Mending New Communities After Involuntary Resettlement in the Philippines and Indonesia

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This research was conducted under the auspices of the Graduate School of Wageningen School of Social Sciences (WASS)

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Melissa Quetulio-Navarra

Thesis

submitted in fulfilment of the requirements for the degree of doctor
at Wageningen University
by the authority of the Rector Magnificus
Prof. Dr M.J. Kropff,
in the presence of the
Thesis Committee appointed by the Academic Board
to be defended in public
on Wednesday 17 September 2014
at 4 p.m. in the Aula.

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Mending New Communities After Involuntary Resettlement in the Philippines and Indonesia
274 pages.

PhD thesis, Wageningen University, Wageningen, NL (2014)
With references, with summaries in Dutch and English

ISBN 978-94-6257-069-6

ACKNOWLEDGEMENTS

"Don't be afraid to dream big", this was always the reminder of my mother when I was growing up. Earning the Doctor of Philosophy degree and producing this book are one of those big dreams that came true. They came true not just because of hard work and dedication but also due to the complementary contributions of individuals and organisations who provided me with learnings, motivations, inspirations, and opportunities. All of them deserve to be mentioned here.

The desire to undertake an academic study on the formation of social capital in an involuntary resettlement situation was planted by my thesis supervisor, Prof. Yutaka Katayama, during my master's studies at Kobe University, Kobe, Japan. His lectures on Local Development made the social capital theory fascinating to be investigated further in an involuntary resettlement context and aroused my intellectual curiosity.

I am profoundly grateful to the three individuals who made my PhD studies possible. First to Dr. Prof. Yuriko Takahashi of Kobe University, GSICS, and Dr. Ana Marie Karaos of Ateneo de Manila University, my local supervisor, who believed in me and wrote flattering recommendation letters to the Graduate School of Social Sciences of Wageningen University and to Netherlands Fellowship Programme which funded my PhD studies. Words of thanks are indeed not enough for former Undersecretary Percival C. Chavez of PCUP, my former boss, mentor, and friend who always had great confidence in me. He strongly convinced me to further my studies from master's studies in Kobe, Japan, to PhD studies in the Netherlands.

Equally significant is the agency I have been working with for over a decade already, the Presidential Commission for the Urban Poor. The Agency's quest to better the lives of resettled poor households was an inspiration of my study. I am greatly thankful as well for the logistical and morale support of the entire Agency, especially to our present CEO, Chairman Hernani Panganiban, who with the assistance of Ms. Susan Gapac and Mr. Jun Patagnan, would always facilitate the issuance of official documents necