs highlighted the need for a new land management system after the tsunami. As of 2017, BPN still uses the same system as it did prior to the tsunami, which means the complex bureaucracy is still in place. The standard processing time for BPN land procedures takes one to two months. After the tsunami, due to the high volume of applications for land certificates, the process took up to three months.[530] Due to this lengthy process, some ACs in rural areas do not have official certificates. Before the tsunami, time and financial constraints were the main hurdles to claiming land documents from BPN. After the tsunami, with the close coordination of the district office and BRR, ACs were able to claim land and house documentation after waiting two years for the certificate.[531]

While NGOs were proactive in resolving land and house issues, government bureaucracy caused delays. Once NGOs left the region, certification issues remained unsettled. For example, Uplink applied to settle land certificate issues for ACs in Ulee Lee Meuraxa. The government promised it would examine the matter once the tsunami blueprint was finalised. As of 2017, the case has not been resolved.[532]

Some rural communities relied on the *Geuchik* to handle the process. However, some *Geuchik* are ineffective and refuse to assist their community members. In such cases, ACs claimed that there was no visit from BPN to measure their land or explain the process. Most ACs believe that the *Geuchik* should prioritise the needs of people in rural areas. The data indicate that 85 per cent of the ACs received some form of explanation about land rights and ownership after the tsunami in BA. A further 15 per cent claimed that they did not receive any response local BPN offices.

Conversely, in WA, 100 per cent of ACs were satisfied and fully understood the explanation given by the local BPN office. However, only 83 per cent understood the land acquisition procedure. In BA, only 65 per cent of ACs fully understood the land process, while 35 per cent claimed they had not been given any explanation by the

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[530]. Beneficiary, interview by research team, in BA, 2 December 2012, BA4, transcript.
[531]. Beneficiary, interview by research team, in BA, 6 December 2012, BA11, transcript.
[532]. Beneficiary, interview by research team, in BA, 9 December 2012, BA19, transcript.

local BPN office. The lack of explanation on the cost of land measurement raised concerns of double standards and nepotism among ACs. Therefore, the devolvement of all land-related issues to NGOs does not transfer new ISK to local communities.

A special government program called Prona allowed ACs to obtain certification with minimal delay. One beneficiary claimed that the process to obtain the certificates was completed within a year with the help of secretary of the village (*kabupaten*).[533] This indicates that the *Geuchik* and other village leaders were more effective when they collaborated with government programs. The Prona program was more common among ACs in WA than in BA. In WA, 50 per cent of ACs claimed that their land and house certificates were obtained through this program.[534]

The findings indicate that some ACs were denied the opportunity to join Prona due to their absence from their villages or their single status at the time of the tsunami. One participant in BA claimed that she was staying with her parents and was single at the time of the tsunami. She was not entitled to land due to her classification as a 'different KAKA'. She was forced to share a house with her parents. However, the original KAKA of the land (her parents) were entitled to assistance from Prona.[535]

A widow claimed that she did not join the Prona program because she was staying in Aceh Besar with her husband's family after the tsunami. Her house was built in BA while she was away and her name was left off Prona's list.[536] In some rural areas, ACs devolved certificate processing to the government, but sadly, many of them had not received their documents at the time of interview in 2013. [537]

In WA, ACs were more than satisfied with the Prona program than were ACs in BA. Most ACs' certificates were prepared and processed under the Prona program.[538] The

[533]. Beneficiary, interview by research team, in BA, 6 December 2012, BA12, transcript.
[534]. Data analysis based on empirical findings of this thesis, Aceh from November 2012 to May 2013.
[535]. Beneficiary, interview by research team, in BA, 7 December 2012, BA13, transcript.
[536]. Beneficiary, interview by research team, in BA, 11 December 2012, BA22, transcript.
[537]. Beneficiary, interview by research team, in BA, 9 December 2012, BA19, transcript.
[538]. Beneficiary, interview by research team, in WA, 10 May 2013, CM1, transcript.

certificates were either given to the *Geuchik* to present to the government[539] or processed directly by the BPN.[540]

According to one village leader in Desa Suak (Nagan Raya), many certificates were processed through Prona by the *Geuchik*. Of the 149 applications, the *Geuchik* handled 50 per cent.[541] Another village apparatus in Seuneubok Aceh Barat (district of Johan Pahlawan) claimed that all community members obtained their certificates via free Prona programs. The government managed most land and house certification issues in WA.[542]

7.8 Illegal Hoarders

Illegal hoarders posed another challenge for ACs, further delaying the acquisition of their land and house certificates. The problem was only significant in selected cases, such as Saudi Arabian and Turkish government-sponsored PHR in BA. The findings indicate that at least 10 per cent of ACs encountered problems with illegal hoarders. The hoarders were local villagers who had occupies the house before the rightful owner received the keys. [543]

According to a recipient of a Saudi PHR home, the HOV was responsible for misleading the villagers by allowing them to occupy the houses. Others hoarded the Saudi houses because it was inconvenient to remain in the crowded barracks, especially for families with children.[544]

In Aceh, renters did not possess any CoLo to evict hoarders. Documentation handover typically took place after an occupancy period of two years. Widowers and renters were mostly migrants from other parts of Aceh Jaya who were working in BA when the tsunami hit. The Saudi and Turkish government-sponsored homes were given to the less fortunate and people who had never owned land. Renters chose to stay in BA

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539. Beneficiary, interview by research team, in WA, 13 and 10 May 2013, CM7 and CM1, transcript.
540. Beneficiary, interview by research team, in WA, 24 and 25 May 2013, CM28, CM29 and CM30, transcript.
541. Beneficiary, interview by research team, in WA, May 2013, CM13, transcript.
542. Beneficiary, interview by research team, in WA, May 2013, CM6, transcript.
543. Beneficiary, interview by research team, in BA, December 2012, BA10, transcript.
544. Ibid.

due to socio-economic factors and original heritage land located in another district in Aceh Jaya.[545]

The two-year occupancy condition issued by BPN created problems for some ACs who were affected by hoarding. For example, one beneficiary was asked to pay up to IRP2 million to evict the illegal occupants from his home. After the tsunami, he stayed at the barracks for three years. Before the tsunami, he rented both a house and tailor shop. Due to his tenancy status, he was entitled to a Saudi-built house. His limited income as a tailor meant he could only pay part of the ransom demanded by the hoarders; he still owes IRP150,000. This problem was referred to the head of the district office, but no significant action was taken.[546] The hoarders problem had ongoing effects on the long-term economic sustainability of post-tsunami Aceh.

7.9 Future Land Issues

According to the local authority, economic development agencies predicted that the next generation of Aceh would not have any available land to build on in 2020. Low literacy levels, a high birthrate and marriage at a very young age has increased the population significantly in a short time. The program *Tunda Nikah Dini*[547] has been actively implemented in BA. The local authority should consider extending the campaign to rural areas, where rising birth rates are beginning to pose a concern for land security. The quick expansion and blooming of new KAKA has created demand for more land.

National campaigns to raise awareness about the importance of literacy would help tackle the rising birth rates. The low literacy issue relates directly to land problems in the village because more areas are needed as the population expands. There is a need to raise awareness about family planning and sustainable CB.

In a village in Sigli, Pidie Jaya, the community's nearest secondary education facility was located eight km from the village. The *sek dasar* (primary school) was located within the community. For preschool education, the community required a *Teka Islam*

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545. Beneficiary, interview by research team, in BA, 6 December 2012, BA11, transcript.
546. Beneficiary, interview by research team, in BA, 8 December 2012, BA17, transcript.
547. The 'Delay early marriage' campaign.

(Islamic preschool) to set a strong educational foundation and helping to reduce the illiteracy problem of future generations. [548]

7.10 Relocation

Relocated communities in Aceh faced many challenges, especially in sustaining their livelihood. Employment issues and long commutes prompted some ACs to return to their temporary shelter. In some cases, ACs tried to adapt to their new socio-economic climate, but mostly found it unsustainable in the long term. Most relocated ACs encountered issues with their land status, especially those who previously owned a coastal property that was submerged in the tsunami. Coastal residents, such as fisheries workers, opted to stay closer to the sea, where they could continue to work.[549] The relocation of fisheries communities would have impeded the region's economic climate.

Coastal areas like Indra Puri (Johan Pahlawan) were declared a green zone by the local government. Therefore, the local government had to relocate the whole population from Suak Indra Puri, a coastal village, to Blang Brandang, a new relocation area.[550] This resettled community in WA received 48 m^2 houses, worth IRP40 million each.[551]

In some areas, problems arose between relocated settlements and indigenous communities. For example, relocated communities insisted on retaining the name of their village, Padang Serahit, that was now submerged. The original community refused, claiming that the village no longer existed. Logically, there should not be two places with the same name. [552] The matter was resolved when the relocated community agreed to call their new village by its existing name as a sign of respect to the original residents. [553]

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548. Beneficiary, interview by research team, in BA, 12 December 2012, interview BA24, transcript.
549. Beneficiary, interview by research team, in WA, 16 May 2013, CM14, transcript.
550. Ibid.
551. Beneficiary, interview by research team, in WA, 10 May 2013, CM2, transcript.
552. Beneficiary, interview by research team, in WA, 18 May 2013, CM18, transcript.
553. Beneficiary, interview by research team, in WA, 18 May 2013, CM18, transcript.

In WA, relocation settlements did not exclude those with uncertain ownership status. ACs included tenants and survivors who lost their land in the tsunami.[554] The only problem facing the relocated community was that ACs were not given ownership certificates due to their relocation status.[555]

7.11 Importance of Land and its Value

The importance of legal land and house ownership for ACs was largely about heritage value[556]for future generations. The legal documentation also allowed ACs to use their property as collateral value for business loans. The official certificates were proof of ownership that could be passed down to the next generation. Further, possession of land certificates protected landowners against ownership disputes. These are the reasons ACs were so determined to secure their documentation.[557]

The selling or renting value of properties depended on the location in the village or town.[558] Homes could be mortgaged for IRP10 million to fund business activities.[559] A local tailor lost all his businesses due to the tsunami. He was afraid of being unable to make the IRP400, 000 monthly repayments on his IRP5 million loan after being transferred back to barracks while waiting for his Saudi-built home to be completed.[560] The tailor was burdened with debt, but due to delays with his new home, he had no certificates to use as collateral.

7.12 Analysis and Conclusion

Land rights and ownership became key concerns in the RR phase because land certificates were vital for ACs to secure PHR homes. Before the tsunami, locals were largely unaware of the importance of land documentation. Thus, the tsunami land and house certification program had increased ACs' ISK on the significance of legal documents.

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554. Beneficiary, interview by research team, in WA, 25 May 2013, CM30, transcript.
555. Beneficiary, interview by research team, in WA, 10 May 2013, CM2, transcript.
556. Beneficiary, interview by research team, in BA, 6 and 9 December 2012, BA11 and BA18, transcript.
557. Beneficiary, interview by research team, in BA, 8 December 2012, BA16, transcript.
558. Beneficiary, interview by research team, in BA, 5 December 2012, BA9, transcript.
559. Beneficiary, interview by research team, in BA, 7 December 2012, BA13, transcript.
560. Beneficiary, interview by research team, in BA, 8 December 2012, BA17, transcript.

AC participation in the Prona program taught locals the value of land certificates and the process required to secure them. However, several factors, such as a lack of coordination between NGOs, government agencies (BPBD and BPN) affected the outcomes of Prona. The findings indicate that the coordination did influence the effectiveness of this program. The comparison between BA and WA shows that the coordination between BPBD, BPN and NGOs in WA facilitated a smoother process for ACs. Most ACs in BA who were not included in Prona encountered difficulties in acquiring land and house certificates. In some cases, ACs opted not to apply for certificates due to time and financial constraints.

ACs tended not to participate in the resolution of house and land issues because NGOs managed this for them. While this saved ACs a considerable amount of money, it left them with little knowledge about the process. However, the certification process did raise community awareness about the importance of legal documentation. From a CB perspective, beneficiaries learned that certificates could be used to secure bank loans.

The price of land in Aceh also affected the capacity of ACs. High land prices were an obstacle for entrepreneurs and business owners. While the relationship between land price and socio-economic activity may seem minor, it did affect ACs' livelihoods.

However, the reliance on NGOs and other agencies to resolve the land issue indirectly led towards passive participation among ACs. The ACs had to rely on the NGOs for assistance to resolve many land issues highlighted throughout this chapter due to lack of knowledge, budget constraints and limited capacity to solve the issues themselves. Further, the cost of measuring land and acquiring certificates was prohibitive for some community members. They had relied on the NGOs and government agencies to assist them. However, from an LRRD perspective, had the land-related issues been addressed as part of MSD in the ERR phase, many of the issues encountered in the RR phase would have been avoided. The land issues in ERR and RR phase should have been integrated under the LRRD framework to enhance the ACs participation.

Chapter 8:
Tsunami Mitigations

8.1 Introduction

According to Burke, as illustrated in the revised logic model for DRR, six principal components have direct effects on a hazard in a manner that can decrease or increase vulnerability in the face of disaster.[561] Increased investment in a combination of these six components, under an integrated long-term development plan, can assist in reducing risk. The DRR components—institutions and laws, disaster knowledge, disaster awareness, risk-reduction measures, preparedness, changes in vulnerability, changed impact of future disasters and positive or negative impacts on development—have inter-linkages with the non-DRR components, which are the primary focus of this study, such as livelihoods, capacities, the social fabric, the state and CS in general.[562]

The following discussion on TM will be based on the findings from the empirical studies conducted in Aceh, Indonesia. The information includes direct comments by interviewees, detailing their perspectives on the importance of TM facilities in their long-term development plans and commenting on how this affects their livelihood and CB, with the aim of becoming a resilient disaster-prepared community.

TM can be divided into two components: first, the tangible aspects of TM, such as facilities; and second, the ISK integration into AC's long-term development plans. The two components are linked with each other, although, in Aceh, there was greater physical development relating to TM, whereas the ISK integration was rather slow or still in progress. This was because of the Indonesian government's new legislation and institutions in disaster management areas, which were established after the tsunami in 2004 and that were still in the early stages of development. The guidelines, the emergency law department and the ministries for disaster were new and could be regarded as 'works in progress'.[563]

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561. Burkey, *People First*, 40–70.
562. Ibid., 88.
563. Ibid., 90.

Before the new national disaster management law was introduced, disasters were managed at the national level of the government, under the Badan Koordinasi Penanggulan Bencana (BAKORNAS). BAKORNAS was a mechanism to coordinate eight departments through a committee, the operational costs of which were funded by the government.[564] The process of centralising the BAKORNAS into the new disaster ministry, the BNPB (Indonesia National Disaster Management Agency) took some time,[565] as it was only established a few years after the tsunami, during the RR phase. The new national disaster management law has high priority within the government, which has made the head of the emergency management agency, BRR, a highly mandated ministerial post with its own budget.[566]

The standardisation of the early warning system to help improve monitoring of disaster risks has been viable only with the supervision of leading foreign agencies. In the post-development phase, there has been a great deal of collaboration with local research institutions, such as TDMRC, UnSyiah BA, BPBD and the local fire brigade department, in designing the new blueprint for TM.

8.2 Evacuation and Mitigation Facilities

The ACs in Aceh raised some issues concerning the TM facilities. Concerns were raised regarding the seismic-resistant infrastructure and public facilities, the lack of a hazard map showing the tsunami risk zones and of seismic-resistant housing. Questions were also raised regarding the accuracy of the metrological system and the location of the tsunami alarm warning system in coastal areas.

The issues raised above are necessary to ensure that the ACs are well prepared and alerted when there is a tsunami warning. The combination of all the issues raised above affects the local capacity and the ISK development in TM programs. An empirical study shows that, for the ACs in BA, based on the current TM programs and facilities in place, the effect of a future tsunami would be reduced by 96 per cent. For WA, the corresponding percentage was slightly lower, at 89 per cent. WA already had a good TM blueprint plan as early as the ERR phase and it completed implementation

564. James, 'Getting Ahead of the Next Disaster', 426.
565. Burkey, *People First*, 90.
566. Ibid., 90.

during the RR phase. The TM facilities include tsunami early warning systems (TEWS), evacuation buildings, high grounds, tsunami walls and/or mangrove plantations that act as a shield against the waves.[567]

In WA, the ACs has relocated a few km away from their original land as part of the district-level TM plans. The findings indicate that 88 per cent of the ACs in BA believed that various stakeholders could help reduce the impact of a disaster such as a tsunami by undertaking a joint TM effort to increase the quality of the TM facilities. In WA, 100 per cent of the ACs considered that the TM facilities were necessary as part of the disaster management system in Aceh.

However, the ability of those in the ACs to reach TM facilities is determined by their geographical location during the catastrophe. Therefore, the preferences of the ACs regarding which type of TM facilities should be implemented depend on the PHR location. Those in the ACs who had their homes reconstructed on the original land close to the coastal areas prefer tsunami walls and more TEWS. However, the relocated communities prefer seismic-resistant evacuation buildings with better sanitation and irrigation systems to avoid floods. Based on the 2004 tsunami experience, the seismic-resistance factors made ACs feel confident in seeking protection in the mosques in Aceh during the tsunami, which saved hundreds of lives.

8.3 Evacuation Buildings and High Grounds

In BA, four evacuation buildings were built due to the collaboration between the local government, the local research centre and international donors, including Japan, through a multi-trust donor fund. There were two types of evacuation facilities for ACs in Aceh: first, the evacuation building; and second, the evacuation grounds, that is, the higher ground of the hills and mountainous areas.

In BA, 92 per cent of ACs claimed that the seismic resistance of their public facilities and infrastructure was of primary concern in their reconstruction of their PHR. This includes the seismic resistance of facilities such as evacuation buildings and of evacuation routes to higher grounds. The ACs commented that, during the earthquake, they had a high level of certainty that they would be able to reach one of the four

567. James, 'Getting Ahead of the Next Disaster', 427.

seismic-resistant escape buildings if they were travelling from the surrounding 16 villages in Ulee Lee, Meuraxa, BA, which is seismic resistant. As well as their seismic-resistant qualities, the strategic locations of the escape buildings were important. It is particularly important that they are located in coastal areas, because 90 per cent of casualties during a tsunami are from coastal areas. After the tsunami, only one per cent of the population from each village survived the disaster. For example, of the 3000–7000 individuals in the communities in Ulee Lee, only 8–15 people survived.[568]

Even though the evacuation buildings are seismic resistant, the ACs remained sceptical over the quality of these buildings and their ability to protecting them against the tsunami waves. This scepticism explains why the ACs preferred high grounds over evacuation buildings during the disaster.[569] Nevertheless, 50–55 per cent of ACs highlighted that more evacuation buildings were required in both regions.[570] The Acehnese communities are blessed with great confidence in their religion, but only 19 per cent of the ACs claimed that they put their trust in God rather than relying on the human-made facilities to survive another tsunami.

Those in the coastal communities are aware that no evacuation building will be built close to their houses.[571] However, 50 per cent of the ACs in BA and 55 per cent of those in WA and the surrounding regions considered that continuous improvement of evacuation facilities is the best way to reduce the effect of tsunamis. Only about 19 per cent of the ACs relied on higher ground as the nearest evacuation route. The most common problem with the high ground evacuation areas was ease of access, in that there were no proper permanent roads or stairs had yet to be constructed to enable ACs to reach safety and ensure that these higher grounds were effective TM facilities.

A limitation of the escape buildings such as the TDMRC is that they can only accommodate 600 people at a time. As a result, the rest of the community must evacuate to the nearest high ground.[572] As the ACs are aware of the physical space

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568. Beneficiary, interview by research team, in BA, 1 December 2012, BA1, transcript.
569. Beneficiary, interview by research team, in BA, 7 December 2012, BA14, transcript.
570. Beneficiary, interview by research team, in BA and WA, 25 May 2013, 12 and 9 2012, CM30, BA 25 and BA18, transcript.
571. Beneficiary, interview by research team, in BA, 2 December 2012, BA4, transcript.
572. Beneficiary, interview by research team, in BA, 9 December 2012, BA19, transcript.

limitations of the evacuation buildings, most would choose to attempt to escape to the nearest higher ground, given a choice between the two TM facilities. Given the preferences for the higher grounds, and the much larger number of individuals able to utilise them, the evacuation routes need to be improved, with better staircases constructed to accommodate the need of the communities during disasters. Evacuation routes in poor condition that slow down the evacuation process for the communities during the disaster do not satisfy TM needs.[573]

The ACs were expecting that responsible stakeholders would reconstruct a bigger and larger road for higher ground evacuation. This would reduce the risk of accidents occurring during the mass public evacuation to safer grounds. Good traffic control can ensure that everybody can reach the higher ground safely and in time. The AC in BA was very satisfied with the current facilities, including the evacuation route, evacuation buildings and TEWS facilities that had been developed, compared with those available prior to the tsunami in 2004.

Most evacuation facilities have been built by NGOs and international governments. Assistance from foreign agencies such as NGOs was only meant to be a short-term solution, although it was preferable to no action from the local, provincial authorities. However, the ACs urge that local authorities should take an active role in seeking solutions to mitigate tsunamis in future.[574]

In one district in BA, Desa Kajhu, Dusun Lamseunong Baru Jaya Kec Baitussalam Aceh Besar, there was no evacuation building for the coastal communities.[575] The village elders claimed that the TM facilities were vital for the population in Kajhu because there were 3,666 eligible voters in the village after the tsunami and they considered that the government should pay more attention to the needs of their constituents. After the tsunami, only 10 per cent of the 16,000 people in the community survived, with the high number of casualties being the result of the high density of the area. Of the casualties, 90 per cent were women and children.

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573. Beneficiary, interview by research team, in BA, 4 December 2012, BA8, transcript.
574. Beneficiary, interview by research team, in BA, 8 December 2012, BA16, transcript.
575. Beneficiary, interview by research team, in WA, 16 May 2013, CM13, transcript.

According to the ACs, it is the responsibility of the stakeholders to provide evacuation buildings or evacuation routes as TM facilities for the community in this district.[576] The community's *Geuchik* added that there was a plan to build an evacuation building in Kajhu but that there was no work in progress yet. The construction of the evacuation facilities should be in progress as the central government continues its efforts to improve TM facilities and the community is more than willing to provide land for the government to build the evacuation facilities. However, it is taking longer than it should for the facilities to be provided.[577]

In Lum Badeok BA, an evacuation route was built to assist evacuation to the mountain, which was identified as the only higher ground in the area. A crucial bridge is required to link the villages to the evacuation facilities in the mountain area.[578] Further, the existing escape route was not tarred, which created difficulties in reaching the mountain.[579]

The reconstruction of TM evacuation facilities needs to consider the ratio between the density of the population and the capacity of the evacuation facilities. Some evacuation routes involve a distance of approximately 9 km to the nearest high ground. In these cases, some of the ACs would have no choice but to escape to the much closer evacuation buildings, which only 500 m away.[580] However, as the evacuation buildings are limited in space, as noted above, they could not accommodate mass evacuation. This indicates that greater attention must be paid to the ratio between TM facilities and population numbers, particularly where higher ground, the alternative to evacuation buildings, is quite distant.

In some case, the existing facilities malfunctioned, owing to lack of maintenance or poor planning, and did not benefit the communities.[581] For example in Kecamatan Johan Pahlawan in Melaboh, WA, as a result of high tides and a lack of training of TEWS staff, the TEWS sent a false alarm, alerting the surrounding community of a

576. Beneficiary, interview by research team, in BA, 8 December 2012, BA15, transcript.
577. Beneficiary, interview by research team, in BA, 8 December 2012, BA16, transcript.
578. Ibid.
579. Beneficiary, interview by research team, in WA, 25 May 2013 CM30, transcript.
580. Beneficiary, interview by research team, in WA, 11 May 2013, CM3, transcript.
581. Beneficiary, interview by research team, in BA, 10 December 2012, BA20, transcript.

tsunami.[582] Another issue that related to poor city planning was that escape routes were too narrow and needed enlargement to accommodate the mass evacuation process.

For example, in Blang Brandang, a relocation area, the community estimates that, on a normal day, it only takes about 15 minutes to reach the tsunami evacuation safe ground, which was about 5–10 km away. However, during the April 2012 earthquake, the communities in Kecamatan Johan Pahlawan took an hour to reach safe grounds because of the numbers of people using narrow routes and the lack of traffic controls.[583] Some evacuation facilities built by BRR[584] should have been better equipped with spotlights[585] to guide the evacuation route at night.[586] However, renovations of existing TM facilities have been delayed because of bureaucratic procedures. For example, in WA, the repair of approved TM facilities should have been completed in May 2013[587] but there was no sign of the construction of such facilities in WA.

As well as providing infrastructure such as evacuation buildings and staircases to higher ground, there is a need for appropriate health programs and training in medical education for women, children and elders in the villages. In addition, emergency medical facilities and equipment such as stretchers are required as part of the emergency response, in addition to TM facilities.[588]

8.4 Tsunami Early Warning Systems or Sirenai

According to Madlazim and Tjipto Prastowo, 22 of 30 earthquake events reported by the Indonesian Agency for Geophysics, Climatology and Metrology between 2007 and 2010 were falsely identified as tsunamigenic by the Indonesian Tsunami Early Warning System (Ina-TEWS).[589] Thus, only eight tsunami warnings were genuine.

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582. Beneficiary, interview by research team, in WA, 12 May 2013, CM6, transcript.
583. Beneficiary, interview by research team, in WA, 19 May 2013, CM19, transcript.
584. Beneficiary, interview by research team, in WA, 24 May 2013 CM28, transcript.
585. Beneficiary, interview by research team, in WA, 24 May 2013, CM29, transcript.
586. Beneficiary, interview by research team, in WA, 24 May 2013, CM28, transcript.
587. Beneficiary, interview by research team, in WA, 11 May 2013, CM4, transcript.
588. Beneficiary, interview by research team, in BA, December 2012, BA6, transcript.
589. Madlazim and Tjipto Prastowo, (2016) 'Evaluation of Earthquake Parameters Used in the Indonesian Tsunami Early Warning System', *Earth Science* 29, no. 1: 27.

The TEWS in Aceh created a public panic when it provided a false tsunami warning in April 2012. Proper maintenance will ensure that the TEWS functions well as a TM facility for the community in BA. Beginning in 2005, under the TEWS system, 15 sea buoys linked by satellite communication had been in place in Aceh. This system was part of a US$130 million Indian Ocean tsunami Warning and Mitigation System, which was expected to be operational by 2008.[590]

Due to the lack of general observation of the TM facilities, and the false alarm issued, people were endangered and some almost lost their lives trying to escape to safety.[591] A combination of evacuation facilities and TEWS such as *Sirenai* (sirens) are vital for coastal area communities.[592] However, ACs in both BA and WA regarded the evacuation facilities as more important than the TEWS. In BA, only eight per cent of the AC thought that the siren system was the best way to reduce the effect of a tsunami. In WA, 22 per cent thought that the TEWS system was necessary but a higher percentage (55 per cent) regarded evacuation facilities, including routes to high ground, seismic-resistance buildings and tsunami walls as essential TM facilities.

The reliability of the TEWS was a strong concern to ACs as the TEWS false alarm caused traffic congestion and numerous incidents.[593] A lack of training, resulting in poor transfer of skills to TEWS staff and limited capacity to maintain the TEWS, was the primary deficiency in this region. In addition, some of the TEWS relied on electricity supplies, but there is a high probability of power supplies failing during a tsunami. Without ISK to operate and maintain the TEWS, they represent a waste of resources because the ACs cannot rely on the accuracy of the tsunami alerts issued by these TM measures.

Without the TEWS, the evacuation buildings would not function as safety grounds for these communities. The community needs the combination of evacuation buildings, roads and an effective TEWS to ensure that its members can reach safe ground during a disaster.[594] In BA, one AC claimed that the problem with their local TEWS was that

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590. James, 'Getting Ahead of the Next Disaster,' 425.
591. Beneficiary, interview by research team, in BA, 9 December 2012 BA18, transcript.
592. Beneficiary, interview by research team, in BA, 6 December 2012, BA11, transcript.
593. Beneficiary, interview by research team, in WA, 25 May 2013, CM30, transcript.
594. Beneficiary, interview by research team, in WA, 10 May 2013, CM1 and CM2, transcript.

it was as not properly maintained, which led it to issue a false tsunami warning by itself.[595]

The AC in WA only had one TEWS, which was provided by the NGOs in Suak Indra Puri area during the RR phase. It was donated by NGOs and needs to be replaced with a new system.[596] Without proper mitigation efforts or TEWS, the AC relies on local wisdom. Ironically, there were no evacuation facilities in Kecamatan Meureubo, which consists of two *mukim* and 26 villages, and has a population of 45,000.[597]

Training local communities with decent ISK to operate TEWS is important to ensure that the system is maintained with the arrangement between BPBD and BPBN.[598] In addition, the government should allocate more funds to research and development to determine which TM facilities are best suited to the ACs.[599] The combination of good ISK and TM facilities, such as TEWS and evacuation buildings such as the TDMRC, could help reduce the risks and negative effects of tsunami.[600]

Evacuation buildings may be the only TM effort that stakeholders can provide to an AC if there is no local capacity to operate TM facilities. Without CB efforts, including participation in simulation exercises, the ACs remain fearful and lacking in confidence in terms of their abilities to manage in the face of tsunamis.[601] It is crucial that more disaster mitigation facilities are added and that there is an increase in simulations and mitigation activities to avoid unnecessary problems during evacuation.[602]

As well as good TM facilities, more frequent training will help ACs to be mentally and physically prepared to face a tsunami or other disaster. The combination of scheduled maintenance of alarm systems to avoid false alarms and a TM training program will help ACs to develop local capacity to deal with disasters and prevent

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595. TDMRC was built in 2008.
596. Beneficiary, interview by research team, in WA, 11 May 2013, CM3, transcript.
597. Beneficiary, interview by research team, in WA, 11 May 2013, CM4, transcript.
598. Beneficiary, interview by research team, in BA, 5 December 2012, BA10, transcript.
599. Beneficiary, interview by research team, in WA, 10 May 2013, CM2, transcript.
600. Beneficiary, interview by research team, in BA, 9 December 2012, BA18, transcript.
601. Beneficiary, interview by research team, in BA, 3 December 2012, BA5, transcript. The interviewee reported greater confidence with religious support. Despite stronger evacuation buildings, a larger tsunami would leave no chance of survival. Locals would rather escape to higher ground. While it is logical to seek refuge in the higher building, local communities believe the mosque is safer.
602. Beneficiary, interview by research team, in WA, 12 May 2013, CM5, transcript.

unnecessary waste of resources.[603] With better ISK, training and simulation exercises, ACs would not be alarmed by or unable to cope with, for instance, a small-scale earthquake.[604]

8.5 Distance from Evacuation Facilities

A hazard map is a useful tool to guide coastal residents in the case of evacuation.[605] The hazard map should indicate and highlight the possible flood zones and the location of safe evacuation places, including evacuation buildings, higher ground, evacuation routes and, possibly, a tsunami shelter in the event of an earthquake and tsunami. The hazard maps need to consider both vertical and horizontal evacuation techniques. As an example of a vertical technique, in high-rise hotels and buildings, evacuees have been directed to move to higher floors. In coastal communities, evacuees have been told to undertake a horizontal evacuation technique, by moving inland away from possible flooding areas resulting from the tsunami waves.

The distance from TM evacuation facilities was a concern raised by most ACs. Factors such as long distances, combined with poor conditions of evacuation routes to evacuation buildings or high grounds, had resulted in delays in ACs reaching safety grounds. The current TEWS located in Baitussalam does not alert communities in Krueng Raya of tsunamis because of its limited radius of 5–6 km. Most TEWS are limited to a certain range and location as they have a limited siren sound. In some areas, sirens are located 10 km away from the housing area.[606]

Krueng Raya provides an example of the issues related to evacuation distances. The distance from Krueng Raya to the nearest evacuation building is 10 km, which is about 15 minutes by vehicle. Alternatively, the ACs can rely on higher grounds for safety.[607] For example, in Mesjid Raya, the biggest mosque in central BA, Leung Bata, is the nearest safe ground, about 15 minutes from Mesjid Raya. However, it would have taken the AC in Krueng Raya an hour to travel from Krueng Raya to Mesjid

603. Beneficiary, interview by research team, in BA, 1 December 2012, BA2, transcript.
604. Burkey, *People First*, 93.
605. Satake, 'Advances in the Earthquake and Tsunami Sciences', 9.
606. Beneficiary, interview by research team, in BA, 5 December 2012, BA9, transcript.
607. Beneficiary, interview by research team, in BA, 2 December 2012, BA4, transcript.

Raya and, thus, the AC had no other choice.[608] The SEKDA office had requested a TM evacuation building in Krueng Raya from the central government. However, the government agencies have been too slow in responding to the communities' TM needs.[609]

In some cases, even if the evacuation facilities are potentially reachable in time, there is a problem because of the condition of the route to the premises. For example, one AC explained that the nearest mountain for evacuation was only about 15 minutes from her house. After the 2004 tsunami, the AC chose to escape to the mountain after the earthquake struck the region more than 50 times. However, during the April 2012 earthquake, the rough condition of the escape route made it difficult for some ACs to travel back and forth from their home to the evacuation ground and, therefore, they would choose to stay on the mountain for a few days. This indicates the need to repair and improve the existing evacuation route to the hills. Moreover, an evacuation route that may only take five minutes without traffic may take 30 minutes during the evacuation process.[610] In isolated cases, such as in the district of Ketapang, some ACs claimed that their nearest evacuation building was about 10 km away, meaning that they had to evacuate to higher ground instead of to an evacuation building.[611]

The rehabilitation of evacuation routes and facilities would help shorten the distances that ACs must travel to reach safety. For example, in Hujung Tanjung, the nearest evacuation route was about 4 km long. However, the locals suggested building a direct tsunami evacuation route, which was only about 900 m because it utilised community land and avoided traffic hazards. The ACs insist that, in such a case, the responsible stakeholders need to negotiate with local communities, which are more than willing to give up their land to enable a better evacuation route to be built from the village to the safe area. The government and other responsible agencies should make more effort to help their communities.[612]

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608. Beneficiary, interview by research team, in BA, 10 December 2012, BA20, transcript.
609. Beneficiary, interview by research team, in BA,12 December 2012, BA26, transcript.
610. Beneficiary, interview by research team, in BA, 3 December 2012, BA5, transcript.
611. Beneficiary, interview by research team, in BA, 2 December 2012, BA4, transcript.
612. Beneficiary, interview by research team, in WA, 11 May 2013, CM4, transcript.

8.6 Mangrove Plantations

After the tsunami, the existing mangrove plants along the coastal were damaged. These plantations were one form of natural TM effort that functions as a shield against the sea waves. The capacity of coastal forests to reduce the impact of tsunamis and storms has been noted as a significant risk mitigation measure.[613] Mangrove plantations and coastal pines (*rhu*) are preferred types of coastal forests in Aceh that assist in reducing the impact of tsunamis. Mangrove plantations represent one of many TM efforts that have occurred along Aceh's coastal lines. Many mangrove plantation projects were initiated by NGOs in partnership with local NGOs during the RR phase. Others were local initiatives, and some were supported by Wetland,[614] the most well-known INGO in relation to mangrove projects in Aceh.

As for the coastal communities, given a choice between evacuation buildings, mangrove plantations and seawalls, their preference is for safety. Even though the evacuation buildings and routes worked effectively for the communities in Aceh, they remained concerned about safety when staying near coastal areas that lacked tsunami walls or *tambak* (aquaculture fish ponds) to the waves during high tide.[615] Thus far, no concrete walls have been built in any areas in Aceh and most coastal areas rely on mangrove plantations. The mangrove plantation program needs to continue as a mechanism to raise awareness of the importance of this natural form of TM in coastal areas.[616]

The communities insisted that responsible stakeholders should build high seawalls, not only to help resist tsunami waves, but also to protect the mangrove plantation projects initiated by multi-donor funds via environmentally-based NGOs.[617] The construction of so-called tsunami walls is a good form of long-term TM investment for the local people. Mangrove plantations take 6–10 years before the trees are

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[613]. Semeidi Husrin, Agnieszka Strusinska and Hocine Oumeraci, 'Experimental Study on Tsunami Attenuation by Mangrove Forest', *Earth Planet Space* 64 (2012): 973.
[614]. Beneficiary, interview by research team, in BA, 5 December 2012, BA9, transcript.
[615]. Beneficiary, interview by research team, in WA, 11 May 2013, CM3, transcript.
[616]. Beneficiary, interview by research team, in BA, 5 December 2012, BA9, transcript.
[617]. Beneficiary, interview by research team, in WA, 17 May 2013, CM15, transcript.

sufficiently strong to function as TM. In the meantime, high walls are required to reduce the impact of the waves on coastal communities.[618]

One of the many functions of the mangroves was to protect the livelihood and socio-economic systems of the coastal communities. For example, most *tambak* were built close to the coastal area because it provides a better irrigation system. The aquaculture projects depend on the mangrove plantation as the first form of the protection mechanism against tidal waves. As mangrove plantations only provide protection for coastal economic activities in the long term, they should be given more attention by the government.[619] Mangrove plantations are a time-consuming and high maintenance project.[620]

As an alternative, some ACs have suggested cemara plantations,[621] which grow easily in the coastal area and are lower cost and less time-consuming than mangroves. Along the WA coastline, there are many cemara plantations instead of mangrove. The choice between mangrove and cemara depends on factors such as the landscape and the socio-economic needs of the local communities. Cemara was the best option for coastal areas where the economy and community are centred on beaches and tourism, whereas mangroves are preferable for communities centred on fisheries and aquaculture farmers.

However, the ability of both types of plantations to reduce risk and function as TM measures is still very much debated.[622] From a long-term perspective, plantations may provide some protection against the alteration of the coastal landscape in the wake of a tsunami. In summary, based on empirical findings, the ACs prefer mangrove plantations as a first buffer and the best natural protection for coastal-based socio-economic activities.

8.7 Responsible Stakeholders

Stakeholders should take responsibility for providing TM facilities and training. That is, their tasks should include building, maintaining, repairing and improving existing

618. Beneficiary, interview by research team, in BA, 8 December 2012, BA16, transcript.
619. Beneficiary, interview by research team, in BA, 1 December 2012, BA2, transcript.
620. Beneficiary, interview by research team, in BA, 1 December 2012, BA1, transcript.
621. Beneficiary, interview by research team, in WA, 11 May 2013, interview CM4, transcript.
622. Burkey, *People First*, 92.

TM facilities and providing training and simulation exercises for the beneficiaries and ACs. The empirical findings indicate that beneficiaries identified a few stakeholders that they suggested should be held responsible for the TM facilities.

The government ministry was rated as the most important stakeholder by 92 per cent of people interviewed in BA and 89 per cent in WA. In both regions, government agencies were rated as the second-most important stakeholders in terms of TM efforts, with 46 per cent in BA and 55 per cent in WA rating these agencies. Surprisingly, the NGOs were ranked lower in both regions, with only 15 per cent of those in BA and 11 per cent in WA considering them important. Finally, only ACs in WA rated the UN agencies as responsible stakeholders in TM efforts, with a rating of 11 per cent.[623]

The government ministry, one the most active stakeholders in TM efforts, was rated as the most responsible stakeholder after 12 years of the tsunami as shown by the empirical findings. In WA, the beneficiaries estimated that 89 per cent of the TM effort was undertaken by the government, with beneficiaries in BA rating it as undertaking 77 per cent of the TM effort. Again, WA ranked the government agencies higher than did BA, considering that they were responsible for 72 per cent of the TM effort, compared with the much lower BA ranking of 31 per cent.

The governmental bodies in WA were more actively engaged with the international organisations in reconstruction and TM efforts than were those in BA. The international organisations chose to be directly involved with selected local research centres and agencies and did not undertake any direct collaboration with the local government agencies.

On the involvement of organisations in TM efforts, the international agencies, including NGOs, were rated slightly higher in WA at 22 per cent compared with 19 per cent in BA. This was the result of the active involvement of these non-governmental bodies during the RR phase, which focused more on the physical development in RR and placed less emphasis on TM efforts. After the end of the RR phase, the programs and projects were handed over to related disaster ministries and agencies, which had to change the perception of ACs, convincing them that the role of

[623]. Data analysis based on empirical findings of this thesis Aceh from November 2012 to May 2013.

these government agencies should be more prominent in TM. The beneficiaries did not highlight the actual active role played by NGOs in their efforts to seek funding from donors to assist with the RR of TM facilities.[624]

8.8 Government Role

The lack of disaster management preparation at the central government level and the large scale of the catastrophe in 2004 forced the Indonesian government to declare a state of emergency in Aceh for one year. The government's role in PTR, which commenced under BRR, occurred in the RR phase. BRR focused only on the RR stage and its efforts did not extend to TM issues. Research centres and agencies that liaised with the government via academia, such as TDMRC in UnSyiah, were responsible for continuing the TM efforts and programs after the RR phase.

Mitigation efforts in Aceh were usually a combined effort of the government, academia and research centres, funded by international agencies, and NGOs, supported by donors.[625] The NGOs were the dominant player in the ERR phase. In the case of Aceh, mitigation efforts by the government were a combined effort of local, national and international governments.[626]

Public awareness and participation in TM are the final, fruitful outcomes of the whole new disaster management process.[627] Before the tsunami, there were no mitigation efforts or preparedness in Aceh. Communities became aware of the importance of mitigation efforts only after 2007. The community in Aceh has started to realise the importance of having TM measures such as an early warning system and evacuation facilities. As part of government efforts to raise awareness among the ACs, many programs are run by responsible government agencies, including Disaster Preparedness Day, the school road show and other outreach efforts at local and provincial levels.[628]

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[624]. Beneficiary, interview by research team, in BA and WA, November 2012–May 2013, BA77, BA31, BA19, BA0, BA4, WA89, WA72, WA22, WA6 and WA11transcript.
[625]. James, 'Getting Ahead of the Next Disaster', 427.
[626]. ECB CRS, interview by research team, Jakarta Indonesia, 13 November 2012, transcript.
[627]. James, 'Getting Ahead of the Next Disaster', 427.
[628]. Ibid., 428

The government attempts to prioritise TM efforts based on existing capacity and resources. For instance, disaster-prone areas were given priority in the collaborations with major donors, research centres and government agencies. Coordination was essential in contributing to efficient and effective mitigation efforts. The government acknowledged the role of NGOs as important in PTR in Aceh, including the reports, information, plans and achievements of NGOs in mitigation efforts. The government request reports on aspects mentioned earlier on the annual base. As for the NGOs, acceptance from the government was the key to ensuring their recognition, reputation and accountability. The NGOs in Indonesia were present to support the government and reach out to the beneficiaries and communities.[629]

In Indonesia, the Emergency Capacity Building (ECB) consortium of NGOs helped the NGOs to coordinate and cooperate during the emergency. The ECB develops an annual action plan, planning deployment during emergencies. This collaboration was the key to achieving the objectives of the annual action plan. Coordination was critical not only during the emergency response, but also in development preparedness and mitigation measures.[630]

The Indonesian government needs the NGOs because of its gaps in capacity in disaster management. The lack of experts in government ministries and agencies in the TM sector was one of the reasons why the NGOs' role was important in TM programs in Aceh. The process of integrating ISK and CB among local staff for TEWS is time-consuming. Most of the tsunami warnings issued after 2004 depended only on TEWS sirens. Government lacks the staff and the expertise to train the ACs and raising their confidence in, and knowledge of, TM. Indeed, the government's inability to understand the importance of TM facilities to the community impeded the TM programs and projects that were started by the NGOs.[631]

The size of the population contributed to whether the government was effective in dealing with TM. For example, because of its small population, there were almost no needs of NGOs presence in Japan after the 2011 earthquake and tsunami, even given the extreme scale of the disaster. Japan is a tsunami-prone region with high levels of

[629]. ECB CRS, interview by research team, in Jakarta, 13 November 2012, transcript.
[630]. Ibid.
[631]. Beneficiary, interview by research team, in BA, 12 December 2012, BA23, transcript.

preparedness. In contrast, in developing countries such as Indonesia, the presence of NGOs was crucial in filling the gap when it was found that government ministries and agencies were incapable of handling the massive disaster caused by the tsunami.[632]

The mitigation efforts, the TEWS and the preparedness of the communities were the most important focuses for the government. The Indonesian government should focus on the fact that Indonesia is a disaster-prone country.[633] Coordination between the agencies involved in the ERR should include not only the NGOs but also the local NGOs. Partnerships with the local NGOs improve the collaboration with the NGOs. Collaboration between NGOs has not always been easy because of issues of pride and reputation, but the key has been the maintenance of communication, collaboration and coordination among the agencies, as demonstrated by the ECB consortium.[634]

Before the tsunami, there was no handbook or blueprint in Indonesia to guide the management of a large-scale disaster such as the tsunami. In the absence of such a guideline, the central government approved any agencies wanting to help in Aceh, provided they promised to fund the humanitarian operations. For example, in BA, local governance collapsed and the central government had no experience handling such a large-scale disaster. As a result, this gap was filled by international agencies, which assisted in coordinating and implementing effective rules and regulations during the ERR phase after the tsunami.

The absence of a locally based central body to coordinate the international agencies meant that the NGOs adopted a direct approach towards their beneficiaries. There were no rules to govern and organise the influx of humanitarian assistance in Aceh during the ERR phase. Consequently, there was no recording of, and no accurate data available on, the movement of the international agencies and the assistance that they provided directly to the communities.[635]

In the discussion on responsible stakeholders, a high percentage of ACs considered that the government should be held responsible for all TM efforts in Aceh.[636] Most

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632. ECB CRS, interview by research team, in Jakarta, 13 November 2012, transcript.
633. Burkey, *People First*, 89–90.
634. Representative from Oxfam, interview by research team, in Jakarta, 16 November 2012, transcript.
635. Former NGO/consultant, interview by research team, BA, 29 November 2012, transcript.
636. Beneficiary, interview by research team, in BA, 6 December 2012, BA12, transcript.

coastal communities had strong expectations that the government efforts and attention should be focused on the communities living near the coast. The perspective was that government assistance was crucial and should be focused on helping to train the locals with necessary ISK to face disaster.

The empirical findings indicate that some NGOs focused only on certain sectors in the RR phase and failed to emphasise the importance of DRR or TM-based ISK or training. The TM training was expected to train all levels of ACs, not to focus only on a specific part of the community. ACs considered that they were affected victims and, therefore, that NGOs should not discriminate, but rather should coordinate to unite the entire community, with all members benefit from the TM programs. If ACs were not included in an individual NGO's TM program, they sought an explanation from the local BPBD. The nature and mission of the NGOs sometimes resulted in them being misunderstood by the ACs, which created a negative perception of NGOs.

The empirical findings show that the government bureaucracy is the main hurdle impeding the progress of TM efforts in Aceh. The beneficiaries claimed, many times, that the responsible government agencies gave excuses and stated that there was no funding to continue with TM blueprints left by the NGOs and other international agencies during the RR phase. For example, local NGOs, including Red Cross and Uplink initiated mitigation efforts that were not continued into the developmental phase.[637] The empirical findings show that the government agencies staff relied entirely on state funding for transportation and food allowances to visit the villages and hold training and other programs.

Most beneficiaries considered that the government should be responsible for providing social infrastructure.[638] They also demanded that government should allocate more funds to supporting the TM efforts to prepare the ACs for the risk of disaster.[639] For instance, it was expected that greater funding for TM efforts would assist the provincial government to repair the existing tsunami evacuation facilities. It was also considered that the government should increase its efforts to upgrade the existing facilities and ensure that they would function effectively for the community,

[637]. Beneficiary, interview by research team, in BA, 3 December 2012, BA6, transcript.
[638]. Beneficiary, interview by research team, in BA, 6 December 2012, BA11, transcript.
[639]. Beneficiary, interview by research team, in WA, 13 May 2013, CM7, transcript.

and that it should enlarge evacuation routes and improve their conditions for the local community.[640] Another expectation of ACs in BA was that the government should increase its efforts to upgrade the existing TEWS to alert the community of tsunami risks.

One issue of concern to ACs was that the local government ran a TM program for tourists in Sabang and Pulo Aceh Island in Aceh. The programs were developed by the local administration in Aceh,[641] with collaboration between government agencies. It was strongly considered that the government should design a similar training program focusing on highly vulnerable groups, including the elderly, housewives and children.[642]

Another issue of concern to local communities in relation to TM facilities was the building of a tsunami wall, which functions as a shield against strong waves and high tides. According to the local communities, the government agencies had proposed building such a wall along the coastline during the ERR phase. However, it had not materialised because of a lack of foreign funding.[643] The government could not afford to build the seawall, which would need to stretch about 50 km along the coastline, without foreign funding.

The coastal areas were Indonesia's leading tourist attraction, and there were many small stalls and hawkers selling goods and services to tourists. The wall was expected to function as protection against high tides and possible tsunami waves and as safety shield to protect this coastal socio-economic community. The construction of the wall would also assist in stopping the high tide water flooding into the villages and destroying the paddy field irrigation system.[644]

A resident from Suak Indra Puri in Meulaboh, WA, commented that, if there was a tsunami wall, then the waves would not reach the community's houses during high tide season. The transitional shelters located along the coast are at risk of flooding during high tide and the rain season. The seawall was the only TM option for this

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640. Beneficiary, interview by research team, in BA, 8 December 2012, BA17, transcript.
641. Beneficiary, interview by research team, in BA, 2 December 2012, BA3, transcript.
642. Beneficiary, interview by research team, in BA, 9 December 2012, BA19, transcript.
643. Beneficiary, interview by research team, in WA, 17 May 2013, CM15, transcript.
644. Beneficiary, interview by research team, in WA, 19 May 2013, CM19, transcript.

community because of the problem of the landscape and its proximity to the sea.[645] These coastal communities were at risk during the disaster and the ACs considered that the government was not making sufficient efforts to overcome this problem.[646] Thus, it was considered that the collaboration between government ministries and agencies during the disaster was not sufficient to assist the local communities with TM.[647] In contrast to this view, some ACs considered that the TM efforts of the government were improving over time as there was increased funding for DRR-based simulation training conducted by the government agencies.[648]

8.9 Religions and Mitigation

Faith plays as an important role in strengthening the psychological state of the ACs in Aceh, the majority of whom are Muslims. The individuals of the AC in BA were more confident in their religious beliefs than those in the WA, particularly the Muslims. About 19 per cent of the interviewees claimed that they put their faith and trust in God (Allah) rather than in the TM facilities. They considered that the government should preserve the buildings that survived the tsunami as historical monuments, as a symbol of religious confidence.[649] The tsunami survivors believed that this would stand as a reminder that nothing is stronger than the will of Allah in determining their fate in the time of disaster. For example, in Lam Bada, Kajhu, Aceh Besar, studies on survival strategies after the tsunami showed that the communities accepted the tsunami as part of their destiny and placed their faith in God to lead them to a better life. Thus, the community TM efforts were based on their belief in Allah and they consider that, even if they have the best TM possible, events would continue to happen as they are destined.[650]

Most ACs believed that they could try to evacuate to higher ground but their success or not would depend on the Allah.[651] Some even saw religious belief as the only thing that they could rely upon, considering that they should 'leave the rest to Allah

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[645]. Beneficiary, interview by research team, in WA, 17 May 2013, CM15, transcript.
[646]. Beneficiary, interview by research team, in WA, 18 May 2013, CM18, transcript.
[647]. Beneficiary, interview by research team, in BA, 7 December 2012, BA14, transcript.
[648]. Beneficiary, interview by research team, in BA, 1 December 2012, BA1, transcript.
[649]. Beneficiary, interview by research team, in BA, 8 December 2012, BA17, transcript.
[650]. Researcher and senior lecturer from the Faculty of Agriculture at Syiah Kuala University, interview by research team, BA, 16 December 2012, transcript.
[651]. Beneficiary, interview by research team, in BA, 11 December 2012, BA22, transcript.

s.w.t.'[652] Even though the ACs insisted that they needed TM facilities, they continued to firmly believe in God's will lead their life.[653] This was a factor that contributed to many coastal communities willingly rebuilding their life in the coastal areas and leaving their survival to faith. This attitude indicates the level of confidence in, and the stronghold of, religion among ACs in Aceh. Apart from its efforts to supply TM facilities and measures, the ACs considered that the government was entirely responsible for building religious centres for the community. From this perspective, the tsunami was viewed as a lesson for disregarding Allah's s.w.t orders and, therefore, it was necessary for the government to encourage better religious education for the community.[654]

In contrast to the situation in BA, in WA almost none of the interviewees mentioned their stand on religion in relation to dealing with the disaster. In contrast, almost 55 per cent of the ACs in this region believed that the training and simulation exercises were the only TM efforts that could prepare them and reduce their risk in the time of a disaster such as the tsunami. In BA, only 27 per cent of ACs thought that the training and the simulation activities would help them face the disaster such as the tsunami.[655]

8.10 International Agencies and Local Agencies

Even though the role and efforts of the international agencies in TM were not rated highly by the government agencies and ministries, their programs during the RR phase prompted a new perspective, transforming the Acehnese perception of TM ideas. As a result, the Acehnese were more alert to any disaster and almost everyone had undertaken preparations to evacuate in case of an earthquake in the region. Thus, the TM efforts and training provided by the international agencies had a significant impact and they provided a practical blueprint for TM responses that was applicable to all levels of society in Aceh.

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652. Beneficiary, interview by research team, in BA, 5 December 2012, BA10, transcript.
653. Beneficiary, interview by research team, in BA, 4 December 2012, BA7, transcript.
654. Beneficiary, interview by research team, in BA, 3 December 2012, BA5, transcript.
655. WA results: evacuation facilities (10 people, 55 per cent); Assam tree and TEWS (four people, 22 per cent); simulation (10 people, 55 per cent). BA results: religion (five people, 19 per cent); evacuation facilities (13 people, 50 per cent); Assam tree (one person, four per cent); TEWS (two people, eight per cent); simulation (seven people, 27 per cent).

In WA, where there are no TEWS, the village's volunteer committees were well prepared to face any disaster. In BA, there is a locally based disaster committee known as CBAT that provides an example of how community participation contributes to CB in TM. This was a successful example of ToT training in TM knowledge. CBAT involves the establishment of a local disaster response team in every village, equipped with necessary plans to help ACs stop panicking during a disaster such as an earthquake. This committee is the first to respond to the community during a disaster. It is also a part of DRR integration program established by NGOs for the ACs. However, in some cases, the transfer of the blueprints or plans was delayed because of a lack of ISK and local capacity in the form of experts in TM management.

As noted, CBAT is a disaster volunteer board at the village level. These community committees have 10–20 voluntary members, consisting of the local youths and the village leaders. In one village, where flooding was the main concern apart from the tsunami itself, the local NGO PMI provided a simulation exercise, with the collaboration of local disaster agencies, as a measure to overcome the problem.[656] PMI equipped the team with essential equipment, such as a radio to make communication easier if the volume of rain in the mountain area increased and flooded the surrounding paddy field. Expanding such disaster-oriented committee to another village will help the community respond better during an emergency.

The AC suggested that they also required a seawall to be built along the river to avoid damage to their paddy plantation and crops during a flood.[657] As for new settlement areas, the ACs needed larger WASH and irrigation facilities to avoid flooding problems. For example, the IOM housing project was a good example of flood-resistant facilities, as brick walls surrounding the housing area stop the flood from flowing into the housing area.[658]

The transfer of a ToT program such as CBAT to BPBD occurred with the aim of integrating this DRR program at the national level. Sadly, however, because of a lack of continuity in TM CB, the CBAT team was not expanded to other villages. As the

656. Beneficiary, interview by research team, in WA, 16 May 2013, CM14, transcript.
657. Beneficiary, interview by research team, in WA, 18 May 2013, CM18, transcript.
658. Ibid.

CBAT volunteers have been trained to provide medical attention to community members in disasters, the integration of the CBAT program with PUSKESMAS[659] would be appropriate.[660]

Apart from CBAT, other NGOs instituted programs such as Save the Children, which focused on healing for the children to alleviate the trauma and help strengthen the psychological state of the younger generations.[661] The UN and UNICEF started a program to focus on disaster drills, intending that the Indonesian government would take over the responsibility for this program and ensure its continuance.

Many of these programs included the village leaders as mediators between NGOs and ACs. At the local community level, NGOs had conducted mitigation training for the HOVs.[662] It was intended that the HOVs would pass on their ISK on TM by conducting the training, which would assist the local communities to integrate this knowledge into their disaster preparation. Thus, the approach was bottom-up rather than top-down approach. It is important for some forms of TM knowledge and training to be integrated into all level of society, which will increase CB in the community. With appropriate ISK and capacity, the community perception will also change. The top-down approach in the community in Aceh meant that the communities had developed a negative impression of any 'uniform-based' project. The local opinion was that a uniform was a sign of a high authority in the bureaucracy, and a wide gap was perceived between such government officers and the local communities. Most ACs suggested that a less formal approach would improve acceptance of programs and ensure greater cooperation from the community.

The TDMRC based under UnSyiah in BA was one of the local agencies most mentioned in our empirical research.[663] The establishment of this centre was regarded as a good effort by the government. However, most ACs considered that the TDMRC, as a leading tsunami research centre in the region, should lead more simulation and exercise-based training programs for the ACs. The administrative building works as

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659. Local health clinic.
660. PMI, International Red Cross (local NGO), by research team, BA, 29 November 2012, transcript.
661. Beneficiary, interview by research team, in BA, 8 December 2012, BA15, transcript.
662. Beneficiary, interview by research team, in BA, 8 December 2012, BA16, transcript.
663. Beneficiary, interview by research team, in BA, 8 December 2012, BA15, transcript.

the research centre, and evacuation facilities were built 5 km from the coastline.[664] It was strongly considered that the government should support the establishment of more such research centres to encourage locally based research on disaster management.[665]

8.11 Coordination among All Stakeholders

Even though stakeholders each had their own responsibilities, coordination and collaboration was required among them, including among the beneficiaries, to ensure that TM was effective. All relevant parties, including local and international agencies, had to collaborate. Most ACs claimed that there was the very little effort at collaboration from the government and NGOs.[666] However, the BA PMI provides an excellent example of cooperation between government and local agencies, in this case a local NGO.[667] Another collaboration between government and nongovernment agencies was the UNICEF-sponsored TM programs.[668] Collaboration between the government and other public bodies, such as the TDMRC, was an essential step to encourage local–international partnerships, which included the local communities, and create successful TM programs.[669]

Coordination between the community and the government was critical in ensuring a successful TM program. To gain acceptance from the community and local confidence, it was essential that such coordination was informal and based on a bottom-up approach.[670] The high level of trauma experienced by these communities has continued up to present times, as Aceh is an earthquake-prone region. Some children experienced trauma up to four years after the tsunami because of the frequent earthquakes,[671] and the level of trauma is only just reducing now that there has been a long break since the last large-scale earthquakes. A bottom-up approach by the

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664. Beneficiary, interview by research team, in BA, 7 December 2012, BA13, transcript.
665. Beneficiary, interview by research team, in BA, 7 December 2012, BA14, transcript.
666. Beneficiary, interview by research team, in BA, 10 December 2012, BA21 and BA20, transcript.
667. Beneficiary, interview by research team, in WA, 10 May 2013, CM1, transcript.
668. Beneficiary, interview by research team, in WA, 10 May 2013, CM2, transcript.
669. Beneficiary, interview by research team, in BA, 11 December 2012, BA22, transcript.
670. Ibid.
671. Ibid.

government agencies in their TM efforts and programs will assist the ACs to reduce their trauma and be better prepared for emergencies.[672]

Another concern raised was that, even when seismic-resistant infrastructure has been built, support is still required to ensure the transfer of ISK through training and to increase human capacity.[673] It was argued that BPBD, the local disaster agencies, should plan better programs that continue throughout the year, rather than relying on simulation exercises that are held only twice a year.[674] At the national level, there was a TM[675] program that was a collaborative effort between the BPBN and the TNI military.[676]

Another TM problem faced by the ACs was the relocation of the community without TM planning being in place. This results in land problems and issues for owners, particularly when the distance of resettlement of PHR units are not assessed according to the needs of, and their suitability for, the people. For example, fishermen desire a relocation that is close to the sea, which is practical rather than safe. Strategically, a fishing-based village should be located 1–2 km from the coastal area to ensure the daily fishing activities can continue as usual. However, there was no central and strategic planning on this or other relocation issues in Aceh until the second half of 2005.

The distance of new relocation from the coastline in the coastal zone would not be an issue if the government had a good TEWS and TM system in place. The government needs to enhance its capacity to deliver the correct information on tsunamis and appropriate timely warnings to people in coastal areas during a disaster. In this respect, as noted above, the government needs to increase its efforts to rehabilitate evacuation routes to mountains and hilly areas and to provide evacuation building in the coastal areas, to ensure that the mitigation and warning systems will benefit the local community.

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672. Ibid.
673. Beneficiary, interview by research team, in BA, 12 December 2012, BA23, transcript.
674. Beneficiary, interview by research team, in WA, 11 May 2013, CM4, transcript.
675. *Siap siaga bencana*.
676. Beneficiary, interview by research team, in WA, 12 May 2013, CM5, transcript.

Even if a community has relocated close to the coastline, if an effective mitigation and warning system is in place, it will warn the people in time to evacuate them to safety. Given the time that occurs between an earthquake and an actual tsunami hitting a coastal area, the early warning system would be able to save lives.

In 2011, when Japan experienced a strong earthquake and tsunami, east Indonesia was given warning that the tsunami would hit their coastlines in seven hours. It provided a test of how efficient the Indonesian government was and whether it had the appropriate metrological technologies and could determine whether to send out a tsunami warning. In association with the mitigation efforts in Japan, the Indonesian government built a high wall along the coastline to stop the waves from directly hitting the coastal areas. However, because this structure was not enough to stop the waves, it was important to train the people and to deliver information and knowledge that is useful when there is an earthquake and/or tsunami. The tsunami alert should warn the ACs to escape to the nearest available evacuation facilities and it should reach the local communities that are vulnerable to the tsunami disaster in time to save more lives.[677] It is apparent that all these situations and issues discussed above required coordination among all stakeholders

8.12 Tsunami Mitigation at Beneficiaries level

8.12.1 Wasiat

Traditionally, the ACs in Aceh believes in the local wisdom and *wasiat* from their ancestors as a form of TM. One of the individuals from the ACs related that, when he was young, his grandmother used to tell him that there were times, when the earthquake hit, that there would be *ie Beuna*, which means 'big water' or 'water rising' in Bahasa Aceh. Thus, knowledge of the tsunami was a local wisdom that his community learned from the preceding generations. When the earthquake struck Aceh, this knowledge meant that because he knew to search for higher ground, which he sought at Meuraxa hospital, the nearest high ground, with his family. However, because of 30 m waves, as high as a coconut tree, the high ground did not protect

[677]. ECB CRS, interview by research team, in Jakarta, 13 November 2012, transcript.

them all of them, and one of his children was lost during the tsunami.[678] Another survivor from Simuleu Island said that there was local wisdom of *Smong-smong*, which meant tsunami or 'run from the sea' in the local island dialect.[679]

Unfortunately, this local wisdom was confined to only a few places. The experience and local knowledge gleaned from the ancestors was not published for public reference. There had been a tsunami in Aceh before, and there was some historical evidence in Sabang that a ship was brought by the waves and stranded on Sabang Island. It was recently returned to the Aceh local authority by Jakarta to serve as an historical monument of the tsunami.[680]

There is geological evidence supporting the local wisdom regarding previous tsunamis. Geological findings in the hillsides prove that tsunamis have reached the mountain areas during the time of the ancestors. According to the local folk stories, the tsunami waves were so high that they reached the mountains and hill areas. Thus, running to higher ground does not guarantee safety. The ancestors believed the word of *ulama* and prediction on the disaster and escaped to high ground safety. The higher land in Genting, in Pidie Jaya district today, was established as part of their ancestors' efforts to evacuate to a higher ground.

The survival rate was high in communities that had inherited knowledge from their elders and ancestors regarding the danger of seawater draining away, followed by a rapid rise in the sea tide after an earthquake. Another example of the benefits of local knowledge was that the participation of locals in CRS's project to build shelter in Padang improved their understanding of the concept of rebuilding. Here, the BBB concept accommodated local knowledge, as CRS realised the importance of involving the community rather than simply building for the community, based on experience in Aceh. It was important to ensure that the locals benefited from and utilised the ISK and experience and that they learned how to maintain the house.[681]

Another island in Sumatra that had a lower rate of tsunami casualties was Simeuleu Island. The community had listened to their ancestors' *wasiat* to run to the hills and

[678]. Beneficiary, interview by research team, in BA, 1 December 2012, BA2, transcript.
[679]. Beneficiary, interview by research team, in WA, 16 May 2013, CM14, transcript.
[680]. Beneficiary, interview by research team, in BA, 2 December 2012, BA3, transcript.
[681]. ECB CRS, interview by research team, in Jakarta, 13 November 2012, transcript.

mountains if there were many fish on the shore, and that they must never go to the sea to pick up the fish, but must move to the hill. Listening to this 'old folk's tale', the *wasiat*, helped to reduce the death rate in this community.[682]

Another belief among the ACs springing from the local wisdom was that sinful acts would cause more disaster in future. Although some communities saw the low tide as the sign of a coming tsunami, because of the lack of ISK and training in TM in the community, they only vacated their houses and did not have further evacuation plans. Another reason for this lack of knowledge regarding TM, as highlighted by the *Geuchik*, was the low literacy level of the community, which largely had only primary school education.[683] Fighting illiteracy means increasing the capacity of the local community to grasp the concepts of TM training and preparation. Higher education increases understanding of the importance of TM.[684]

8.12.2 Participation in Simulation and Mitigation Exercises

The participation of the ACs in Aceh in tsunami simulation and mitigation exercises was negatively affected by factors such as the lack of facilities, the distance and a lack of ISK and awareness of the importance of simulation exercises. However, the empirical findings showed that most ACs considered that the local community should participate in the simulation and mitigation exercises. It seems that the training provided by NGOs during the PTR phase was most highly regarded by the ACs in Aceh because it had a high level of AC participation. Most NGOs started their TM programs and training during the RR phase. Training was important in preparing the local coastal communities to be alert to face a tsunami.

The community is vigilant in responding to the TEWS alarm. However, they required training immediately after the next earthquake in April 2012 to enhance their mitigation and evacuation skills.[685] Locals reported that the 2004 tsunami reeached the Aceh coast approximately 20 minutes after the earthquake, highlighting the importance of community readiness..[686] Training of the coastal communities must be

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682. Ambulance 118, interview by research team, in Jakarta, 12 November 2012, transcript.
683. SD, primary school.
684. Beneficiary, interview by research team, in BA, 12 December 2012, BA24, transcript.
685. Beneficiary, interview by research team, in BA, 9 December 2012, BA19, transcript.
686. Beneficiary, interview by research team, in BA, 3 December 2012, BA6, transcript.

given priority and there must be greater skill and knowledge involved in the training course for the coastal ACs[687] so that they are prepared and ready when disaster strike, especially a tsunami. The emphasis should be on creating awareness and emergency preparedness among the coastal communities. These communities need the alarm system to enable them to better prepare for future disaster management, and the simulation exercises for the coastal community are critical to reducing their risk and vulnerability.[688]

The village leaders were targeted as the first members to represent their community and participate in tsunami drills every year, with the hope that this would benefit individuals and communities in the villages.[689] The high local participation means that the village leaders can train the community on essential evacuation skills and knowledge during disaster emergencies. It has been found that the best way to attract local participation is to hold simulation-training exercises annually on the tsunami anniversary date, 26 December.[690] This training assists the younger generation to learn useful evacuation-related ISK that will help save more lives if or when an earthquake hits that is followed by a tsunami.[691]

Despite the ACs' constant demand for government to build more evacuation routes and buildings as the population expands, the findings also suggesting that the existing evacuation route is not adequate and needded more rehabilitation. Besides that the government primary focus needs to shift toward provoding more training and simulation exercises. For example, government officials and authorities, such as the police and the fire brigades, should alert and assist the panicking communities and show them the path to safety. The community should be advised to relax and not panic, which has caused unnecessary accidents and casualties in the past.[692]

Tsunami simulation and training has been provided for the younger generations at the school run by Dinas Social, at both secondary and tertiary level. The tsunami simulation exercises are held in the school once a year. These school-based programs

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687. Beneficiary, interview by research team, in WA, 12 May 2013, CM6, transcript.
688. Beneficiary, interview by research team, in WA, 12 May 2013, CM5, transcript.
689. Beneficiary, interview by research team, in BA, 5 December 2012, BA10, transcript.
690. Beneficiary, interview by research team, in WA, 11 May 2013, CM3, transcript.
691. Beneficiary, interview by research team, in BA, 4 December 2012, BA8, transcript.
692. Beneficiary, interview by research team, in WA, 13 May 2013, CM7, transcript.

and training were supported by NGOs and local NGOs, such as YPK and Ibu Foundation. Ibu for Aceh-Desa Tangguh Bencana was an example of disaster preparedness program. It focused on the information needing to reach the targeted communities.[693] The communication of the tsunami warning relies on the radio if other communication facilities are destroyed by the disaster.

As the government agencies such as BPBD have limited capacity in providing comprehensive disaster simulation and training exercises, the ACs relies for further support and training from local NGOs so that can benefit the communities.[694] However, the government needs to collaborate and plan programs by providing financial support and assistance. More simulation exercises for DRR awareness programs from the government need to be integrated with simulation and training especially at school level.[695]

Some communities found it difficult to participate in TM training mainly because of the lack of proper evacuation buildings or roads.[696] For example, when simulation and mitigation training was held by one *kabupaten* for 300 villages, only 30 people attended, representing the whole population of 300 villages. As well as the low level of participation, the simulation and mitigation exercises were only held once in the eight years after the 2004 tsunami. This simulation exercises only took place on an annual basis, which was still regarded as insufficient for the CB of the ACs.[697]

In WA, most primary evacuation routes were built only after the tsunami. This region does not have any siren or TEWS, which means the community's TM relies entirely on basic tsunami training and knowledge. This is also due to constrained and limited budget for disaster mitigation preparedness. However, despites the community should be trained, by utilizing the existing mitigation facilities and frequent TM programs, to raise its awareness of the importance of disaster mitigation preparedness.[698]

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[693]. Beneficiary, interview by research team, in WA, 14 May 2013, CM10, transcript.
[694]. Beneficiary, interview by research team, in WA, 16 May 2013, CM14, transcript.
[695]. Beneficiary, interview by research team, in WA, 17 May 2013, CM15, transcript.
[696]. Beneficiary, interview by research team, in BA, 8 December 2012, BA16, transcript.
[697]. Beneficiary, interview by research team, in WA, 20 and 24 May 2013, CM20, CM21 and CM28 transcript.
[698]. Beneficiary, interview by research team, in WA, 10 May 2013, CM2, transcript.

In the villages, the simulation and training exercises were assisted by NGOs. The PMI volunteers, collaborating with the community volunteers, assisted with the community preparations (*siap siaga Kampong*). BPBD and Pemadam provided more simulation training.[699] For example, BPBD in Nagan Raya, WA ran a simulation program and training for two days, using limited evacuation facilities, which consisted of only 400 m of the evacuation route.[700] BPBD had run some simulation training based on local evacuation capacity.[701] These efforts were assisted by research centres, the staff of which coached the heads of the villages and the younger people to help build the disaster expertise at the local level. Agricultural workers, farmers, fishers and carpenters in the coastal communities critically needed TM training.[702] A high participation level by the tsunami-prone communities in the simulations, information and training was essential.[703]

8.12.3 Mitigation and Livelihoods

The issues discussed in this chapter highlight the tsunami mitigation related problems facing the ACs today. The ACs' participation in TM programs depends on the effective coordination and planning of TM programs by local and government agencies. The findings show that most ACs complain that TM programs in Aceh do not contribute much to their DRR efforts. Facilities such evacuation buildings, stairs and routes are still lacking in Aceh. Those communities that rely on hilly ground and mountains as evacuation areas complain that the TM facilities are incomplete and apparently no simulation exercises have been held for them.

According to the TM blueprint for disaster management, a new settlement for ACs was meant to be placed at least 500 m from the coastline. However, the empirical findings indicated that this should not occur, especially in the region surrounding BA because of the need for the ACs to resume their livelihoods. It took six months after the tsunami for the TM blueprint to be finalised and, in the meantime, the AC was instructed not to build any settlement as part of its TM effort. However, in the early days after the tsunami, during the ERR phase, there was a lack of coordination

[699]. Beneficiary, interview by research team, in WA, 13 May 2013, CM7, transcript.
[700]. Beneficiary, interview by research team, in WA, 16 May 2013, CM13, transcript.
[701]. Beneficiary, interview by research team, in WA, 17 May 2013, CM15, transcript.
[702]. Beneficiary, interview by research team, in WA, 13 May 2013, CM7, transcript.
[703]. Beneficiary, interview by research team, in WA, 16 May 2013, CM13, transcript.

between the agencies, both foreign and local, which led the NGOs to develop a direct approach to reach the beneficiaries in need.

It was almost impossible to prevent the fisheries community from living close to the coastal areas because of their need to resume their livelihoods. Most fisheries communities had no choice but to resettle near their source of income. Thus, from a TM viewpoint, the only solution for these new settlements was to have an evacuation building close by as part of their evacuation plan. These communities were expecting more funding for TM facilities from the annual government budget.[704] However, given that the reconstruction including the PHR had not proceeded according to the TM blueprint plan by the central government, it proved difficult for the government to integrate the local community's requests.

Apart from the mangrove plantations commenced in the coastal area as natural TM efforts, the coastal ACs suggested planting Assam trees, as the Acehnese tradition was that such trees would help prevent strong wind/water hitting the land.[705]

8.13 Conclusion

The participation of ACs in TM efforts indirectly affects all other sectors involved in RR in Aceh. The CB of the ACs relies on proper coordination and collaboration from various stakeholders in the RR phase. The NGOs' role is important in planning TM programs, as they are considered the pioneer of ISK on disaster management. The inclusion of local communities from all levels is necessary for TM programs to ensure that the same knowledge and capacities are shared among the locals to enhance their TM capacity. Local knowledge and capacity are essential in TM programs as the empirical findings indicate that maintenance and rehabilitation of existing TM facilities has been slow because of factors such as a lack of funding and participation from the beneficiaries, that has impeded the stakeholder's efforts to improve the CB in the TM sector.

[704]. Beneficiary, interview by research team, in BA, 6 December 2012, BA11, transcript.
[705]. Beneficiary, interview by research team, in BA, 2 December 2012, BA4 transcript.

The existing TM facilities such as the TEWS are not functioning in a fully effective way to alert the community during disaster. Maintenance and rehabilitation of such facilities is necessary to encourage the participation of ACs in the effort to build their TM capacities. It can be considered that the ACs have reached their full TM ISK capacity once they are self-sufficient and prepared at the local level to face a disaster on their own, at least for the first 24 hours. In the case of Aceh, to reach this level, more TM training programs and greater participation from the ACs is required. The government should assume responsibility for collaborating with international governments and donors that have expertise in TM management to foster this process.

The TM facilities are essential for the ACs that resettle in the coastal areas. They have resettled in these areas because of factors including the location of their PHR unit, the location of their livelihoods and socio-economic environment. As a result, their participation in tsunami training and drills and the construction of seismic-resistant facilities are essential TM strategies for these ACs.

Beneficiaries expressed the view that the government should play an active role in providing training and simulation exercises for the community to raise awareness of the importance of DRR education. The government should focus on the training of village leaders, who will then train the younger generations in the community.[706]

Based on Aceh's TM efforts, it can be concluded that understanding the needs of AC and providing the appropriate humanitarian response is critical, but if a common methodological approach is lacking, it will result in the loss of time and other resources that could have been better utilised for CB in the ACs.[707]

[706]. Beneficiary, interview by research team, in BA, 10 December 2012, BA21, transcript.
[707]. James, 'Getting Ahead of the Next Disaster', 428.

Chapter 9:
Analysis: Participation and Capacity Building in Reconstruction and Rehabilitation Phase in Post-Tsunami Reconstruction Aceh

There were nine primary themes that emerged from the sector-specific discussions in chapters 5-8, that were shown to affect local community participation and capacity building in PTR Aceh. This chapter will discuss each theme in the sections that follow, paying particular attention to issues and factors that have affected the participation and CB in Aceh. The discussion entails findings from beneficiaries' participation in programs and projects in ERR phase and RR phase based on LRRD framework to maximise CB in Aceh.

This chapter outlined issues and factors such as lack of need assessment and coordination among main stakeholders was highlighted as the foremost factor that contributes to the following issues such as lack of people knowledge integration in the program and projects. This results in programs and projects being designed based on domination of local knowledge by local elites and external actor such as NGOs based on conventional post disaster programs.

Group based program clearly do not fit into existing socioeconomic structure and failed to support ACs socioeconomic climate in long term, which was an indirect result from lack of proper NA assessment. Further, NA was only conducted in tsunami-affected area as it fits the purpose of distributing 'tsunami fund' to tsunami victims. However the conflict affected communities socioeconomic climate was affected as much as the tsunami affected communities. The tsunami fund was meant to help the Acehnese community to build their socioeconomic, which should fairly include and distributed to much needed the conflict-affected communities for their socioeconomic betterment. Currently there are 27 districts in Aceh labelled as '*daerah tertinggal*' in Aceh, Indonesia.

Eventhough the tsunami fund was disbursed to help the tsunami victims, the lack of on going socioeconomic development and support in post RR phase lead the ACs to replase back being vulnerable.

9.1 Participation, Capacity Building and LRRD in Aceh from the beneficiaries' perspectives

The NGOs and donor governments are well known for their efforts to emphasise local participation as the key to empowerment of the local people.[708]

However, the empirical findings show that patterns of participation among the ACs varied, depending on the plan, design and implementation of the programs by international agencies.[709] Active community participation means that projects take a longer time and it is necessary to continuously facilitate the process to ensure that it will strengthen the community's CB.[710]

This research concurs with the LRRD framework, which emphasises the participation of individuals as a crucial aspect of CB for the community. Under the LRRD framework, community participation should start from the recovery phase and be continued throughout the rehabilitation, reconstruction and development phases. A higher level of participation results in, and can be measured by, more knowledge of the planning and implementation of the programs by the local people, rather than them being passive recipients of the programs.

For example, in PHR, the relocated residents argued that they were not given a choice in their place of residence and that, as a result, they were considerably further away from their previous source of income and had to travel longer distances to work[711] This is one of the many examples indicating the lack of a multisectoral approach in the RR phase in Aceh. The empirical findings of this research confirm that housing reconstruction was one of the most important aspects of RR, which affected many other aspects of life for the ACs.

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[708]. Kenny, 'Reconstruction Through Participatory Practice?' 79–104.
[709]. There were approximately 120 international agencies working in Aceh during the PTR. Due to reconstruction and rehabilitation needs, some stayed longer throughout the RR phase depending on their funding and expertise.
[710]. Steinberg, 'Housing Reconstruction and Rehabilitation in Aceh and Nias',150–166.
[711]. Matsumaru, Nagami and Takeya, 'Reconstruction of the Aceh Region Following the 2004 Indian Ocean Tsunami Disaster', 16.

Further investigations with the ACs reveal that the lack of integration of other sectors, such as transportation, in PHR had a dire impact on the socio-economic development and general wellbeing of the ACs in the development phase.

Table 9.1: Effect of Multisectoral Development in Livelihood Restoration[712]

	BA	WA
Do you think that multisectoral planning by multiple agencies instead of sectoral planning by a single agency would have improved the continuity of your livelihood? Prompt: If the planning was done at the same time across multiple sectors, and it therefore took into account all your needs, including settlement and your ability to continue with your livelihood/jobs from your new home, would that make things easier for you? Yes or No	Yes 100 %	Yes 83 % No 17 %
Do you think that agencies such as NGOs and BRR have managed to help restore or reconstitute your livelihood to its state pre-tsunami?	Yes 73 % No 19 %	Yes 89 % No 11 %
In your opinion, what could have been done better to improve your livelihood status?	Yes 70 % No 30 %	Yes 61 % No 39 %

Based on table 9.1, the findings show that the lack of multisectoral planning, or the delay in introducing it, resulted in difficulties for ACs in accessing essential facilities such as WASH and transportation. Their location in flood-prone areas, and the absence of other infrastructures, has forced some ACs to switch to other income sources and abandon their previous workplaces. Thus, the ACs' socio-economic needs seem to have been neglected in the housing reconstruction program. Thus, the

[712]. Data analysis based on empirical findings of this thesis (Aceh) from November 2012 to May 2013.

integration (or lack of integration) of MSD affects the livelihoods of the ACs, which was also an essential element of non-DRR aspects in CB.

CB emphasises the inclusion of the people's knowledge, which means ensuring participation by ACs. This would have resulted in better socio-economic outcomes for the aid beneficiaries and greater consideration of the need to maintain their livelihoods. The lack of multisectoral planning coordination between these aspects of RR became a hurdle that ACs had to overcome to continue with their livelihoods.

From the LRRD perspective, early recovery, DRR, CB and poverty alleviation need to be integrated into one framework, rather than remaining separate sectors. This means that the NA must incorporate these four elements in moving towards economic recovery, and it must do so as early as the ERR phase, when it is addressing the humanitarian needs.[713]

However, with only a few exceptions, most NGOs and developmental agencies have concentrated on the objectives of their organisational and institutional programs, rather than focusing on the development of better strategies for local CB. The main downfall here was that there were no operational concepts of CB in the planning of RR programs, which led them to overextend the development aid instead of building local capacity.[714]

The recovery process in the ERR phase lacked integration in terms of operational CB because of this over-extension of development aid. To develop proper operational CB for dual ACs like Aceh (human-made and natural), all the main themes of LRRD need to be integrated, which assists in achieving the long-term development goal and resolving deep-rooted developmental issues. An integrated approach rather than single approach is required in the planning of programs and projects from the ERR phase itself.[715]

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[713]. Brusset, *A Ripple in Development?*, 115.

[714]. The BA economy is expanding, but beneficiaries still find it difficult to sustain an income. However, CM30 (a former *Geuchik* from Aceh Jaya) believes RR programs temporarily boosted ACs' economies. Somehow, after the RR phase, the region returned to its pre-tsunami state, although it is still lacking socio-economic sustainability.

[715]. Researcher and senior lecturer from the Faculty of Agriculture at Syiah Kuala University, interview by research team, BA, 16 December 2012, transcript.

The empirical findings demonstrate that continuity of relationships with field partners, such as the continued partnership with local NGOs to carry out the RR and development work with dual ACs is the best option to help integrate the local operational CB. This allows the NGOs and local NGOs to collaborate and implement programs and projects using an integrated approach, which ensures continuity of participation at the community level.

Based on past research on LRRD, the integrated contextual assessment (refer to Figure 2.3) known, as the NA was developed to ensure multisectoral integration. This integrated approach involves close coordination among development agencies and practitioners in Aceh from the initial step of the NA, which is a good first step towards improving local participation and building local operational capacity. This first step of the NA must be followed by an upright cycle of LRRD, as illustrated in Chapter 2. The combined findings from the LRRD reports showed that most development actors, including NGOs, donors and UN agencies, have tended to focus on project-based intervention.

As discussed earlier, coordination and an integrated approach are the first important factors to ensure a successful RR phase post-tsunami. It is crucial to integrate factors such as early recovery, DRR, CB and poverty alleviation to achieve the goals of long-term development plans across all the components of the RR cycle in Aceh. The lack of coordination and integrated planning across these four areas within the LRRD framework, and the greater weight placed on the achievement of institutional program objectives by the development agencies, have led to devastating outcomes in the RR phase.

The LRRD cycle explains the necessary steps to link the RR process and long-term development plans. The first step involves acknowledging and informing the local people and including their local knowledge. This process of obtaining the essential local knowledge starts with contextual assessment, known as the NA in the case of Aceh. The adaptation of all six of the components of the LRRD cycle would result in better-targeted CB by local actors such as government agencies and local NGOs.

'The effects of the lack of integration were most observable in marginalised communities affected by conflict and the tsunami. The tsunami-affected regions did

not necessarily have better economic prospects than the conflicted-affected regions of Aceh, but they prospered during the RR phase after the tsunami because of the enormous amount of tsunami aid funding. In contrast, the conflict-affected regions, which were rich in natural resources and had strong potential for industrial development, were marginalised and unable to benefit from long-term tsunami development programs and projects. The focus of this research is not on the marginalised communities, but it is important to note this issue for future studies of the socio-economic development and livelihoods of the Acehnese.

9.2 Lack of Needs Assessment: Impacts on Programs and Projects

Programs and projects have been examined in terms of their potential to integrate the LRRD framework and enhance local participation in the ERR phase. The empirical findings indicate that inputs from the NA could have been integrated as the first stage in the LRRD cycle in the NGOs' planning and implementation of programs. Including all the LRRD stages would enable the inclusion of effective capability-building activities in the ERR phase, which would easily continue in the following RR phase.

Post-disaster assessments refer to two types of NA. First, there is a humanitarian assessment (HA), which addresses issues such as immediate needs for shelter, food, and water, to survive the disaster. The second NA is the recovery assessment (RA), which focuses on the 'restoration of dignity, the rebuilding of structures and the revival of former livelihoods'.[716] The NA refers to such needs, focusing on issues related to livelihood, long-term wellbeing and socio-economic recovery in the RR phase. In Indonesia and other tsunami-affected countries, this process began in the first week after the disaster and ended within one and a half months, which was surprisingly fast. The National Development Planning Board and World Bank (BAPPENAS) published a report detailing this process on 19 January 2005.[717] Reports from the TEC on the NA for the ACs show that it is never too early to initiate any RA. The process of conducting an RA is tedious and lengthy, and best planned from the beginning of the ERR phase.

[716]. De Ville de Goyet and Morinière, *The Role of Needs Assessment in the Tsunami Response*, 26.
[717]. Ibid.

In an effective recovery process, the people's knowledge had to be the primary input rather than the NGOs' perception or interpretation of local knowledge.[718] When local knowledge was excluded by this top-down approach, it had dire effects on participation levels in PTR programs and projects. The empirical findings confirm that inputs from the NA are important and valuable sources of information on the local knowledge. The integration of local people and locally based knowledge should be prioritised over program or INGO knowledge in developing programs and projects in the ERR phase to meet the needs and interests of ACs.

However, given the fact that the RA process in Aceh was completed by the first quarter of 2005, it is difficult to understand why there were so many faults in the outcome of RR programs and projects designed to support ACs' livelihoods. When the RA process was completed, the planning for ACs' long-term rehabilitation and reconstruction should have proceeded immediately. Then the integration of the RA with the HA should have resulted in better long-term LRRD planning. In Aceh, however, the RA and HA processes were combined, which means both assessments were not conducted simultaneously. This assisted in reducing the time required to undertake the evaluation and hastened the RR and LRRD planning in the region.

As these reports may seem to contradict the empirical findings of this research, most local NGOs claimed that this was not the case with the NA in Aceh. In reality, the feedback from local development agencies in Aceh does not support this fact. A brief assessment and interviews undertaken with the ACs in the first few weeks were assumed to represent a comprehensive NA process. The inadequacy of this first step, and the lack of understanding of AC needs, then affected the planning and implementation of programs and projects.

Previous studies on the NA in Aceh and reports from the TEC confirm these findings of the local academic researcher on the problems with the livelihood recovery process in Aceh. The phrase 'not genuinely consulted' indicates that direct consultation with the ACs regarding their needs was neglected. Many NGOs chose to adapt standard INGO processes, which meant that the design of the NA was based on what they

[718]. D. Mosse, '"People's Knowledge", Participation and Patronage', in *Participation: The New Tyranny?*, eds. B. Cooke and U. Kothari (London: Zed Books, 2001), 16–35.

perceived as the ACs' needs. Even though the ACs were repeatedly asked about their needs, they were not properly consulted, which meant that direct participation, integration of local knowledge and CB did not occur. To restate this directly, therefore, the NA process excluded the people's knowledge and the NA outcomes were dictated by the NGOs' perceived local knowledge. Failure to include local leaders or the *Geuchik* in ACs' consultation resulted in an approach being developed that was not necessarily advantageous to the beneficiaries in Aceh. [719]

The lack of a comprehensive NA in the RR phase has not made a significant difference to the output of the RR programs and projects. The NGOs did not include the ACs sufficiently to encourage them to participate actively and legitimately in programs and projects. The exclusion of their assets, including pre-existing ISK and social culture inputs, had dire effects on the outcomes of the programs and projects.

A related fact demonstrates the importance of integrating the NA into programs and projects in the ERR phase. Regarding the importance of integrating the NA into the LRRD, it should be noted that a single sectoral rather than a multisectoral assessment was conducted in Aceh. The TEC reports show that critical areas such as WASH and broader livelihoods were not given attention in the NA. This was further supported by the empirical findings of this research. ACs continues to point to the absence of multisectoral elements in the actual outcomes of the RR programs and projects. Consequently, this then affected CB in the developmental phase.

Appropriate recovery and NA processes were complicated by the fact that the Sphere humanitarian guide, which had provided the international standard for NA evaluations, was focused on HA assessment, and did not provide the right guidelines for RA.[720] Most international donors responded to humanitarian needs, offering large amounts of funding and demanding immediate results.

This situation placed an incredible weight on NGOs to juggle upward and downward accountability. The best way to describe this pressure on NGOs was that they were forced to prioritise and commence RR programs and projects that would have the most tangible and immediate results. Conventional programs such as CFW programs

[719]. Ibid.
[720]. De Ville de Goyet and Morinière, *The Role of Needs Assessment in the Tsunami Response*, 50.

are an example of the type of program that fitted the donors' requirements and, at the same time, fulfilled the ACs' immediate economic needs. However, the duration of CFW programs, which involved daily paid program work, was extended excessively and this discouraged genuine participation and delayed the socio-economic recovery of the ACs. Apart from the strong tendency of such programs to disenfranchise the affected individuals and households, there was no encouragement for the ACs to develop a sense of ownership of the programs, which was essential to achieving a sustainable livelihood recovery.[721] The LRRD reports labelled such programs as involving 'ineffective use of costly and short-lived humanitarian means to address chronic development issues'.[722] Because they were overstretched in the case of Aceh, they had detrimental impacts on CB and the recovery of the ACs.

Another issue was that there was an excessive focus on determining the number of casualties in the aftermath of the tsunami. This was criticised for attracting 'too much' of the funding available for the recovery phase. The delay in starting the RA was further exacerbated by the fact that recovery programs were overstretched because of Aceh's existing socio-economic conditions. Many communities were deprived of local CB and remained underdeveloped because of protracted conflict in the region. The NGOs and other development agencies ignored such pre-existing deep-rooted problems, but they re-emerged after the tsunami.

The problem facing the NGOs and international development agencies was not only redeveloping Aceh following the damage by the tsunami, but also assisting the community to recover from the impact of deep-rooted, protracted conflict. These dual complexities were inseparable and interrelated. For example, the overstretching of recovery phase was related to the complex nature of Aceh's post-conflict and post-disaster conditions, which led to the problem of separating conflict and disaster issues, creating uncertain 'grey areas' of operations between the phases of PTR in Aceh. The inability to gain access to baseline data was a big obstacle in differentiating tsunami-induced needs from needs resulting from long-standing conflict and poverty. Data were unavailable because of the damage to government offices and the loss of personnel further complicated the matter.

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721. Ibid.
722. Ibid.

The accumulated and historical complexities involved in Aceh's PTR, leads us to ask whether it is possible to integrate humanitarian needs with long-term development plans. If so, how does the NA could be anticipated as a form of participation in the ERR phase when it is impossible to even to determine the number of ACs. The TEC reports indicated that the 'affected regions' varied from 14 to 22 areas, based on the separate assessments by various international agencies.[723] This is just one example of the multiple complexities involved in the reconstruction of Aceh. Many stakeholders considered management of information flows and databases to be one of the main problems in coordinating efforts in Aceh.

PLA, a locally based fishery NGO, supported this empirical finding regarding the lack of databases affecting the coordination of programs in Aceh. Conducting the RR phase without a proper and systematic database had increased the wastage of resources. According to PLA, after the tsunami, the fisheries communities were scattered in at least seven temporary shelters, making the assessment process difficult. For example, fisheries communities in Lam Bada and Krueng Raya had 7 or 8 different units of accommodation in each area. It is difficult to find ACs and collect information from them when they are so scattered. Since the fishing communities were so scattered and displaced, many of them did not receive the aid and funding that they were allocated. Another issue was that PLA faced difficulties in identifying genuine fishing communities, which were mostly displaced after the tsunami.[724]

Due to the significant scale of the causalities in Aceh, it was impossible to collect legitimate data. Moreover, communities became opportunistic in relation to the large amounts of assistance available after the tsunami. This led to anomalies such as one AC selling the boat it was granted under an INGO livelihood program at a meagre

[723]. Ibid., 31. 'Even the numbers of affected districts were problematic. The number of districts deemed "affected" in Indonesia varied between 14 and 22 in individual assessment.'

[724]. *PLA, LSM, Nuftachhuddin Cut Adek* and *Agus Bustaman,* interview by research team, BA, 15 December 2012, transcription. These were among the problems encountered during the assessment. As a local fisheries committee, PLA collaborated and had been facilitated by the INGO to help it conduct NA in a few *Kabupaten* under the jurisdiction of PLA BA.

price for short-term benefits.[725] Inconsistency of information, data leakages, and false data meant that the assessment data became defective.[726]

An NA is viewed as the first form of participation of beneficiaries because it requires extensive input from those involved in humanitarian operations.[727] Participation through an NA is the best way to examine how including local knowledge and capacity can encourage participation of ACs in the planning and design of a program. This promises continuous and active participation in the other phases following the ERR, such as RR stage. Community-based programs have higher chances of encouraging local participation to achieve better CB. Adopting a bottom-up reconstruction and a shared understanding of CB has always been the end target of NGOs, who should be focusing on individual development and advancement.[728]

To achieve better participation and CB, the phases in PTR need to integrate the LRRD framework as a foundation for successful and effective PTR programs and projects.[729] However, an NA was only used by NGOs as a platform to design programs for the AC and not with the intention of including or encouraging genuine participation. The empirical findings indicated that most NGOs explained that the programs and projects needed to run according to the SOP and donor requirements. Here, the NA was not utilised as a source of added value in the design of a program that suited the need of the ACs. The NA was just another report that they needed to hand over to the donor as proof of the assessment. Further, the donor considered the inclusion of ACs in one or two PTR program and project meetings as full participation.[730]

From a logistics point of view, the easy access to some of the severely affected areas led to the repetition of assessment, while other sectors with secured access had fewer

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[725]. *PLA, LSM, Nuftachhuddin Cut Adek* and *Agus Bustaman,* interview by research team, BA, 15 December 2012, transcription, 79.
[726]. Some ACs gave false information, claiming to be fisheries workers when they had never belonged to fishing communities before the tsunami.
[727]. Trevor Girard et al., 'Near-Real-Time Analysis Communicated Disaster Response Information,' *International Journal Disaster Risk Science* 5 (2014): 166.
[728]. Kenny, 'Reconstruction Through Participatory Practice?' 79–104.
[729]. LRRD is referred as 'transition', which refers to the artificial gap between relief and development phases that can be overcome. LRRD links relief, rehabilitation and longer-term development interventions, regardless of the size or character of a disaster. According to Emery Burke, LRRD consists of NA (see Chapter 3), long-terms plans, field presence and decentralisation, an integrated approach (MSD) and better partner focus.
[730]. Plan International (formerly YCAR) staff, interview by research team, in Jakarta, 7 June 2013, transcript.

NA/RA processes and conflict-affected areas were either partially accessed or not accessed at all. The empirical findings indicated that conflict-affected regions, such as Pidie and Pidie Jaya, were among the areas that had dire logistics and access issues, resulting in no assessment or assessment without any action to assist the ACs. As a result, the ACs in this region did not benefit from the same quality of RR projects as found elsewhere.

Despite huge funding and hundreds of NGOs and international agencies to rebuild the region, participation was difficult to achieve in Aceh. The reason behind this was that Aceh is a region of both PTR and post-conflict reconstruction. There are some international agencies that focus solely on PTR and do not consider post-conflict factors into their RR process. The past literature emphasises that, to rebuild Aceh, it is important for international agencies to understand the culture and history of the Acehnese. Understanding and studying the community through an NA would set the right approach and would be a more appropriate tool to help ACs overcome their vulnerability.

NGOs should take the initiative to learn and study their history and cultural norms to better understand and determine the best way to approach ACs. The empirical findings found that the Acehnese preferred informal approaches to cooperation. Besides, the NGOs Western ideas of development are different from the Asian perspective, culture, norms and traditions. The Acehnese are more concerned with the relationship and social interaction between members of the community and, similarly, with interactions with outsiders.

The main fault is that the NGOs and international agencies treated the ACs as objects rather than as subjects that should have been included in the program process from design and planning through to implementation. The missing links to establish communal social interaction indirectly discouraged communal participation in programs. When the NGOs provided incentives to lure communities to participate, this resulted in competition among NGOs. In turn, the ACs chose well-paid INGO programs. This affected the way the Acehnese viewed the aid, funding and programs. The Acehnese expected to receive financial incentives to participate in programs that should have been based on communal, social network relationships.

9.3 People Knowledge Versus Project Knowledge

NGOs' cultural sensitivity was essential in acknowledging the importance of local knowledge and culture. It is essential to conduct a proper NA to understand the ACs before channelling any aid. In Aceh, cultural insensitivity was misleading the people knowledge as project knowledge without input from people knowledge, which had a dire impact on the outcome of programs in Aceh. The LRRD reports emphasised the need for NGOs and development agencies to be more aware of cultural appropriateness, which required integration of local knowledge.[731]

Findings from interview sessions with a senior lecturer and leading social researcher from UnSyiah assisted in elucidating the interrelated processes of planning, designing and implementing a program and the problems relating to the failure to integrate of local knowledge. He explained that the evasion of the NA by NGOs in Aceh stemmed from their failure to include local assets and inputs in the early stages of planning and designing programs.[732]

From the participatory approach in development, such issue raised by the respondents relates back to the foreign element in planning, actors involved in setting the agenda, legitimate local ownership, the method of implementation of programs and external induced participation that has a series of effects on the development phase.[733] The biggest problem was the exclusion of assessment results from Aceh in planning the programs.

On the importance of integrating people or knowledge, Mosse emphasises that local knowledge, which consists of community needs, interest, priorities and plans, is merely a construct of projects and program planning context.[734] The process of this so-called people planning is cloaked in a complex micro-politics. Interestingly, he pointed out the role of local relations of power, which, in the empirical findings of

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[731]. Burke, 'Evaluation of the Linkage of Relief, Rehabilitation and Development', 1–104.
[732]. Researcher and senior lecturer from the Faculty of Agriculture at Syiah Kuala University, interview by research team, transcript. Issues arose among NGOs that planned and designed programs in their headquarters without proper assessment or constulation in Aceh. Further, these programs fail to encourage community participation, which leads to failure. The lack of participation in INGO programs is the main reason for program failures during the RR phase. Some NGOs failed to focus on inclusion due to time and funcing pressures.
[733]. Connor, 'A new ladder of citizen participation', 249–257.
[734]. Mosse, '"People's Knowledge", Participation and Patronage,' 19.

this study, refers to local structures such as the *Geuchik*, which have a substantial impact on the interpretation of the NA by the NGOs. In relation to local knowledge and power, Mosse commented that:

> While local knowledge is highly differentiated regarding who produces it and regarding the different ways of knowing (see Hobart 1993), it is precisely these relevant differences that are concealed in planning.[735]

The local knowledge included in program planning depends on the interpretation of the inside of outside the programs. The results of different types of NA outputs are based on who represents the community. In Aceh, there was a strong tendency for the local knowledge to be based on the interests of the local leaders rather than the needs of the local community. The LRRD report shows that the interplays within the social structure, such as occur in the case in which local leaders dominate local knowledge, affected the pattern of aid flows to the ACs in Aceh:

> The LRRD studies on Indonesia and Sri Lanka described the use of local structures (the *Geuchik*, or village head in Aceh, for example), which meant that aid intended for the more vulnerable would end up reinforcing the status of the elite groups. There appeared to be no effective mechanism to rectify the situation.[736]

When local leaders such as the *Geuchik* dominate the local knowledge and represent only their own interests and needs, this leads to misuse of aid funds for the benefit of the local elite.[737] Such domination further exacerbates this situation when it is influenced by elements of nepotism and favouritism that discriminate against other members of the community in the ACs. This situation denies the ACs an equal chance of obtaining aid to which they are entitled. Thus, the implementation of common programs by NGOs that did do not require any meticulous process of gaining input from the ACs, reduced the ACs' chances of participation to the minimum.

For example, another quite unusual finding from the empirical data is the claim by beneficiaries that funding was inadequate, given that the tsunami aid was more than enough to help the ACs in Aceh. The problem appears to stem from the fact that some

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[735]. Ibid.
[736]. Burke, 'Evaluation of the Linkage of Relief, Rehabilitation and Development', 80.
[737]. Sato, 'Matching Goods and Individuals', 74.

NGOs divided the funding allocated for one family into two or more portions. As the researcher stated:

The basic required amount for recovery of livelihood would be IRP10 million per individual. If the INGO gives limited funding for the communities in which this IRP10 million is divided into two portions of IRP5 million, each portion is not enough for their recovery process. This funding ended up being spent on other domestic and household items and not aimed at the socio-economic development.[738]

Thus, the issue was that the funds allocated to restart the household's socio-economic[739] development were not adequate to cover the start-up costs and equipment for them to initiate their livelihood journey. As a result, families in such a situation often spent their aid funds on buying new household equipment or as deposits for new cars or motorcycles.

Regarding the problem of limited funding, the researcher pointed to local elites' domination of local knowledge due to the lack of an NA, which led the NGOs to assume that dividing funding between two families would not affect the recovery of the AC's livelihood. In a situation in which if the people's knowledge had been considered in an NA, such a problem would not have occurred.

As for the development agents, according to Mosse, their interpretation of the NA by the NGOs is considered in terms of placing an outsider's agenda over the expression of 'local knowledge'. Here, the role of NGOs as neutral or passive facilitators was contested and viewed rather as an active role in shaping and directing the process of including local knowledge in the projects and program planning. This was because the INGO's project staff '"own" the research tools, choose the topics, record the information, and abstract and summarise according to the project criteria of relevant'.[740]

The extent of foreign ownership of programs had detrimental effects on local participation, leading towards lower levels of local ownership. In Aceh, the same

[738]. Researcher and senior lecturer from the Faculty of Agriculture at Syiah Kuala University, interview by research team, BA, 16 December 2012 transcript.
[739]. Activities included small to medium businesses, fisheries-related home businesses and agricultural enterprises.
[740]. Mosse, '"People's Knowledge", Participation and Patronage', 19.

pattern occurred when the ACs were represented by the *Geuchik* or *Hape*[741] as unofficial representatives of local communities, who interpreted the local community's needs, interest, priorities and plans.[742]

A need is something that is socially constructed.[743] The interpretation of local knowledge from the NA in the ERR and RR phases were being shaped and equally dominated by leading local groups, such as local village leaders, and by outsiders, such as project staff who represented the project's interest.[744] Therefore, collecting and incorporating the 'people knowledge' into program planning was compromised because of the difficulty of separating the insider knowledge and outsider knowledge from the people knowledge.

The planning and design of programs were based on the NGOs' previous experience, which they had accumulated as their 'local knowledge'. This local knowledge overrode the emerging 'people knowledge' in the aftermath of the disaster. The NGOs' preferences for conventional and feasible programs were prioritised over programs planned according to benefits for the ACs.[745] When the people's knowledge was not considered an important input for people planning, this had flow-on effects in terms of their willingness to participate in the various programs in Aceh.[746]

Development agents such as NGOs had a bias towards deliverable projects and relied too heavily on local leaders' interpretations in designing and planning the programs, which only benefited the ACs in the short term. With NGOs working in constrained surroundings and environments to fulfil their upward accountability, their downward accountability towards their beneficiaries was being compromised in a way that explains why there was no genuine AC participation in the ERR or RR phases in Aceh.[747]

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741. Village elders.
742. Mosse, '"People's Knowledge", Participation and Patronage', 19.
743. J. Pottier, *Practicing Development: Social Science Perspectives* (London and New York: Routledge, 1992).
744. Mosse, '"People's Knowledge", Participation and Patronage', 19.
707. Connor, 'A new ladder of citizen participation', 249–257.
746. Brusset, *A Ripple in Development?*, de Ville de Goyet and Morinière, *The Role of Needs Assessment in the Tsunami Response*, 46.
747. Mosse, '"People's Knowledge", Participation and Patronage', 24.

Development agents work under pressure and they are required to balance everything to ensure that the programs are delivered, regardless of whether the outcomes are sustainable for the AC. Innovative programs based on inputs from the ACs were not prioritised in Aceh because of organisational bureaucracy pressures in implementing such program.[748]

In contrast to this view, Cleaver emphasised the importance of responsive development agencies in promoting better participation among the AC:

> Understanding how participation can benefit the poor might also involve identifying the role of better, more responsive development agencies in developing more efficient and equitable forms of involvement or in offering state action to substitute or reinforce community participation where the cost of this is very high to the participation.[749]

The focus of the development agencies was to maximise the program and project outcomes to meet the NGOs and the donors' requirements. Meanwhile, the people knowledge of the beneficiaries, which could have been acquired through AC participation in program planning, was excluded because of time and accountability constraints. However, the NGOs should not have assumed that their common programs and projects that are considered 'achievable' would necessarily benefit the ACs in Aceh.

The primary goal of programs and projects was to encourage better participation from the ACs, which means that the AC and local partners should be given ample time to input to ensure the success of programs. The act of balancing the upward and downward accountabilities should be the aim of the NGOs and other international agencies, rather than simply implementing programs that exclude people knowledge, as, ultimately, these programs will be destined to fail in the development phase.

As explained by a senior researcher from UnSyiah, except for some regions in *Lam Bada*, Aceh Besar, the success of programs and projects relates directly to the NA. Successful programs are achieved when a proper NA has been conducted, with

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[748]. This also explains how these pressures have allowed developmental agents to run a conventional program that is adaptable to most post-disaster reconstructions.
[749]. Cleaver, 'Institutions, Agency and the Limitations of Participatory Approaches to Development', 54.

appropriate coordination and collaboration with local leaders at the village and district levels.[750]

This case of *Lam Bada* is an example of a form of partnership being developed to participate in the planning of programs, in which 'power was in fact redistributed through negotiation between people and power holders' at the local level (the *Geuchik*) who represent the ACs. The fact that the 'outcome was determined by the need of the communities' indicates that people have some positive bargaining influence over the results of a plan.[751]

For the programs and projects to be sustainably transferred into the development phase, the inclusion of genuine people knowledge is required in the planning stages. This is important to build a sense of ownership and provide legitimacy for active subjects of the programs. Based on the interview extracts, the findings above demonstrate that the level of participation has an enormous impact on the outcomes of programs. Further, the ownership and legitimacy of programs and projects for the ACs were only practical when local knowledge was extracted through a proper NA analysis. People knowledge should be accounted for in planning through the inclusion of inputs and pre-existing local assets and building the capacity of the ACs.

The discussion above identified the problem of the manipulation of local knowledge by the local elite as one of the main hindrances to effectively assisting the ACs. Mistakes in interpreting local knowledge based on local leaders' interpretations were regarded as a large obstacle to effective programs and project design by NGOs.

The main issue with the planning and implementation of the PTR programs and projects was that an external actor undertook planning and the agenda was set from outside the region. An external actor, who lacked understanding of the local culture, social fabric and network, set the planning agenda but failed to include local participation to generate better local CB. This relates directly to the lack of integration of the NA output due to time constraints. The empirical findings identified the NA as

[750]. Researcher and senior lecturer from the Faculty of Agriculture at Syiah Kuala University, interview by research team, BA, 16 December 2012, transcript. However, there were NGOs in *Lam Bada* that implemented successful programs. Effective NGOs conducted assessments and consulted with village leaders to plan and refine programs. Outcomes were determined by communities' needs, which ensured economic sustainability.

[751] As long as both parties find it useful to maintain the partnership.

the first form of participation during the ERR phase in PTR Aceh. With proper integration of the NA, the designing and planning of the programs and projects in these four aspects would account for the beneficiaries' input from the people's needs, perspectives and knowledge.[752]

The design and planning of the programs and projects in Aceh were patronised by the NGOs on the ground and were based on donor requirements and the foundation of the program, not local needs, knowledge or capacity. In addition, due to the loss of human capacity and resources, coordination and collaboration with local NGOs took longer to establish. This explains the 'direct intervention' method practiced by most NGOs without local partnership. As illustrated in Chapter 4, due to Aceh's post-conflict history and its current post-disaster environment, there was no room for the planning of programs and projects based on the input from the local NA.

The programs' design lacked a local NA, and without integration of local knowledge, the INGO's program design failed to encourage active participation. The capacity vulnerability factor also explained the instantaneous spending that caused the AC to relapse back to underdevelopment. The failure to integrate local elements and the nature of the externally generated programs and projects was a kind of cultural shock to the locals and encouraged opportunism among their communities. The disadvantage of this phenomenon was that the AC manipulated the design of the programs, failing to sustain a good socio-economic climate in the post-PTR phase.

The capacity vulnerability analysis emphasised the recognition of local capacities as an essential step to encourage participation in humanitarian operations. The failure to recognise local capacities led to top-down approaches that either overlooked or undermined local existing capacities.[753] In Aceh, the CB of society has gone from bad to worse following the tsunami, affecting the sustainable economic climate in the post-development phase.

Aceh is a case in which reoccurring violent conflict has led to underdevelopment because of lack of CB and development, which is considered normal in the most protracted conflicts. The empirical findings showed that CB was not so easily viable

[752]. PMI, International Red Cross, interview by research team, BA, 29 November 2012, transcript.
[753]. Byrne, 'Participation by Crisis Affected Populations in Humanitarian Action', 135.

during PTR in Aceh. The re-emergence of deep-rooted underdevelopment issues affected the effective transition of Aceh's PTR programs and projects into the National Development Plan at the state level. ISK transfer is important for CB; however, most NGOs failed to ensure the program was adopted as part of the National Development Plan. The NGOs contribution of the NGOs to CB ended once the programs were not absorbed into national development planning.

From a socio-economic and climate sustainability standpoint, Chapter 5 indicated that without proper integration of DRR—as a main component in long-term developmental planning—into PTR programs and projects, this caused ACs to relapse to a state of vulnerability. The importance of DRR integration needed to be emphasised in each sector of the PTR phase and not only in aspects of disaster mitigation. This was obvious in the case of Aceh DRR, which was exclusively integrated into the TM sectors (see Chapter 8) during PTR after the RR phase. The evidence of DRR integration in sectors within the BBS framework, such as socio-economic, land and PHR sectors, by NGOs was the main contribution that supported a sustainable socio-economic climate.

NGOs in Aceh emphasised MSD to reduce the vulnerabilities of conflict and post-tsunami ACs. Integration in each phase of RR is best gathered under MSD. As required in long-term development plans such as the LRRD, the integration of BBB, BBS and DRR were needed to ensure a fruitful PTR outcome and to ensure CB in the development phase.

Most NGOs found themselves juggling between two accountabilities to reach their target: an upward accountability towards donors or fulfilling a downward accountability to meet the needs and satisfaction of their beneficiaries. BBB first emerged following the Indian Ocean tsunami as a measure to improve the existing reconstruction and recovery practice.[754]

The main issue of contention was the prioritisation of accountabilities to optimise the best strategies to achieve the long-term development plan. For example, in the PHR sector, the task of interpreting the two mainstreams from the beneficiaries'

[754]. W. J. Clinton, *Lessons Learned from Tsunami Recovery: Key Propositions for Building Back Better* (New York: Office of the UN Secretary-General's Special Envoy for Tsunami Recovery, 2006), 1–24.

perspective is termed 'community-based reconstruction' when interpreted by BBB and 'contractor-based reconstruction' when interpreted by BBS. The empirical findings highlighted the issue of both mainstreams having their own individual interpretations, issues and challenges for both the NGOs and the AC to overcome.

As a complex PTR region, Aceh requires more than just physical reconstruction and developmental phase—it requires a multifaceted process. Aceh is a region that has suffered both human-made and natural disasters. As a post-conflict and post-tsunami region, Aceh requires a combination of political and development framework analysis to tackle its deep-rooted problems. The work of NGOs in Aceh should involve more than just delivering humanitarian assistance and socio-economic programs.

9.4 Lack of Coordination

Successful transfer of the ownership of programs and projects requires integration of people's knowledge and coordination with local leaders to determine the timing required to deliver the necessary components of the programs and projects such that they can commence on time. For example, timing was crucial in fisheries projects to ensure that different components reached the ACs on time. Problems with timing usually stem from the subcontractors who are assigned to deliver the components to AC. In one project, a delay in delivering parts by one subcontractor significantly slowed delivery of the remainder of fisheries activities.[755]

A consistent issue with delays in the fishing projects created other problems for the ACs in utilising aid in time to sustain their livelihoods and socio-economic activities. In the fisheries case, for example, the delay in delivering the complementary the equipment had dire effects, as it was crucial to restoring the fishing activities.[756] The lack of coordination in these projects was a significant problem in Aceh. The failure to coordinate the proper project timing, such that all project components were delivered in time, was the result of the insufficient coordination between local village leaders, government agencies and officers at the district level, the local NGOs and

[755]. Researcher and senior lecturer from the Faculty of Agriculture at Syiah Kuala University, interview by research team, BA 16 December 2012 transcript.
[756]. Delays led ACs to sell unused equipment, leaving the village with no assets to sutain business activity. While selling equipment provided a short-term financial boost, it was detrimental to long-term development.

NGOs.[757] Such problems suggest the need for coordination at the local level. Similarly, the empirical data indicate that the existing local NGOs played a significant role in coordinating foreign aid at the local level. Based on findings from other tsunami-affected countries, the NGOs were lacking in experience and local knowledge.[758] This was another reason why the NGOs need to develop a close partnership with the locally based NGOs as their first step in understanding the local community's social structure and needs before commencing projects and programs.

Such collaboration is essential to fill gaps in the experience and knowledge of NGOs' staff. The involvement of local agencies in the NA process would create a bridge between the NGOs and their beneficiaries, enabling them to interact and exchange local knowledge. For example, the PMI staff commented on how their role as a mediator between NGOs and their beneficiaries directed programs and funding towards an effective outcome. In this way, resources can be utilised to benefit the ACs with their long-term developmental plans. This approach contrasts sharply with the disadvantages of a direct approach in which NGOs design programs and projects based on assumptions rather than on beneficiaries' needs.[759]

When the process of channelling of aid is based on actual results from the NA, the planning and design of programs can address the existing issues and new problems that emerge after disasters. Thus, aid funding is utilised in the best manner to achieve concurrently both the short-term needs and the long-term development plans. From the long-term development view, the establishment of partnerships with local NGOs and two-way communication between local NGOs and government agencies, particularly at the NA level, is the starting point for improving AC participation and CB.

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[757]. Sato, 'Matching Goods and People', 71.

[758]. Sisira Jayasuriya, P. Steele and D. Weerakoon, *Post-Tsunami Recovery: Issues and Challenges in Sri Lanka*, report presented to the Prime Minister of Sri Lanka, Colombo: Institute of Policy Studies, November 2005, 17

[759]. PMI, International Red Cross, interview by research team, BA, 29 November 2012, transcript, 5. Humanitarian assistance reached the community on time. However, the assessment was crucial in determining the community's recovery needs. PMI plays an important role in evaluating ACs' requirements. NGOs that coordinated with communities delivered timely humanitarian assistance, while non-consultative NGOs were unable to deliver aid immediately. Each community is unique, so individual assessments are vital.

The assessment plans indicate that the NGOs undertook some coordination efforts, especially in dividing tasks to deliver different kinds of aid and assistance. For example, some NGOs focused on providing food items, whereas others provided NFI. However, there were issues of competition between NGOs that impeded them from undertaking proper NAs.[760] Most NGOs are granted a limited visa that only allows them to stay for a month. Therefore, they did not have enough time to create partnerships or study the local culture and knowledge, such that they could better deliver aid that suited the local needs.[761]

Another important effect of the coordination problem was that it impeded information flows between stakeholders in Aceh. There was no proper channel through which to inform the ACs of what they would be receiving from the NGOs and other development agencies. This issue was more obvious in BA than in WA.

The interruption of information flows had dire effects in terms of the significant gap between the ACs' expectations of the tsunami aid and the actual reality of the program and project outcomes. In the chaos of a disaster, there is rapid spread of a great deal of false information and rumours regarding aid. The empirical findings indicated that there was a causal link between the pattern of the information flows and the ACs' perception of who was responsible for conveying the right information to them. Most ACs complained that information on assistance was delayed or not receives at all. Most direct information and aid came from the NGOs in BA because of the damage inflicted by the tsunami on the operations of the local government agencies. The LRRD reports interpreted this as 'weak vertical information flow'[762] between the stakeholders. The issue of the lack of trust among the interested parties and competition between agencies had its roots in this poor flow of information.

Just as the lack of coordination had detrimental effects on the outcomes of programs during the RR phase, the insufficient flows of information between stakeholders in the RR phase further thwarted the process of determining the project outcomes in the

[760]. Action Against Hunger worker (formerly from CARE International during the tsunami), interview by research team, in Jakarta, 16 November 2012, transcript. The first step for CARE was to assess the disaster and the damage in all areas. Assessment took several days due to road damage and travel time. After the assessment, CARE and other NGOs began to distribute food. The government provided food and rice.
[761] Former NGO/consultant, interview by research team, 15 December 2012, BA, transcript.
[762] Brusset, *A Ripple in Development?* 83.

ACs.[763] The LRRD report showed that issues of transparency and faulty targeting were the main reasons that the ACs provided for considering that information flows were insufficient.

The empirical research conducted for this thesis confirms the existence of transparency issues, but points to the lack of coordination as the main reason for the insufficient information flows. The empirical evidence indicates that there was a high level of competition among NGOs, which precluded any form of information sharing between the aid agencies. Competition among aid agencies was the main source of faults that led to a lack of transparency in the data conveyed to the ACs.[764] Further, the *Geuchik* often controlled the power relations and flow of information to ACs and manipulated the kind of information that reached the AC for reasons of nepotism and favouritism, such that only the 'preferred' individuals obtained the correct information.

Coordination needs to take place with inter-agencies to ensure better fund management, quality assurance and the maximisation of benefits for beneficiaries of the tsunami fund. Lack of coordination affected the participation of ACs in programs and projects and compromised the quality of PHR projects. Funding mismanagement in various socio-economic programs encouraged the practice of nepotism and favouritism. As much as good funding management is important for effective outcomes of PTR programs and projects, without good coordination between all stakeholders, it can impede the participation of beneficiaries in PTR programs.

In Aceh, BRR is a highly mandated agency representing the central government and appointed with the task of coordinating the funding and interagency cooperation. In the first six months after the tsunami, some NGOs had already made direct contact with their beneficiaries and had started their RR programs and projects while BRR was under construction. Since the initial direct contact in the ERR phase, some NGOs had already come up with housing reconstruction plans even before BRR even existed.

The empirical findings highlighted the numerous cases of mismanagement of the tsunami fund in all sectors due to the lack of coordination, either by central or local

[763] Ibid.
[764] Former NGO/consultant, interview by research team, 15 December 2012, BA, transcript.

government and including the local district council and head of the village (the *Geuchik*). However, this was not a normal practice, given there was some outstanding financial management in villages and at the district level in Aceh. For example, good coordination between NGOs and local communities allowed the ACs of Mesjid Raya to enjoy good WASH facilities, an outstanding achievement and example of excellent and best management practices.

There were also several bad examples that really affected the communities. For example, there were plenty of mismanagement issues, especially within contractor-based housing reconstruction. Most BRR housing aid recipients were forced to spend funds for constant house maintenance and some houses showed signs of cracks after only few years post-reconstruction. Compared to other PHR projects by NGOs, the beneficiaries were not burdened with high maintenance and most were complete with the necessities.

The main reasons for such problems in housing aid were the lack of coordination and monitoring of the flow of funds from the NGOs to the beneficiaries. Further, there was no quality assurance measurement in their performance or the end results of housing projects. BRR was given the task to coordinate all international agencies, including NGOs and local and central government, even though BRR was formed by the central government to coordinate the fund and aid in the Aceh RR phase. However, they failed to convince the NGOs to put their trust in them due to their low-quality housing.

Coordination delays in Aceh affected the commencement of the socio-economic programs, such as CFW. After three months of weekly meetings in WA, the NGOs finally agreed on pay rate of IRP1, 500 per day.[765] According to most local NGOs, it was easier to assist the beneficiaries when there was smooth coordination and collaboration between the NGOs. With proper coordination, the NGOs and international agencies were champions in the provision of housing for ACs. However, when coordination was not in place, it caused problems, such as overlapping aid and poor construction, and was not effective in encouraging genuine participation among

[765]. Plan International (formerly YCAR) staff, interview by research team, in Jakarta, 7 June 2013, transcript.

beneficiaries. Other issues that led to poor-quality PHR were the lack of MSD, which was also due to poor coordination in WASH facilities. Due to the lack of coordination during the PTR phase, the AC had limited mediums through which to channel their problems.

The lack of coordination also led to fund wastage on one type of public facility or on infrastructure. For example, communities were provided with a community centre with better facilities if the NGOs collaborated to build one community centre. However, in Aceh, each INGO chose to build without coordination with other agencies, causing these facilities to be left unutilised. The combined and shared knowledge, skill and coordination between the NGOs were important elements to provide the AC with better facilities.[766]

Building local capacity requires strong partnerships with local agencies. However, such partnerships require the strengthening of local agency capacity to then build up AC capacity. Christoplos labelled this as 'usual excuses' and related corruption, speed and scaling up as reasons for the failure to build local capacity. Such organisational problems in local NGOs need further investigation.[767]

Evidently, the empirical findings helped to explain that the 'usual excuse' was genuine due to the existing low human resources capital that lacked ISK and training. However, the findings suggested that lengthy bureaucracy and corruption equally affected local CB. Burke explained that the interconnection between interagency coordination and the effect on participation was important for the benefit of their beneficiaries.[768]

Even though PTR in Aceh was one of the biggest humanitarian operations in human history, without coordination, standardised operational procedures and good quality control, most of the NGOs planned their projects for themselves. In coordination meetings, agencies generally sit together and discuss projects to help with synchronisation and avoid project overlap. However, many NGOs with their own

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[766]. Ibid.
[767]. Christoplos, *Links Between Relief, Rehabilitation, and Development in Tsunami Response*, 31.
[768]. Burke, 'Evaluation of the Linkage of Relief, Rehabilitation and Development', 102. Such a harmonious relationship naturally depends on interagency and NGO coordination. Cooperation between the UN, NGOs and the government built capacity and promoted community participation.

expertise started their own projects without proper coordination, causing overlapping problems. The level of coordination varied among NGOs in PTR Aceh. There were numerous factors that may have impeded the coordination effort among foreign agencies after the tsunami, such local corruption, mishandling of funds and low human resources and capacity.

9.5 Group-Based Projects and Programs

Most socio-economic programs designed by the NGOs in Aceh are group-based projects or *proyek kelompok.* The idea behind the group project was that team-based activities would help overcome the psychological trauma of the tsunami and that such projects could be easily monitored by the NGOs. However, group projects that require the ACs to develop team-based activities to qualify for livelihood funding aid were not a wise move by the NGOs in the RR phase. From the ACs' perspectives, the formation of group-based programs meant that they had to share the equipment given to them.

Sharing equipment was a problem for the Acehnese. Most ACs claimed that they preferred individual aid rather than being involved in group-based programs to achieve a sustainable livelihood. However, most NGOs required the ACs to form groups, which was one of the major reasons why many programs or projects failed. As the empirical researcher for this project found:

There were also cases where there are 100 AC needed the aid, but the NGOs funding covers only 20 individuals. In order not to cause communal conflict, this limited funding was divided into 2–3 people per group, and the outcome was not successful due to the limitation of the aid. The grant was utilised for individual consumption. The Acehnese community do not like sharing. When in such a situation, in which the limited funding requires being shared, this causes them to sell their share of the assistance to other partners who are willing to buy the shares.[769]

Based on the empirical findings, this need to share were the primary concern of most beneficiaries and the cause of many of them giving up their share in group equipment

[769]. Researcher and senior lecturer from the Faculty of Agriculture at Syiah Kuala University, interview by research team, BA, 16 December 2012 transcript.

or socio-economic activities. The researcher explained that this type of group project had created a form of group syndrome among the communities and that 90 per cent of such programs and projects failed to be sustained into the developmental phase.

The formation of these group involved loosely connected members, who were profit oriented and lacked unity. They would usually disassemble after the fund had been allocated and divided among the team members. The groups did not carry any liability for the failure of the program because they joined the group solely to obtain the aid funding. As there was no sense of belonging to, or ownership of, the programs and projects, the formation of socio-economic groups did not result in any genuine group participation. The individually funded programs had a much higher success rate because the individual was held fully responsible for the success or failure of the project, in contrast to the situation for the group-based programs.[770]

Although the individual funding-based programs, based on full responsibility, ownership and control had a much higher chance of success, there was a small number of legitimate pre-existing groups, particularly in fishing, that had developed based on their own initiatives and common interests. The group-based program was of benefit to these fishing groups, assisting them to improve productivity and profit for all members of the group. Thus, for these pre-existing closely-knit groups, the funding from the NGOs was viewed as a bonus to enhance the group-based CB.[771]

The issues of mishandling of funds, self-interest, favouritism and nepotism were familiar in the CBA programs in Aceh. There are two primary forms of CBA assistance: the NGOs' direct approach and funds channelled through the village leaders, known as the *Geuchik*. The role played by the local leaders could create difficult issues at times and the brokering functions of the *Geuchik* were problematic as they created more conflict between the ACs and their local leaders. For example,

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[770]. Group funding for socio-economic activity is also known as 'group syndrome'. NGOs require ACs to form groups before funding is distributed. For example, for boat aid, no individual financing was available.

[771]. Ibid. 'The success and failures of NGOs' programs were based on their level of commitment to helping the communities. The meeting and discussion at the assessment level promised a higher chance of success of the programs. The inclusion of local leaders also guarantees a better chance of community commitment and participation … There were also issues with local leaders being focused on self-interest gain … issues of nepotism and no transparency in managing the community fund, triggering more mistrust not only among the communities but also at the INGO level'.

most NGOs and beneficiaries claimed that the Geuchik mishandled funds and that there were issues regarding the accountability of the local leaders. Common complaints included favouritism and nepotism in the distribution of aid funding, irresponsibility and unreliability in fulfilling the ACs' needs.[772] After the tsunami, the ineffective leadership behaviour of some *Geuchiks* was condemned and they were later replaced with new *Geuchiks*, based on a majority vote by the villagers.

In the cases in which the *Geuchik* was no longer reliable or had not survived the tsunami, a local community committee was established to help monitor the disbursement of funds. A democratically selected board, assisted by the INGO staff members, was much more reliable than one dominant *Geuchik*. The PHR project committees known as the *Komiter Rumah Bantuan* (KRB) were one of the examples of locally established organisations in post-tsunami Aceh.

The KRB provided an example of improved intra-community adjustment,[773] in which community solidarity led to a positive outcome from the programs in the RR phase. The high levels of participation and the input of people knowledge into the program assisted local CB and livelihood promotion. Here, the importance of the social fabric in rehabilitation related directly to the CB and livelihood promotion. This form of community-based organisation overrode the pre-existing power relation, controlled by local leaders such as *Geuchik*. Such community-based measures were important in ensuring transparency in funding flows and the channelling of funding aid to the ACs. The empirical findings of this research indicate that community-based mechanisms such as KRBs were the main pillars of successful programs and projects. A community-based organisation with a high level of local ownership resulted in better community-based solutions, which had the advantage of encouraging local participation among the ACs in the RR phase.[774]

However, the influence of local power relations is significant in the case of group-based projects and programs. The role of local leaders was important in ensuring the formation of genuine groups that were not only profit-oriented. The role of the

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772. Burke, 'Evaluation of the Linkage of Relief, Rehabilitation and Development', 83. The government had made little or no attempt to explain eligibility for housing reconstruction. In many cases, this was attributed to favouritism.
773. Brusset, *A Ripple in Development?,* 83.
774. Ibid., 83.

G*euchiks* remained important because they had the authority to identify the authentic nature of an individual joining a group to participate in the NGOs long-term developmental plans. It was almost impossible for external agents such as the NGOs, which lacked local knowledge, to verify the legitimacy of these group formations, based on whether there was genuine participation and interest in programs and projects, without the verification and assistance provided by local leaders.[775]

The effectiveness of program and project outcomes was a product of the nexus between the participation level of the ACs and the role of local leaders. Community solidarity and the rehabilitation of the social fabric should be perceived as one of the most striking aspects of the reconstruction phase, especially when compared to the related issues of CB and livelihood promotion. The LRRD study had noted that there was a risk of increased conflict between affected populations and their community leaders because of the brokering role and privileges that the early relief phase had given the community leaders. Over time, however, there had been an adjustment to better intra-community targeting, such that it was the leaders who came to feel excluded from the relief efforts.[776]

In contrast, where government agencies were responsible for monitoring the coordination of the tsunami funds during the RR phase, this implied low-quality outcomes of projects and programs. The ACs response to the BRR-led programs was that this government agency only focused on permanent house reconstruction and lacked MSD plans for the livelihood of the AC. Most BRR staff led a lavish lifestyle during the four years of the RR period, which exacerbated doubts regarding the central government and amplified existing issues of mistrust among ACs. Most beneficiaries considered that the BRR misused tsunami funding, with little benefits for the ACs. However, for most international stakeholders, the existence of BRR and

775. Researcher and senior lecturer from the Faculty of Agriculture at Syiah Kuala University, interview by research team, BA, 16 December 2012, transcript. 'There were lots of problems when everybody thinks that they ought to benefit from the tsunami funding. Those who did not come forward to claim their portion of the funding ended up being left out and did not help at all. The RR process in Aceh was better managed towards the end. All problems … took place at the beginning of the RR phase. The establishment of BRR promises a better coordination but leads to low quality of RR projects.'

776. Brusset, *A Ripple in Development?,* 83.

MDF was regarded as positive because they were operative reconstruction institutions and they had at least reduced the tension between Jakarta and Aceh.[777]

A local researcher added that the role of BRR was more prominent towards the end of the RR phase. However, the quality of programs and projects led by BRR was low, especially in the BA region. The research findings indicated stark differences in quality between the physical reconstructions by the BRR in BA and WA. Most BRR housing recipients in BA complained about the poor quality and the lack of seismic-resistant elements in the reconstruction of their house. The low quality of bricks and wood used in the PHR by the BRR meant that the houses were prone to cracking during the earthquake and the wood decayed because of termite problem after few years. However, in WA, the quality of the BRR houses were as high quality as if they were a PHR built by other international agencies.

The findings of this empirical research were contrary to the literature in the LRRD reports on the role of the BRR in reducing the tension and conflicts in the region. Realistically, most ACs remained cynical towards anything that came from Jakarta. The ACs accepted all assistance distributed through the BRR with a high level of scepticism. The protracted conflict in Aceh not only deprived the region of economic growth and made funding flows and long-term development plans difficult to sustain, it also created a high level of mistrust of the central government of the Republic of Indonesia. Although the LRRD report claimed that these government agencies had encouraged development and made constructive efforts to reduce conflict, the empirical findings from the beneficiaries' perspectives on the BRR proved otherwise.

9.6 Conflict-Affected Communities and Daerah Tertinggal

The rise of more *Daerah tertinggal* (DT), or less developed regions, was another issue that arose in the PTR phase in Aceh. These conflict-affected communities were largely communities in rural areas or districts that were left out of the RR programs.[778] Most regions that fell into this category were considered high-intensity, conflict-affected areas with a high potential for better economic development, given their abundance of resources. However, because of factors such as the effects of

[777]. Burke, 'Evaluation of the Linkage of Relief, Rehabilitation and Development', 111.
[778]. Sato, 'Matching Goods and People', 76.

conflict and high-risk access issues, they were deprived of the chances to benefit from the NGOs' development programs.

According to local government officials, as of 2013, there were 27 DT districts, managed by the Ministry of Rural Development[779] in Aceh Jaya. Researchers from universities in Aceh evaluated the programs and projects in these districts to study their impact on development as part of a national program measuring the socio-economic differences between regions. The programs were evaluated in terms of indicators including household income, literacy levels, medical access, WASH access, and road and transportation access in the conflict areas, compared with the province and national standards.

For example, the DTs in Aceh includes the districts of Aceh Besar and Aceh Jaya; Nagan Raya in Aceh Barat Daya, Simeuleu, Pidie Jaya in Aceh Timur and Benar Meriah in Aceh Tengah. The reasons for DT status included conflict, in areas such as Pidie, and new *kabupaten* being established, in areas such as Biren and Aceh Utara, which are now divided into two subdistricts. The new subdistricts of the divided *kabupaten* will suffer socio-economic problems because their centre of economic activities has been divided, and their previous dependency will make it difficult for the new *kabupaten* to establish a new commercial centre in these circumstances. In addition, the new *kabupaten* must adjust to new regulations, laws and council management, limiting their focus on socio-economic activities. This situation applies to Aceh Jaya and Pidie Jaya, which were among the new *kabupaten* in Aceh.[780]

Most public and private donors specifically requested that NGOs focus on the ACs affected by the tsunami and, thus, indirectly marginalised the conflict-affected communities and minimised their chances of development. The situation worsened as MDTFANS could not override the government's policy and redirect tsunami funds to benefit the marginalised regions in Aceh. The long-term development plans that aimed to reduce the risk and vulnerability of the tsunami- and conflict-affected regions needed to spread the benefits of the aid and assistance so that these regions could be prevented from relapsing back to underdevelopment. The discrimination

[779]. *Kementerian Daerah Tertinggal*.
[780]. Former NGO/consultant, interview by research team, BA, 15 December 2012, transcript.

between these two groups of ACs in terms of the international aid provisos resulted in some regions with excellent resources and others deprived of any developmental programs and projects.

The category of 'tsunami-affected' communities had become an unofficial affront to the 'conflict-affected' communities. The areas with better economic growth prospects were those located inland, with superior economic structures, such as gas and oil exports and coffee plantations, which made greater contributions to the exports of the region.[781] Most NGOs' livelihood and socio-economic programs and projects were focused on the coastal areas and the economic activities in the tsunami-affected communities, which concentrated on agriculture and fishing. Thus, despite this focus, the economic activities of the tsunami-affected areas would contribute less to the region's economic development than would the activities of the inland, export-oriented regions. Factors such as geographic location and ease of access to the coastal regions meant that the communities classified as tsunami-affected became a 'livelihood haven' and they received numerous types of assistance to help them recover their socio-economic position. Therefore, this overflow of funding focusing on the tsunami-affected communities was an ineffective approach, which did not maximise the benefits to the communities. Meanwhile, the conflict-affected areas, which were less developed and required more attention, were overlooked and neglected, yet, they had superior prospects for industrial investment, which could have led to increased economic development for Aceh as a whole.[782]

The geographical advantages of the coastal communities and the ease of accessing them led the NGOs to focus their development projects in the tsunami-affected areas. The LRRD report supports our arguments that the outputs identified by the NA were not given top priority and that the situation was aggravated by the discrimination between the conflict-affected and tsunami-affected communities. The report states:

> However, the focus of aid flows, in general, has been in areas that were both affected and more accessible (Banda Aceh and not Nias), which shows partial relevance to the actual need.[783]

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[781]. Brusset, *A Ripple in Development?,* 113.
[782]. Ibid.
[783]. Ibid., 112.

The dire effects of focusing only on tsunami-affected communities resulted in the marginalisation of the needs and socio-economic development potential of some rural and inland regions that were less accessible as they were located further inland than the west coast areas. Despite the preference given to regions with easy geographical access and the multiple sources of assistance and development programs during the RR phase, the coastal communities continue to find it difficult to sustain their economic development. The LRRD reports, and another from the ACs, reflect the different interpretations of the effects of physical reconstitution on livelihoods. It was wrong to generalise that physical replenishment would contribute to the economic development of the ACs. This reasserts the need to implement long-term development plans equally, in both tsunami-affected and conflict-affected communities, without any discrimination. [784]

The physical reconstitution projects, such as the PHR projects, had an indirect impact even though the design of these projects lacked a multisectoral approach to development. This is in line with claims by the majority of beneficiaries that the PHR designs had only a superficial focus on the importance of livelihoods. Only a few NGOs, such as Caritas and CRS in WA, had a multisectoral approach, with a genuine focus on supporting livelihoods and sustainable socio-economic activities. Thus, the CRS housing recipients in WA claimed that they were most satisfied with their housing projects, which were completed with septic tanks and WASH facilities. The multisectoral approach in these housing projects meant that they designers not only fulfilled the immediate basic needs of the ACs but also provided facilities, such as WASH facilities and septic tanks, to ensure a more sustainable livelihood in the long-term development process.

In relation to the MSD, the statement about expanding the economy, made in the LRRD report above, seems unrealistic and there is a lack of evidence of such development based on empirical findings in Aceh. The statement might apply in the case of urban regions such as BA, but not necessarily in the rural regions along the west coast of Aceh. The empirical findings indicated that, as of mid-2013, most

[784]. The BA economy is expanding, but beneficiaries still find it difficult to sustain an income. However, CM30 (a former *Geuchik* from Aceh Jaya) believes RR temporarily boosted AC economies. After the RR phase, the village returned to its pre-tsunami state, but with no sign of sustainable economic activity.

beneficiaries in less poor economic development regions surrounding Aceh still found it difficult to sustain their economy and generate a stable source of income.[785]

A Geuchik explained that, to achieve longer-term, sustainable economic development, the AC needed to undertake long-term planning, including attracting more industry-based investments into Aceh, which would open up greater job opportunities and prospects for the ACs. Most of these regions had rich soil and an abundance of natural resources but they lacked the industries to generate local economic capacity. This problem of the lack of capacity in the economic structure that existed prior to the tsunami was further exacerbated when most economic development programs and projects post-tsunami focused on sectors such as fisheries and agriculture that had small prospects for encouraging economic development. This was another indirect impact of the NGOs' sole focus on the tsunami-affected communities. Not only did this policy marginalise most of the conflict-affected communities and deprive them of the chance of better economic development, it also resulted in a failure to identify sectors with superior prospects for promoting sustainable economic development.

The RR programs and projects in both BA and WA have resulted in most economic activities being based on a temporary mechanism designed to overcome the mass tsunami destruction and have led to higher inflation and stagnant development, without delivering any promising, sustainable socio-economic activities. The lack of focus on economic recovery in the NA framework and the primary focus on the death statistics were the two main factors resulting in the neglect of regions with resources and superior economic prospects being neglected. A more widespread integration of LRRD principles could result in better economic development prospects for rural and marginalised communities.

Another significant finding from the empirical studies was that, because there were no pre-existing locally based industries in Aceh before the tsunami, Aceh was less able to benefit from the tsunami aid and funding flows that were the more industrialised

[785]. (Former *Geuchik* [1998–2007] from *Desa Lhok Timon Kec. Setia Bakti Aceh Jaya*), interview by research team, WA, 25 May 2013, CM30, transcript. Better development programs and industries investment will ensure more money coming into Aceh. Due to the lack of industries in Aceh, tsunami aid flowed to Medan and did not benefit the Acehnese. NGOs should help bring in investors or build bigger industries to increase employment opportunities and reduce inflation. Growth has stagnated and communities have relapsed to pre-tsunami situations.

cities, such as Medan. Medan is an industrial city in North Sumatra that is near Aceh by land. Most RR programs and projects supplies used in Aceh were obtained from Medan because of its highly industrialised economy compared with Aceh. As of 2017, this dependency on Medan for processed goods and services continues. Many basic household goods, including raw sugar cane and eggs, originally came from Aceh and were exported to Medan as raw materials for processing and packaging, before being imported back into Aceh for local consumption at much higher prices. As a result of the lack of industries in Aceh, its level of dependence on Medan was quite high, as confirmed by the empirical findings of this thesis. This was the case even though Aceh was rich in resources. Aceh's underdevelopment affected its capacity for industrialisation, creating a great dependency on Medan.

To summarise, the discrimination between tsunami-affected and conflict-affected communities had dire effects on the overall economic development of Aceh in the development phase. Programs and projects in the RR phase prioritised the tsunami-affected communities and the areas that were easy to access and could fulfil the donor requirements. This meant that economic sectors such as agriculture and fisheries, which were small scale and had little prospect for promoting the long-term development of Aceh, were supported and prioritised for short-term development. Economic sectors with greater potential to foster economic development, including gas and oil exploration and other industries, were marginalised by the focus of aid and funding on the economic recovery of the tsunami-affected communities.

9.7 Lack of Ongoing Socioeconomic Development Process and Support in the Post-Rehabilitation and Reconstruction Phase

Most beneficiaries mentioned that there was a lack of continuity in the support provided by projects and programs to develop more sustainable socio-economic activities in the villages. This also explains why the ACs relapsed and became economically vulnerable again after the RR phase.[786]

In Aceh, forming local partnerships with local NGOs remains the key to ensuring continuous support for socio-economic programs, to contribute to the development of

[786]. Brusset, *A Ripple in Development?,* 112.

a more sustainable economy. In the case in which domestic partnerships do not exist or in which there is a lack of expertise in monitoring program progress, the NGOs utilised a check and balance mechanism, including requirements to submit business proposals or direct monitoring plans that does not promise better commitment and responsibilities of the AC in spending the funding given to them.[787]

Some NGOs took measures such as placing conditions on projects, requiring that the ACs prepare a business proposal upon receiving funds as check and balance tests. In the business proposal, beneficiaries were required to explain and justify how their funds had been spent and how they had promoted socio-economic development. This was, in fact, a good monitoring process to verify that funds granted to ACs would not be wasted on profitable but short-term activities. Even though this mechanism was planned as a monitoring process, its effectiveness depended on the local NGOs' commitment to continue to observe the ACs' projects, which in turn depended on the capacity and resources of the local NGOs. [788]

An INGO's experience in monitoring loan repayments indicated that there were many factors to be taken into consideration when implementing such check and balance measures, particularly if there was no proper local partnership with local NGOs or local financial institutions. For example, the problem faced by most NGOs, including MC, in the RR phase livelihood programs was establishing effective loan repayment methods. In the absence of local partnerships, the NGOs had to monitor the repayment of loans on their own. In some cases, businesses could not commit to repaying their loans after, say, two months, and the NGOs had to change their strategy and shift to a new plan, given that the current strategy did not work. The real challenge was for the NGOs to determine the 'right' strategy, given that it could take months before the best strategy, which suited local capacity and needs, was found using the trial and error approach.[789]

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[787]. PMI, International Red Cross, interview by research team, BA, 29 November 2012, transcript. There were programs in 2005–2007 to improve livelihoods in Aceh Besar and Aceh Jaya by RC from Britain. IRP10 million per family was provided. However, it was not reported how this was spent.

[788]. Former *Geuchik* [1998–2007] in *Desa Lhok Timon Kec. Setia Bakti Aceh Jaya*, interview by research team, 25 May 2013, CM30, transcript. 'We need more monitoring and support. Socialisation for SDM was little. A joint venture between local NGOs and NGOs was needed to ensure fruitful and efficient programs.'

[789]. Mercy Corp, interview by research team, in Jakarta, 14 November 2012, transcript.

Another problem faced by the NGOs was a lack of local banks with the capacity to monitor the progress of loan repayments. The unclear terms and conditions of collaboration with local MFI (*Bank Pembangunan Daerah*) in the initial recovery phases meant that it was not worthwhile for the MFI to take on responsibility of loan repayments monitoring. After the loans had been distributed to the ACs, there were no follow-up actions from the local MFI, despite there being an MoA in place for a follow-up mechanism. The ACs claimed that there was no direct supervision from the appointed MFI or from responsible local government agencies such as BPD on their progress and the AC, therefore, considered that they were running their businesses by themselves after three or four months. This situation was more manageable after a few meetings with BPPD, in which it was identified that the biggest obstacle was miscommunication between the NGOs and local monitoring bodies. However, in the meantime, one INGO, MC, had lost due to no repayment and the lengthy process of trial and error in Aceh in the process of determining the right strategy. [790]

In most cases, the NGOS chose to ignore the failure of loan repayments. This was based on the assumption that, if the ACs did not repay the loans, the NGO would be assisting them to recover by not pursuing the repayments and adding to pressure on the ACs. The NGOs were given common reasons by the ACs for their failure to repay loans, such as that the funds had not been sufficient to support their business needs and that, instead, the funds were spent on transportation vehicles or other family usages. In some cases, the NGOs gave the ACs up to three months to choose the kind of repayment method (daily or monthly) that best suited their particular conditions. [791] In the end, the INGO representative would become a debt collector, chasing reimbursement from the local communities. Some NGOs, such as the MC, commented that it was sufficient if the AC repaid at least 25 per cent of the whole loan. As a result of these repayment issues, it is almost impossible to ensure any of the ACs would pay back 100 per cent of the loans.[792]

Another factor contributing to the problems with repayment of loans was that, as noted above, the aid was channelled to tsunami-affected areas with economic sectors

[790]. Mercy Corp, interview by research team, in Jakarta, 14 November 2012, transcript.
[791]. Ibid.
[792]. Ibid.

that had low growth potential, such as fisheries and agriculture, and that did not contribute greatly to the overall industrial capacity development in Aceh.

9.8 Conclusion

It can be concluded that the objective of targeting and improving the CB of the beneficiaries of PTR in Aceh has been partially successful. The NGOs need to balance upward, downward and lateral accountability in ensuring that programs and projects are designed to meet needs of the beneficiaries and satisfy the stakeholders' interests. The participation of the recipients of aid in projects and programs needs to begin early, as soon as the NA process ends. This aligns with the principles of the LRRD framework, which encourages meaningful local participation to promote the local CB.

However, for future PDR, there are lessons from Aceh that could help stakeholders to manage a disaster better. The NA, the local knowledge (people knowledge), local capacity (partnerships with local NGOs) and vulnerability (pre-existing socio-economic conditions) are factors that need to be considered in the planning, design and implementation phases of any future disaster reconstruction.

Chapter 10: Conclusion

This chapter is a combination of general suggestions and concluding remarks based on the empirical study on PTR in Aceh. The findings in Chapters 4 (ERR) and 9 (RR) highlighted issues that affected participation and CB in the PTR phase. This chapter will highlight the key findings of this thesis, and why the time gap between the tsunami and these findings will allow a better understanding of the importance of the role NGOs play in improving the participation of local communities.

The findings of this empirical study will contribute to a better framework for the future planning and implementation of PDR programs and projects. However, this research argued that without a proper medium to channel the input of beneficiaries to the PTR programs and projects, there is no prospect for improvement in other future PDR programs and projects implemented by NGOs.

The empirical findings offer some guidelines to improve the participation of AC in PTR programs and projects. Several factors identified in this study explain the existing gap in the body of knowledge on how participation affects the CB of AC during PTR in Aceh.

10.1 Tsunami Funding: Problems and Challenges

The accountability of NGOs is crucial when it comes to empowering ACs, the beneficiaries of NGOs. Agencies, such as the NGOs in Aceh, faced difficulties in fulfilling their upward and downward accountabilities. First, when there was a large amount of funding, NGOs had to compromise their downward accountability due to pressures from their donor to instantly spend the allocated funding.[793] Second, working under pressure, the NGOs had to accelerate their operations and implementation of programs and projects, which may have limited the integration of NA input into planning. Due to these issues, the need to study, analyse and plan according to local needs and capacity was neglected.

Empowerment usually results in greater participation, an important element for CB to ensure a sustainable economic climate in post-tsunami and post-conflict communities

[793]. Please refer to Appendix 1.

such as Aceh. Accountability-appointed NGOs are an effective agent of empowerment and development agencies. Kirby defined an INGO as a 'public benefit organization' due to its lack of defined accountability towards their constituencies.[794] Although NGOs seem to perpetuate the interest of their constituencies, there is no clear path through which they can be held accountable to those they represent.[795] As development agencies, NGOs cannot be held totally responsible or accountable for the level of participation of ACs in post-PTR programs and projects in Aceh.

While CB requires the local community to have some sense of ownership towards the programs, only high levels of participation could promise a better outcome. However, when developmental agencies, such as NGOs, are not held accountable in their representation of beneficiaries' interests, this raises the question of their downward accountability, which could be explained through the main aims of their programs and projects.

For NGOs who tried to develop the Aceh region without first comprehending the local knowledge and capacity, their lack of understanding caused conflict with the Acehnese and made developing Aceh from scratch rather complicated. Compared to other disaster-affected communities in Indonesia, such as in Mentawai, Padang and Sumatera, the Aceh situation was more complex. The major issue here was the pre-existing condition of conflict in Acehnese society and poor development. It should be considered whether NGOs were solely responsible for the outcome of the RR phase in Aceh, or whether other stakeholders should have equally shared the responsibility. The position of NGOs is that of a middle person between the main stakeholders: the donor (upward accountability), the state (lateral accountability) and the beneficiaries (downward accountability). In PTR in Aceh, the balancing of the interests of these three main stakeholders was a complicated task with numerous challenges.

Based on the empirical findings, the task of the NGOs in Aceh was more than just typical disaster management for the beneficiaries or a normal procedure in which to fulfil their upward accountability towards their donors. The NGOs faced many

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[794]. P. Kilby, 'Accountability for Empowerment: Dilemmas Facing Non-Governmental Organizations', *World Development* 34, no. 6 (2006): 951–61.
[795]. J. Telford, J. Cosgrave and R. Houghton, 'The International Humanitarian System and the 2004 Indian Ocean Earthquake and Tsunami,' *Disasters* 31, no. 1 (2007): 1–28.

challenges in their operations that affected their accountabilities to their stakeholders, such as obstacles in the effort to coordinate with local NGOs, ineffective interagency coordination, pre-existing vulnerabilities in post-conflict Aceh communities, transparency and trust issues with the state, the capacity of local administration and governance and funding management (mismanagement and corruption).

The factors that impeded beneficiaries' participation in PTR in Aceh included interagency coordination, the communal structure (nepotism and favouritism), the scale of the disaster, the effect of the disaster on the communities, the manipulation of resources due to lack of coordination, the ineffective use of resources, BBS versus BBB, community-based reconstruction v. contractor-based reconstruction and corruption and misuse of funding. These factors caused shortcomings in the level of participation and CB.

The planning of main agenda PTR programs in Aceh should integrate the abovementioned factors to create effective development-oriented programs and projects aimed at uplifting the CB process of AC. However, the findings from the interview and analysis indicated that the factors listed above affected not only the participation level of AC, but also the NGOs operation in Aceh.

PTR in Aceh provided a good example that funding was not a disruption for NGOs. Under normal circumstances, NGOs usually need to hold fundraising activities to raise sufficient funds for their programs. They also encourage participation from the local beneficiaries into programs on a voluntary basis. This ensures that the local communities have an equal chance to be involved in the planning and running of the programs, and determine the outcome of the programs, which would be their choice.

To do this, NGOs would initially conduct a field assessment and plan a program that suits the requirement of their beneficiaries. Later, they would seek funding from an international donor or other sources. Creation of the program prior to funding would be cost-effective and would usually include local participation to ensure maximum cost-benefits. This would reduce costs and ensure that local communities belong to the programs. This way, the program, as part of the donor's requirements, would be in the best interest of both the NGOs and the beneficiaries. Here, the capability and

capacity of the NGOs can be measured through the effectiveness of programs in reaching the needs of their beneficiaries.

The way aid is channelled also differs between short-term humanitarian assistance and long-term development cooperation, the two main phases discussed in LRRD regarding development.[796] The main concern was how to marry the developmental and humanitarian objectives to ensure that the short-term programs did not neglect the long-term development cooperation. This was a common dilemma, especially for multimandated agencies, such as most NGOs in Aceh.

The empirical findings showed that post-tsunami, NGOs were forced to create programs they believed would immediately help the ACs to recover. [797] Here, with the help of the NGOs, the beneficiaries were direct recipients of the aid. However, the NGOs' adaptation and manipulation of the consultation and participation led the AC to assume that their participation in the program would not make any difference.

This weakened the Acehnese societal structure—they were viewed as recipients, rather than being expected, allowed or encouraged to participate in the RR programs. Most agencies, including the NGOs, only focused on developing Aceh as it was after the tsunami, and had forgotten the deep-rooted problems in the social structure and history of Aceh, which posed challenges to the NGOs as development agents.

10.2 Dependency and Group Syndrome

Dependency and group syndrome are two problems that still exist in Aceh. Dependency syndrome existed due to the overstretching of programs, such as CFW, in which the high incentive was the pulling factor for participation and dependency on this factor failed to encourage genuine participation. The CFW also affected the social structure, norms and practice of the ACs. Acehnese social interaction was strong before the tsunami due to the survivalist skills and unity developed due to the strain of conflict. However, this social interaction was later ruined by the competitive nature of programs, such as CFW. The competition, spending and bad coordination led to incorrect perceptions about the tsunami aid.

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[796]. Buchanan-Smith and Fabbri, 'Links Between Relief, Rehabilitation and Development', 1–49.
[797]. MercyCorp, interview by research team, in Jakarta, 14 November 2012, transcript.

Group syndrome was a direct result of the misunderstanding of the local knowledge and culture in Aceh. The program also was unsustainable due to overfishing and the lack of a marketing strategy. Due to this, the fisheries program failed to increase any CB. However, the group-based program was successful within the brick industry in Aceh, as its sustainability depended on the demand for brick materials for the PHR projects. This highlights that the NGOs needed to consider an NA as a benchmark before deciding which programs best suited the ACs.

10.3 Capacity Building for Local Non-Governmental Organisations

Due to prolonged conflict, there was a lack of humanitarian partnership between INGOs and NGOs in Aceh. The operations of NGOs were mostly focused on human rights advocacy prior to the conflict in Aceh. The opening of Aceh to foreign agencies led to the direct contact of local communities with the NGOs; however, there was no initial assessment or coordination with the local INGO or state apparatus due to the scale of the disaster. The vulnerabilities of Aceh as a pre-conflict region and the gestures of Indonesia in opening its problematic territory to foreign agencies created new opportunities for the NGOs to directly address their beneficiaries without the supervision and coordination of the state.

The local staff of NGOs and agencies did not receive appropriate training to assist in their CB. After the tsunami, the partnership between INGOs and local NGOs involved contacting the local ACs. The local staff gained only technical knowledge and skills. To assist the local communities, local NGOs should be trained in management skills and knowledge rather than as a medium to liaise with the local communities. The main obstacle was the transferability of these skills. It is acceptable to claim that in the beginning of the ERR phase, the ACs did not have the appropriate skills and knowledge in the first 3–6 months after the disaster.

The partnership between the NGOs and local NGOs and agencies need to integrate knowledge and capacity into their programs. Strengthening local NGO capacity through partnership will develop within local NGOs a sense of ownership to take charge and adopt existing programs into long-term development plans. For example, the ToT, YoYo and CBAT programs had a good capacity-transferring process through the training and transferring of knowledge and skills to locals. Local NGOs

are better placed to help the community due to their close communication and shared cultural understanding. The expertise and knowledge of INGOs are needed but dominating the design planning process and implementation of the program and projects will not encourage ownership at the beneficiary and local NGO level.

10.4 Effect of Quality on Participation: Building Back Better Versus Building Back Safely

In the effort to encourage CB, the element of participation can be measured through various sectors in PTR in Aceh. The empirical findings identified a framework that was adopted in various sectors to analyse the effect of participation and CB. For example, in the PHR sector, the BBB framework was adapted to reduce the AC from relapsing into vulnerability. BBB also encouraged adaptation of the community-based framework to reduce the vulnerability factor.

The PHR in PTR Aceh adopted two types of framework: a contractor-based and community-based reconstruction. The outcomes from these two frameworks were later compared between the two most affected regions in Aceh: BA and WA. Factors such as interagency coordination, community-based participation and governing style produced significantly different results in the two different regions, despite experiencing the same tsunami effects. While factors associated with community-based reconstruction, such as local knowledge and perspective, resulted in greater AC participation, other factors, such as interagency coordination and governing style, produced better PHR projects in WA.

In BA, only community-based projects produced a satisfactory result due to the high levels of AC participation and good integration of local knowledge. Conversely, the low satisfactory levels of contractor-based projects were due to the devolving communication between the AC and contractor, and the lower rates of local participation. The combination of participation, interagency coordination and community-based participation encouraged significant CB in WA compared to the CB in BA. The combination of local participation and other factors produced a high level of satisfaction, even in contractor-based projects. This is one example of how participation had a direct impact on the CB of AC in Aceh.

It was a difficult for the NGOs in PTR Aceh to decide whether to give beneficiaries aid that was truly needed or what was expected. Most NGOs focused on BBB rather than BBS, which was not without repercussions to their accountability. The main issue was the priority in choosing the framework that would best benefit and cater to the needs of the ACs, or to integrate DRR into the entire reconstruction phase.[798]

The main eligibility condition required by the donor was that the ACs should have legal ownership of the land. However, under the BRR mandate, Indonesia's Master Plan for Rehabilitation did not allow any reconstruction unless it was at least a few km from the sea. ACs, who mostly rely on the fisheries sector, insisted the reconstruction of houses should occur on their rightfully owned land, located only a few km from the sea. However, the locals' request did not concur with the BBS framework. The NGOs were under pressure from their donor to spend the fund instantaneously and managed to fulfil the ACs socio-economic needs by building houses that met donor requirements but overrode and excluded the DRR aspect.[799]

Not only did the adaptation of a single framework, such as BBB, not resolve the issue of mitigation, it also could not reduce the risk and vulnerability of the AC, leading to recurrences of underdevelopment. When policies such as BBB and BBS were compromised to meet local needs, there was a failure to reduce the risk and vulnerability of ACs, leading to hazardous living conditions in PTR. Here, the community-based reconstruction contributed to CB from a socio-economic perspective. However, the failure to integrate BBS compromised the inclusion of DRR, which was important for communities in their CB towards TM. After the 2004 tsunami, the Aceh communities realised that they were prone to additional hazards that could endanger life.

However, the concern was regarding the attitude and genuine intention to improve their economic climate. Most beneficiaries did not participate in programs without incentive. It is generally understood that local NGOs do not have sufficient funds to

[798]. Indonesia's Master Plan for rehabilitation and reconstruction was based on DRR aspects, such as seismic-resistant house plans, relocation of all coastal communities (at least 5 km from the sea) and mangrove plantation along the coastline.

[799]. This was another problem identified in the research. ACs chose to neglect BBS programs and rebuild on previous land. The master plan integrates BBB, BBS and DRR, but, for socio-economic reasons, the beneficiaries prefer only BBB framework. This places NGOs in a difficult situation and compromises the quality of PTR programs.

provide incentives to encourage local participation. However, if the community needs the motivation of incentives, the genuine intention of the participants must be questioned. For example, incentive-based programs, such as CFW, were designed to alleviate the effects of the tsunami on communities, but eventually these programs changed the mindset of beneficiaries, who became convinced that they need to be paid to participate.

10.5 Participation Analysis in Aceh: Effect of the Post-Tsunami Reconstruction Programs on Local Capacity Building

The empirical findings from Aceh indicated that participation among the beneficiaries was affected by various factors and resulted in different levels of participation. As highlighted throughout this thesis, several issues faced the NGOs, in particular the beneficiaries' participation in the programs in the recovery phase and later in the RR phases. However, it is important to also highlight deep rooted issues that affected the participation of beneficiaries in PTR Aceh, such as time constraints, funding overflow, local capacity building (local NGOs), choice between safe reconstruction or better reconstruction (BBB vs. BBS), the total collapse of local government and communities, and three decades of conflict.

The design, planning and implementation of the PTR programs and projects had few effects on the CB of the ACs, but the effect on the community structure created problems in developing today's Acehnese community. The importance of integration of local knowledge from a complete NA as explained in Chapter 9, would help the NGOs to better understand ACs' existing social, economic and political structure before planning and implementing the right programs to better enhance ACs socio-economic climate.

However, there is considerable evidence that good participation practice took place in Aceh under health and mental wellbeing programs such as ToT, CBAT and CADRE. ICRC BA managed to increase voluntary blood donations. This can be viewed as evidence of NGOs' efforts to encourage participation.

Conversely, when NGOs control, dominate and manipulate the weaknesses of ACs, they leave ACs with no choice but to accept these decisions. Some NGO program structures were planned prior to conducting an NA in Aceh. These international

agencies did not possess local knowledge, and designed their program based on the assumption that the local community could not actively participate. Some NGOs refused to provide ACs with the necessary training to build their capacity, which is why ACs were treated as inactive rather than active participants in the programs.[800]

This can be best explained by examining the components of participation in CB in humanitarian operations (see Table 2.1). These explain the types of participation that are usually practiced in post-disaster and post-conflict communities. The findings of this analysis showed that moving Aceh from recovery, throughout rehabilitation and to reconstruction fell under two patterns—manipulation and consultation. This demonstrates the pattern of NGOs in patronising and not integrating elements of CB into their programs. However, the past literature on CB highlights the need for further research to measure the effect of participation among the beneficiaries in the developmental phase.[801]

The discussion in both chapter 9 and 10 would make a significant contribution to existing post disaster recontruction body of literature and laid down some perspective for future research. First of all, participation is interpreted as a healthy, social structuring process of great importance for CB. However, the level of inclusion and exclusion of knowledge in the planning process is also important. The empirical findings of this study determined that the level of exclusion and inclusion of participation would affect beneficiaries' long-term CB. The program design and the actors involved in the planning and implementation should first understand the important of local knowledge integration.

The emphasis on capacity building should be integrated through good and full participaton in the beginning of any PDR. Future PDR framework should emphasize the important of integrating LRRD framework into individual PDR phases: emergency, rescue and recovery (ERR) and rehabilitation and reconstruction (RR). It is crucial for program designed to enhance long term livelihood sustainability rather than short-term solution that usually create unhealthy practice such as 'dependency syndrome'. Future research in PDR also should emphasize the important to adopt new

[800]. Kenny, 'Reconstruction Through Participatory Practice?', 215.
[801]. Ibid., 79–104.

methods to extract direct fact and information based on the beneficiaries' perspective rather than relying solely on quarter or annual report produced by most agencies involved in the PDR. Aceh is an example where the local knowledge and expertise were undermined and deprived of good development. The tsunami disastrous effect brough with it a huge hope for development but underlying causes such deep-rooted conflict and lack of development limits the reconstruction efforts. The NA process should be given the highest priority and longer time frame before the agencies involved starts to plan, design, and implement any PDR programs and project in future.

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Appendix 1

Administrative Area	2004	2005	2006	2007	2008	2009
All Aceh province & all Nias district	165’492’045	117’471’190	41’902’346	79’188’610	29’081’645 0	0
Aceh Barat Daya	0	10’383’522	4’378’563	1’557’271	3’028’52	
Aceh Barat	154’174	130’599’366	40’803’211	29’289’936	51’247’522	561’075
Aceh Besar	1’186’860	186’289’699	103’674’898	74’793’765	70’751’413	1’102’921
Aceh Jaya	4’361’618 0	128’977’546	74’683’512	60’059’813	51’171’157	0
Aceh Selatan		6’423’527	1’037’755	1’434’993	1’230’737	
Aceh Singkil	0	8’956’064	3’470’154	1’553’890	1’911’722	
Aceh Tamiang		3’933’599	860’712	1’162’591	733’801	
Aceh Tengah		4’739’298	956’172	2’624’249	2’980’714	
Aceh Tenggara		3’490’136	677’311	792’033	621’552	
Aceh Timur		6’179’506	1’549’115	1’991’532	2’338’591	
Aceh Utara	0	30’502’182	25’591’642	15’202’946	12’094’979	1’492’452
Bener Meriah		4’308’978	2’859’417	4’581’647	3’189’685	
Bireun	1’095	32’434’210	17’791’393	21’381’024	10’297’820	336’278
Gayo Lues		3’667’980	583’801	1’041’091	1’920’752	
Nagan Raya	0	17’359’673	19’206’766	5’018’760	8’424’028	0
Nias	0	51’740’287	18’425’300	21’286’618	30’295’093	81’449
Nias Selatan		14’600’207	9’464’072	6’707’145	2’483’625	72’228
Pidie	2’251’995	58’194’806	29’270’929	22’303’013	24’601’297	522’601
Simeulue	183	28’211’821	12’137’240	17’787’091	19’604’755	
Kota Banda Aceh (City)	531’776	204’600’793	90’631’429	130’174’109	40’675’487	101’345
Kota Langsa (City)		1’090’977	717’518	990’522	582’424	
Kota Lhokseumawe (City)	0	10’715’825	3’895’582	5’037’803	2’446’313	113’592

Kota Sabang (City)	0	9’573’378	4’586’910	4’465’690	1’397’091	3’374
Unallocated	406’519	98’041’424	42’644’660	35’093’168	63’101’383	196’498
Unspecified		34’450’231	1’838’888	3’059’291	134	
Annual Total	174’386’265	1’206’936’225	553’639’296	548’578’601	436’212’245	4’584’628

Appendix 2

(Nomor Data: HC12436)

Judul Proyek

Peranan NGOs di dalam Proses Rekonstruksi Daerah setelah dilanda Bencana Tsunami di Aceh (Indonesia) Dan Jepang.

(3) Questionnaires: Affected Societies
(Jajak Pendapat: Masyarakat Terdampak)

Note: Please feel free to respond to the questions according to your real experience in the aftermath of tsunami in December 2004. Please do not hesitate to reveal your experience and opinion in regard of the matter being questioned below. The answers and information in this questionnaire is Personal & Confidential (P&C). which will only used for the purpose of these studies only. Thank you for you participant.
(*Silahkan untuk menanggapi pertanyaan-pertanyaan sesuai dengan pengalaman nyata anda pasca tsunami pada bulan Desember 2004. Harap jangan ragu untuk mengungkapkan pengalaman dan pendapat dalam hal materi yang dipertanyakan di bawah ini. Jawaban dan informasi dalam kuesioner ini Pribadi & Rahasia (P & C). yang hanya akan digunakan untuk tujuan studi saja. Terima kasih untuk Anda peserta*)

Personal information
(Informasi Pribadi)

Gender: Male (Pria) Female (Wanita)
Age (umur)

_____

Area/district (Daerah)

_____

Pre Tsunami housing area:
(Alamat Sebelum Tsunami)

_____

Post Tsunami housing area:

(Alamat Setelah Tsunami)

_____

Occupation
(Pekerjaan)

_____

Status: Single Married Singleparents
Widowed Orphaned

Post-Tsunami Recovery and Reconstruction

I. Relief effort and humanitarian assistance

1. What kind of assistance did you expect from the government and the relief team after the disaster?
   (Apa jenis bantuan apa yang Anda harapkan dari pemerintah dan tim bantuan setelah bencana?)
   Please explain what and how.
   (Tolong jelaskan apa dan bagaimana.)

   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

2. Did the actual assistance help you in overcoming your loss and trauma after the disaster?
   (Apakah bantuan yang sebenarnya membantu anda dalam mengatasi kerugian dan trauma setelah bencana)
   Yes or No
   (Ya atau Tidak)
   Please explain:
   (Tolong jelaskan)

   _____
   _____
   _____
   _____

3. Was the assistance and relief received in time to alleviate your suffering after tsunami?
   (Apakah bantuan yang diterima pada waktunya dapat meringankan penderitaan anda setelah tsunami?)
   Yes or No
   (Ya atau Tidak)
   Please explain?
   (Tolong jelaskan?)

   _____
   _____
   _____
   _____

4. How would you rate the overall satisfaction on the post-disaster relief and assistance? Scale 1-10
   (Bagaimana Anda menilai kepuasan secara keseluruhan pada bantuan pasca bencana? skala 1-10)
   Scale:
   1 2 3 4 5 6 7 8 9 10
   Yes or No?
   (Ya atau Tidak)
   Please explain:
   (Tolong jelaskan?)

   _____
   _____
   _____
   _____
   _____

II. <u>Organization and actors in recovery phase</u>

5. Which relief team got to you soon aftermath of the disaster?
   (Dari lembaga apa yang pertama datang ke Anda segera setelah bencana?)
   a) Local government (Pemerintah Lokal)
   b) Central government (Pemerintah Pusat)
   c) International NGOs (NGO/LSM Internasional)
   d) Local NGOs (NGO/LSM Local)
   e) Others. (Lainnya)

   _____
   _____
   _____
   _____
   _____

6. How was their assistance to you? (Bagaimana Manfaat Bantuan Mereka Terhadap Anda)
   a) Good (Bagus)
   b) Average (sedang)
   c) Bad (Kurang Bagus)

Scale:
1 2 3 4 5 6 7 8 9 10

Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____

7. What kind of assistance was the government offers you after the disaster?
(Jenis bantuan apa yang ditawarkan pemerintah untuk anda setelah bencana?)
   a) Food and shelter (Makanan dan Tempat Tinggal)
   b) Medical (Pengobatan)
   c) Psychological support and assistance (Bantuan Tenaga Psikologi)
   d) Home reconstruction (Pembangunan Rumah)
   e) Compensation (Ganti Rugi)
   f) Others. Please state: (lainnya)

Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____

8. Was the assistance persistent in helping you in fully recovering from you traumatized experience?
(Apakah bantuan yang berkelanjutan membantu Anda sepenuhnya untuk pulih dari trauma akibat bencana?)
Yes or No?
(Ya atau Tidak)
Scale:
1 2 3 4 5 6 7 8 9 10
Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____
_____

9. Which aspects of reconstruction process you think benefited you most after the disaster?

(Aspek mana dari proses rekonstruksi yang Anda rasa paling bermanfaat bagi anda setelah bencana?)

a) Education, (pendidikan)
b) Permanent Housing / temporary shelters
(Rumah Permanent/Penampungan Sementara)
c) Medical assistance? (Bantuan Kesehatan)
d) Public facilities- school, hospital, Communities area,
(Fasilitas umum-sekolah, rumah sakit, Ruang terbuka)

Please explain:
(Tolong Jelaskan)

III. Housing: Shelter and settlement (add more questions)

1. *Which agencies provide with the shelter and settlement after tsunami?
   a) BRR
   b) Uplink
   c) Oxfam
   d) CRS
   e) Red Cross
   f) Others

Please explain:

_____
_____
_____
_____
_____
_____
_____
_____

2. How was the quality of your permanent housing reconstruction?
   (Bagaimana kualitas rumah yang dibangun)
   a) Good (Bagus)
   b) Average (Sedang)
   c) Bad (kurang Bagus)

   Scale:
   1 2 3 4 5 6 7 8 9 10

   Please explain:
   (Tolong Jelaskan)

   _____
   _____
   _____
   _____

3. *Does your house have basic infrastructure such as primary and secondary connection of water and sanitation facilities and drainage apart from the physical house?

Please explain:

_____
_____
_____
_____
_____
_____
_____
_____

4. *Does primary and secondary infrastructure affects your occupation of your new house?
   Please explain:

   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

5. *Do you face any problem of water shortages and difficulty accessing water sources for your daily use since occupying this house?
   Prompt:
   a) Which organization do you think best responsible in providing you the access to basic infrastructure?
   b) Was it the agencies that provide you with the shelter or any other agencies that have expertise in WASH for example?

   Please explain:

   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

6. *Was your house build by community-based reconstruction or contractor based reconstruction?
   a) Community based reconstruction
   b) Contractor based reconstruction

7. *Were you given any choice to choose between community and contractor based reconstruction
   Yes or No

Prompt:

a) Why did you make this option?
b) Was the choice given to you or you made your own choice?
c) What do you think would have improved the reconstruction of your home?

Please explain:

_____
_____
_____
_____
_____
_____
_____
_____

8. *In your opinion, which construction based is the best for you?
   a) Community based reconstruction
   b) Contractor based reconstruction

9. *How was the progress of your house reconstruction?
   a) Fast
   b) Medium
   c) Slow

   Please explain:

_____
_____
_____
_____
_____
_____
_____
_____

10. *Do you this choice made between community and contractor reconstruction has affected the quality of your house reconstruction?
    a) Good
    b) Average
    c) Bad

    Please explain:

_____
_____
_____
_____
_____
_____
_____
_____

11. *Do you think any parties or agencies are responsible for the shortcoming in your house reconstruction?
    a) Government (BRR)
    b) Contractor
    c) Local labor
    d) NGOs

Please explain:

_____
_____
_____
_____
_____
_____
_____
_____

12. Which aspects of housing reconstruction are your major priorities during the housing reconstruction in post-tsunami? The quality of your house
    (Bagian mana yang menjadi prioritas selama pembangunan rumah pasca-tsunami?

    a. Quality of your house (kualitas rumah anda)
    b. Seisemic resistant housing (rumah yang tahan gempa)
    c. Skilled personnel construction (kemampuan si pembuat rumah)
    d. Experienced and skilled workers (pengalaman dan skil tukang)
    e. Trained labour (Tukang yang sudah mendapat pelatihan)
    f. Understanding of safety and security and livehood
       (Kemanan, kenyamanan dan dekat dengan mata pencaharian)
    g. Organization involved (Melibatkan pihak terkait)
    h. Others (lainnya)
    i. Scale:

    Please explain:
    (Tolong Jelaskan)

    _____
    _____
    _____
    _____
    _____

13. What was your major concern in the reconstruction of the permanent housing? (Apa yang menjadi perhatian utama Anda dalam proses pembangunan rumah anda?)

    a. The quality of your house (Kualitas Rumah Anda)
    b. The modern design of your house (Desain Modern Rumah Anda)
    c. The interior design of your house (Desain Interior Rumah Anda)
    d. The material (brick or wood) (Material [Bata /Kayu])

e. Others (lainnya)

Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____

14. *Are you satisfied with the overall housing reconstruction?
(Apakah secara keseluruhan anda puas pada pembuatan rumah anda)
Yes or No?

Prompt:
a) Is there any aspects of your housing reconstruction did not rise to your expectation?
b) Do you face any shortages in cash and material in building your house?
c) How did you solve the problem?
d) Is there any assistance at all from any agencies in solving this problem?

Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____

IV. <u>Socioeconomic support and long-term development</u>

1. What kind of program has been offered to you in help of assisting you after tsunami?
(Apa jenis program yang ditawarkan kepada Anda setelah tsunami?)
   a. "Cash for work" programs (Program Cash for Work)
   b. Social development programs (Program Pendampingan Sosial)
   c. Psychological development program
      (Program Pendampingan Psikologi/Mental)
   d. Physiological development programs (Program Pendampingan Fisik)
   e. Others (lainnya)

Scale:
1 2 3 4 5 6 7 8 9 10

Please explain:
(Tolong Jelaskan)

_____
_____
_____

_____
_____

2. How long do you think its necessary to have these programs to help you?
(Berapa lama kira-kira program yang anda butuhkan untuk membantu Anda?)
    a. 3 months (3 bulan)
    b. 6 months (6 bulan)
    c. 12 months (12 Bulan)
    d. 18 months (18 Bulan)
    e. longer than 24 months (lebih dari 24 Bulan)
    f. Do you need these programs to continue?
    (Apakah anda membutuhkan program berkelanjutan)

Please explain:
_____
_____
_____
_____
_____

3. How would you rate your satisfaction level of the program?
(Bagaimana Anda mengukur tingkat kepuasan dari setiap program)
    a. "Cash for work" programs (Program Cash for Work)

Scale:
1 2 3 4 5 6 7 8 9 10

    b. Social development programs (Program Pendampingan Sosial)

Scale:
1 2 3 4 5 6 7 8 9 10

    c. Psychological development program
    (Program Pendampingan Psikologi/Mental)

Scale:
1 2 3 4 5 6 7 8 9 10

    d. Physiological development programs (Program Pendampingan Fisik)

Scale:
1 2 3 4 5 6 7 8 9 10

    e. Others (lainnya)

Scale:
1 2 3 4 5 6 7 8 9 10

Please explain:
(Tolong Jelaskan)
_____
_____
_____
_____
_____

4. Why do you think it's important for this programs to continue as long-term recovery programs?
   (Menurut anda, apakah program diatas perlu dilanjutkan dalam jangka panjang untuk proses pemulihan?)
   Yes or No?
   (Ya atau Tidak)
   Please explain:
   (Tolong Jelaskan)
   _____
   _____
   _____
   _____
   _____
   _____

5. How does this help in improving your socioeconomic level?
   (Menurut anda, apakah program diatas dapat meningkatkan taraf hidup anda)
   Yes or No?
   (Ya atau Tidak)
   Scale:
   1 2 3 4 5 6 7 8 9 10
   Please explain:
   (Tolong Jelaskan)
   _____
   _____
   _____
   _____
   _____
   _____
   _____

6. Does it help improve your life in general?
   (Secara umum, apakah bantuan tersebut dapat meningkatkan kehidupan anda secara keseluruhan)
   Yes or No?
   (Ya atau Tidak)
   Scale:
   1 2 3 4 5 6 7 8 9 10
   Please explain:
   (Tolong Jelaskan)
   _____
   _____
   _____
   _____
   _____

7. Does it contribute to your community development overall?
   (Apakah hal tersebut juga memberikan kontribusi bagi pengembangan masyarakat secara keseluruhan)

Yes or No?
(Ya atau Tidak)
Scale:
1 2 3 4 5 6 7 8 9 10
Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____
_____
_____
_____

8. *Does livelihood programs by the NGOs actually helps you to continue with your daily life in general?
   Please explain:

   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

9. *Do you think that a multi sectorial planning by multi agencies instead of sectorial planning by single agency would have improved your continuity of livelihood?
   Prompt:
   If the planning was done at the same time and planned in a multi sector by including all your need such as settlement and also your ability to continue with your livelihood /jobs from your new home.
   Would that makes things easier for you? Yes or No

   Please explain:

   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

10. *Do you think the agencies such as NGOs and BRR have managed to help restore or reconstitute your livelihood as it was in pre tsunami?
    Prompt:

a) How do you think you and your community are adapting to your live now?
b) Has it been easier and much better for you now compared to post tsunami in livelihood aspects?
c) Are you still doing the same job as you did before the tsunami? Yes or No
d) Do you face any problem access to your workplace now?
e) What are the challenges and problem do you face in the post tsunami?

11. *What do you think in your opinion could have been done better to improve your livelihood status?
Please explain:

_____
_____
_____
_____
_____
_____
_____
_____

V. Compensations and grants

1. Are you getting compensation from government of disaster?
(Apakah anda mendapatkan ganti rugi dari pemerintah akibat bencana)
Yes or No?
(Ya atau Tidak)
Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____

2. Did the government compensation sufficient to cover your lost?
(Apakah ganti rugi dari pemerintah cukup untuk menutupi kerugian anda)
Yes or No?
(Ya atau Tidak)
Scale:
1 2 3 4 5 6 7 8 9 10
Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____

3. What kind of compensation did you receive so far?
   (Ganti Rugi seperti apa yang anda dapat sejauh ini)
   a. Grants (Pinjaman Modal)
   b. Cash compensation (Ganti Rugi Tunai)
   c. Others (lainnya)

   Please explain:
   (Tolong Jelaskan)

   _____
   _____
   _____
   _____
   _____

4. What was your expectation of forms of compensation you will receive?
   (Bentuk ganti rugi seperti apa yang anda harapkan)
   Scale:
   1 2 3 4 5 6 7 8 9 10

   Please explain:
   (Tolong Jelaskan)

   _____
   _____
   _____
   _____
   _____

5. Did the given compensation meet your expectation?
   (Apakah ganti rugi yang diberikan memenuhi harapan Anda?)
   Yes or No?
   (Ya atau Tidak)
   Scale:
   1 2 3 4 5 6 7 8 9 10
   Please explain:
   (Tolong Jelaskan)

   _____
   _____
   _____
   _____
   _____

6. How this compensation assists you with your lost?
   (Bagaimana manfaat yang anda rasakan dari ganti rugi yang anda dapatkan untuk kehidupan sehari-hari selama ini)
   Scale:
   1 2 3 4 5 6 7 8 9 10
   Please explain:
   (Tolong Jelaskan)

_____
_____
_____
_____
_____

7. Did any agencies from the government or other organization tries to help you claiming your compensation and grants?
   (Apakah ada lembaga dari organisasi pemerintah atau lainnya yang mengurus agar anda mendapatkan ganti rugi atau pinjaman modal?)
   Yes or No?
   (Ya atau Tidak)
   Scale:
   1 2 3 4 5 6 7 8 9 10
   Please explain:
   (Tolong Jelaskan)
   _____
   _____
   _____
   _____
   _____

VI. Lands rights and ownership

1. Are you a landowner?
   (Apakah anda pemilik asli atas lahan yang anda tempati)
   a. Yes
   b. No

2. Do you owned the land you occupied now?
   (Apakah anda pemilik tanah yang ditempati sekarang?)
   a. Yes I have full ownership of my land
      (Ya, saya sebagai pemilik penuh atas tanah ini)
   b. No. I am renting
      (Tidak, Saya menyewa)
   c. I do not occupy any land for now
      (Saya tidak memilki hak milik atas tanah yang saya tempati sekarang)
   d. I am staying at a temporary shelter/barrack
      (Saya tinggal di penampungan sementara)
   e. Others (lainnya)
   Please explain:
   (Tolong Jelaskan)
   _____
   _____
   _____
   _____
   _____

3. *If renting, can you tell us whether you were given any form of grants or cash as promised which is 40% of the total cost of rebuilding house allocation?

Please explain:

_____
_____
_____
_____
_____

4. There are two forms of Indonesian Law covering land tenure in Aceh.
   Which was your land category?
   (Ada dua bentuk Hukum Indonesia yang menjelaskan tentang kepemilikan lahan Aceh.
   Sebutkan status tanah anda?
   a. Adat- local traditional laws and social codes that vary across the Indonesian.
      (Berdasarkan ketentuan adat dan peraturan sosial yang berlaku di Indonesia)
   b. Law passed by the Indonesian state
      (Undang-undang yang dikeluarkan oleh pemerintah pusat)
   c. Shari'a Law (Islamic)
      (Hukum Syariah)
   d. Others (lainnya)

   Please explain:
   (Tolong Jelaskan)

   _____
   _____
   _____
   _____
   _____
   _____

5. Do you face any land right issues or problem in post-tsunami?
   (Apakah anda memiliki permasalahan berkaitan kepemilikan tanah pasca tsunami)
   If you do can you explain what is the issues.
   (Jika ada bisakah anda jelaskan permasalahan yang ada)
   Yes or No?
   (Ya atau Tidak)
   Please explain:
   (Tolong Jelaskan)

   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

6. How does land issues/rights affect your life in the post tsunami?

(Bagaimana isu / hak kepemilikan tanah mempengaruhi kehidupan Anda pasca tsunami?)
Scale:
1 2 3 4 5 6 7 8 9 10

Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____

7. How important for you to have your own land rights and ownership in your community?
(Menurut anda, seberapa penting kepemilikan tanah untuk anda dalam masyarakat)
Scale:
1 2 3 4 5 6 7 8 9 10
Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____

8. What is the benefit of owning a land in your community?
(Apa manfaat dari Kepemilikan Tanah untuk anda dalam masyarakat)
   a. Heritage value (Nilai Warisan)
   b. Selling value (Nilai Jual)
   c. Rental value (Nilai Sewa)
   d. Collateral for loan (Jaminan)
   e. Exchange for grants and loan (Nilai gadai dan ganti rugi)
   f. Others (lainnya)

Scale
1 2 3 4 5 6 7 8 9 10
Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____
_____

9. Did the government give your land rights as it's supposedly?
(Apakah pemerintah memberikan hak atas tanah untuk anda dikelola sepenuhnya)
Yes or No?

(Ya atau Tidak)
Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____
_____

10. Do you understand the system of land allocation applied in your case after the disaster?
(Mengertikah anda tentang sistem pembagian tanah yang diterapkan terhadap tanah anda sekarang (hak milik)
Yes or No?
(Ya atau Tidak)
Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____

11. Is there sufficient explaination given to you by the authority/government prior to the new allocation of land?
(Apakah ada penjelasan yang memadai yang diberikan kepada Anda oleh pihak terkait terhadap Pembagian tanah)
Yes or No?
(Ya atau Tidak)
Scale:
1 2 3 4 5 6 7 8 9 10
Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____

12. Do you fully anticipate and understand your land rights?
(Apakah anda terlibat penuh dan terhadap hak kepemilikan tanah anda)
Yes or No?
(Ya atau Tidak)
Please explain:
(Tolong Jelaskan)

_____
_____

_____
_____
_____
_____

13. Did your lost your land documentation during the tsunami?
    (Apakah anda kehilangan surat-surat kepemilikan tanah saat tsunami)
    a. Yes. My land ownership documentation was destroyed
       (Ya, Dokumen kepemilikan tanah saya telah hancur)
    b. No. I still have all the documentation.
       (Tidak, Saya masih memiliki semua dokumen)
    c. I have applied for documentation with BPN
       (Saya mempunyai surat pengajuan untuk BPN)
    d. Others (lainnya)

    Please explain:
    (Tolong Jelaskan)

    _____
    _____
    _____
    _____

14. How long does it take for you to get the land document from the BPN?
    (Berapa Lama waktu yang diperlukan untuk mengurus Surat kepemilikan tanah di BPN)
    a. 3 months (3 bulan)
    b. 6 months (6 bulan)
    c. 12 months (12 bulan)
    d. 18 months (18 bulan)
    e. longer than 24 months (24 bulan)
    f. others (lainnya)

15. How far is the nearest located BPN office from your house?
    (Berapa jauh Kantor BPN dari tempat tinggal anda)
    a. 0-10 km
    b. 10-20 km
    c. 20-30 km
    d. 30-40 km
    e. More than 50 km

16. How often do you visit the BPN office to upload to update your land status
    (Seberapa sering anda mengunjugi kantor BPN untuk pengajuan status kepemilikan tanah anda)
    a. 3 months (3 bulan)
    b. 6 months (6 bulan)
    c. 12 months (12 bulan)
    d. 18 months (18 bulan)
    e. longer than 24 months (lebih dari 24 bulan)
    f. others (lainnya)

Yes or No?
(Ya atau Tidak)
Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____

17. Do you understand and know the procedure and the cost of your land registration with BPN?
(Apakah anda mengerti dan tahu prosedur dan biaya yang dikeluarkan dalam pengurusan tanah anda di kantor BPN)
Yes or No?
(Ya atau Tidak)
Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____
_____

VII. Tsunami mitigations

1. How important do you think tsunami mitigation effort to reduce the affect of tsunami in future?
(Menurut anda, seberapa penting mitigasi tsunami untuk mengurangi dampak tsunami di masa akan datang)
Yes or No?
(Ya atau Tidak)
Scale:
1 2 3 4 5 6 7 8 9 10

Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____
_____

2. Which entity do you think should be responsible in building tsunami mitigation effforts?

(Menurut anda, Badan Pemerintah mana yang harus bertanggung jawab dalam terhadap mitigasi tsunami)

a. Government ministry (Dinas Terkait)
b. Government agencies (Pusat Kajian, Pusat Riset)
c. NGOs
d. United Nations agencies (Badan Dunia)
e. Others (lainnya)

Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____
_____

3. Which actor/entity do you think had played the most important role in tsunami mitigation effort after eight years of tsunami disaster?
(Siapa yang berperan paling penting dalam membuat aturan mengenai pengurangan mitigasi tsunami setelah 8 tahun bencana berlalu)

a. Government ministry (Pemerintah daerah, Dinas terkait)
b. Government agencies (Pusat Kajian, Pusat Riset, BRR)
c. NGOs
d. United Nations Agencies (Badan Dunia)
e. Others (Lainya)

Please explain:
(Tolong Jelaskan)

_____
_____
_____
_____
_____
_____

4. How soon do you expect the government to build and work on tsunami mitigation effort?
(Berapa lama yang kamu harapkan dari pemerintah untuk membangun dan bekerja dalam usaha pengurangan mitigasi bencana)

a. < than 1 year (Kurang dari 1 tahun)
b. 1-5 years (1-5 tahun)
c. 6-10 years (6-10 tahun)
d. More than 10 years (Lebih dari 10 tahun)
e. Others (lainnya)

Please explain:
(Tolong Jelaskan)

_____
_____
_____

_____
_____

5. Do you think the tsunami mitigation effort will help reduce the impact of the disaster?
   (Apakah anda berpikir usaha mitigasi bencana dapat menolong anda dalam mengurangi dampak dari bencana)
   Yes or No?
   (Ya atau Tidak)
   Please explain:
   (Tolong Jelaskan)

   _____
   _____
   _____
   _____
   _____
   _____

6. Which aspects of tsunami mitigation is your priority?
   (Apa yang menjadi aspek mitigasi tsunami yang menjadi prioritas anda)
   a. Seisemic resistant infrastructures and public facilities
      (Infrasturktur dan fasilitas public yang tahan gempa)
   b. Seisemic resistant housing reconstruction
      (Rumah yang tahan gempa)
   c. Meteorogical system
      (Sistem Pra Kiraan Cuaca)
   d. Tsunami alarm warning system
      (Sistem Peringatan Dini Tsunami)

   Yes or No?
   (Ya atau Tidak)
   Please explain:
   (Tolong Jelaskan)

   _____
   _____
   _____
   _____
   _____
   _____

7. Are you personally satisfied with the effort of tsunami mitigations taken so far?
   (Apakah secara pribadi anda puas dengan usaha mitigasi bencana yang dilakukan sejauh ini)
   Yes or No?
   (Ya atau Tidak)
   Please explain:
   (Tolong Jelaskan)

   _____
   _____

_____
_____
_____
_____
_____
_____

8. In your opinion, what is the best way to reduce the affect of tsunami in future?
   (Menurut pendapat anda, cara apa yang paling baik dalam usaha mengruangi efek tsunami di masa akan datang)
   Please explain:
   (Tolong Jelaskan)

   _____
   _____
   _____
   _____
   _____

9. Do you have any suggestion in reducing the tsunami impact in your community?
   (Apakah anda mempunyai saran mengenai usaha pengurangan dampak tsunami di dalam kamunitas/masyarakat di lingkungan anda)
   Yes or No?
   (Ya atau Tidak)
   Please explain:
   (Tolong Jelaskan)

Appendix 3

(Nomor Data: HC12436)

Borang Informasi dan Persetujuan Responden

Judul Proyek

Peranan NGOS Di Dalam Proses Rekonstruksi Daerah Setelah Dilanda Bencana Tsunami Di Aceh (Indonesia) Dan Jepang.

Anda telah diundang untuk berpartisipasi dalam sebuah studi mengenai peranan NGOs setelah bencana alam tsunami di Aceh (Indonesia) dan Jepang. Saya, Norhazlina Fairuz, melalui studi ini bermaksud menganalisa peranan NGOs tersebut sebagai pemeran utama di dalam proses rekonstruksi daerah setelah bencana tsunami dan efek dan dampak yang dialami masyarakat yang bersangkutan. Tujuan utama NGO adalah faktor kemanusiaan yaitu membantu dan menolong serta bekerja sama dengan masyarakat dan pemerintah daerah yang bersangkutan. Saya akan melakukan wawancara-wawancara dan mengadakan diskusi kelompok dengan relawan-relawan yang turut serta dalam studi saya ini. Pengarah saya dalam melaksanakan studi ini ialah Assoc. Prof. Shirley Scott (telpon +61(2)93851630, e-mail S.Scott@unsw.edu.au).
Anda telah terpilih sebagai pihak potensial dalam melaksanakan studi ini dikarenakan oleh anda adalah seorang korban bencana atau adalah pengurus NGOs dalam proses rekonstruksi ini.

Bilamana anda bersedia untuk ikut serta, saya akan menanyakan beberapa pertanyaan seperti peranan NGO, pemerintah daerah setempat dan donor lain dalam membantu dan melaksanakan proses rekonstruksi setelah bencana tsunami. Saya juga akan mewawancarai anda dan mengajak anda untuk berdiskusi tentang pendapat pribadi anda dalam hal tersebut tadi. Anda akan menjawab pertanyaan-pertanyaan mengenai persepsi/pendapat/pengalaman pribadi anda. Proses wawancara ini akan menyita waktu

anda tak lebih dari 1 sampai 2 jam saja. Anda akan diwawancara sekali saja, tetapi bilamana saya akan membutuhkan klarifikasi dari jawaban-jawaban yang telah disediakan oleh anda, saya akan kembali meminta anda untuk mengulangi pernyataan anda tersebut. Pertemuan-pertemuan yang akan berlangsung setelah wawancara anda tidak akan memakan waktu lebih dari 1 jam. Jawaban-jawaban dari anda akan direkam dalam wawancara ini, bilamana anda tidak bersedia untuk merekam perkataan-perkataan anda, dimohon untuk memberitahu saya sebelum wawancara dimulai.

Saya tidak menjanjikan anda, bahwasanya anda akan menerima imbalan apapun dalam studi ini. Informasi yang dihimpun dalam studi ini akan sangat bermanfaat untuk pengertian lebih lanjut menngenai peranan NGOs dan pemerintah setempat dalam bekerja sama untuk memberikan bantuan terbaik untuk proses rekonstruksi-rekonstruksi berikutnya, baik di dalam negeri maupun di luar negeri. Mohon diperhatikan, karena studi ini merupakan bagian dari studi akademik PhD saya, saya tidak dapat menjanjikan perubahan atau pengambilan keputusan dalam peraturan dan program yang telah dilaksanakan oleh NGO dan pemerintah daerah setempat terhadap daerah anda. Dengan adanya studi ini saya berharap informasi yang telah saya dapat dari anda akan berguna dalam menambah lebih jauh informasi yang telah ada dalam hal penelitian studi-studi NGO lain dan akan meningkatkan efektifitas kerja sama diantara NGOs tersebut dan pemerintah daerah setempat dalam proses rekonstruksi setelah bencana tsunami.

Informasi yang disediakan kepada saya dalam studi ini hanya akan disebarluaskan atas kehendak anda kecuali bilamana perlu untuk kepentingan hukum. Dengan menanda-tangani dokumen ini, anda telah memberikan ijin kepada saya untuk mendiskusikan dan menyebar-luaskan hasil dari wawancara saya dengan anda, sebagai bagian dari studi lebih lanjut mengenai peranan NGOs dalam proses rekonstruksi setelah bencana tsunami di Indonesia dan Jepang. Bilamana ada informasi atau pernyataan dan perkataan yang terdapat di dalam studi ini dipublikasikan, keterangan dan identitas anda tidak akan dicantumkan.

Bilamana terdapat saran atau keluhan terhadap studi ini, mohon untuk melayangkan hal tersebut kepada Ethic Secretariat, The University of New South Wales, Sydney 2052, Australia. (telpon:9385 4234, Fax: 9385 6648, atau e-mail: ethics.sec@unsw.edu.au).
Keluhan dan saran anda akan diteliti dan di periksa dengan seksama, hasil dari penyelidikan tadi akan kembali diberitahukan kepada anda.

Mohon diperhatikan, bila anda telah bersedia turut serta, anda tetap akan diberi kebebasan untuk membatalkan kesediaan anda untuk turut serta di dalam studi ini, tanpa sanksi atau pertanggung jawaban. Mohon hubungi saya kapan saja, bila ada pertanyaan atau informasi lebih lanjut yang ingin anda sampaikan kepada saya, email saya: n.musakutty@unsw.edu.au.

Anda akan diberikan formulir ini untuk disimpan. Terima kasih atas partisipasi anda.

(Nomor Data: HC12436)

Borang Informasi dan Persetujuan Responden

Judul Proyek

Peranan NGOS Di Dalam Proses Rekonstruksi Daerah Setelah Dilanda Bencana Tsunami Di Aceh (Indonesia) Dan Jepang.

Consent for Participation

Your signature on this page indicates that you have read and understood the information provided on pages 1 and 2 of this document and you have decided to participate in this study.

_____	_____
Signature of research participant	Signature of Witness
_____	_____
Name of research participant	Name of Witness
_____	_____
Date	Nature of Witness

Please forward this section of Consent for Participant form to Ms. Norhazlina Fairuz Musa Kutty, School of Social Sciences, Faculty of Arts and Social Sciences. University of New South Wales. Sydney, NSW 2052 Australia

(Approval No: HC12436)

Judul Proyek

Peranan NGOS Di Dalam Proses Rekonstruksi Daerah Setelah Dilanda Bencana Tsunami Di Aceh (Indonesia) Dan Jepang.

Revocation of Consent

I hereby wish to withdraw my consent to participate in the research project described above and understand that such withdrawal will not jeopardize my relationship with the researcher or the University of New South Wales.

_____ _____

Signature Date

_____

Name

Please forward this section of Revocation of Consent form to Mrs. Norhazlina Fairuz Musa Kutty, School of Social Sciences, Faculty of Arts and Social Sciences. University of New South Wales. Sydney, NSW 2052 Australia.

Appendix 4

(Approval No: HC12436)

Participant Information Statement and Consent Form

Title of Project

The Role of NGOs in Post-Tsunami Reconstruction in Aceh (Indonesia) and Japan

You have been invited to participate in a study of NGOs in post-tsunami Aceh, (Indonesia) and Japan. I, Norhazlina Fairuz, intend to analyze the role of NGOs and your perception of the ways in which they assisted you as members of affected communities. I will be conducting interviews and questionnaire sessions with participants in the study. My supervisor for this study is Assoc. Prof. Shirley Scott (phone +61(2) 93851630, e-mail S.Scott@unsw.edu.au). You have been selected as a potential participant in this study because of your involvement in the post tsunami reconstruction.

If you decide to participate, I will ask you a series of questions about the role of local and international NGOs, government and donors in assisting you and your community in the recovery and reconstruction process.. I will also require an interview with you to discuss your experiences. You will be asked a series of questions to reveal your perception of the role played by NGOs, government and donors in assisting the reconstruction. This will take no more than one to two hours of your time. You will be interviewed once but please note that I *may* approach you *again* if I need to clarify your answers. Any further meetings will not last longer than one hour. Your answers will be recorded during the interview. If you do not wish for the interview to be recorded, please make this known to me at the prior of our meeting or prior to the interview process.

(Approval No: HC12436)

I do not promise that you will receive any benefits from participating in this study. However, information gathered through the project may enhance understanding of how NGOs and government may best collaborate in any future recovery and reconstruction process, whether in your country or else where. Please note that since this study is part of my PhD, I cannot promise that any change in policies or programs regarding the role and involvement of NGOs, government and donors in your country will result from this study. However, information gathered from you may contribute to the studies undertaken by NGOs in Indonesia and Japan, which may in turn lead to better future collaboration between NGOs and Government during processes of reconstruction.

Any information provided by you in connection with this study will be disclosed only with your permission except as required by law. By signing this document, you are giving me permission to discuss and publish the results of your interview in a PhD dissertation, possible published journal articles and/or in the form of a book at some point. However in any publication, information will be provided in a manner that prevents you from being identified.

If you have any concerns/complaints regarding this study, please address your concerns to the Ethic Secretariat, The University of New South Wales, Sydney 2052 Australia. (Phone: 9385 4234, Fax: 9385 6648, or e-mail: ethics.sec@unsw.edu.au). You may also address your concerns and complaints to a local representative nominated in Aceh, Dr Syamsidik at syamsidik@trmrc.org. You can also choose to send it via mail to TDMRC office at UnSyiah, Banda Aceh. Any complaint you make will be investigated promptly and you will be informed of the outcome. A summary of the research findings in the form of short report will be made available to you.

Please note that if you decide not to participate, you are free to withdraw from the study and to discontinue participation at any time without prejudice. If you have any questions now or have additional questions later, please feel free to contact me (e-mail: n.musakutty@unsw.edu.au and I will be happy to answer them.

You will be given a copy of this form to keep. Thank you for your participation in this study.

(Approval No: HC12436)

Participant Information Statement and Consent Form

Title of Project

The Role of NGOs in Post-Tsunami Reconstruction in Aceh (Indonesia) and Japan

Consent for Participation

Your signature on this page indicates that you have read and understood the information provided on pages 1 and 2 of this document and you have decided to participate in this study.

_____	_____
Signature of research participant	Signature of Witness
_____	_____
Name of research participant	Name of Witness
_____	_____
Date	Nature of Witness

Please forward this section of Consent for Participant form to Ms. Norhazlina Fairuz Musa Kutty, School of Social Sciences, Faculty of Arts and Social Sciences. University of New South Wales. Sydney, NSW 2052 Australia

(Approval No: HC12436)

Title of Project

The Role of NGOs in Post-Tsunami Reconstruction in Aceh (Indonesia) and Japan

Revocation of Consent

I hereby wish to withdraw my consent to participate in the research project described above and understand that such withdrawal will not jeopardize my relationship with the researcher or the University of New South Wales.

_____ _____

Signature Date

_____

Name

Please forward this section of Revocation of Consent form to Mrs. Norhazlina Fairuz Musa Kutty, School of Social Sciences, Faculty of Arts and Social Sciences. University of New South Wales. Sydney, NSW 2052 Australia.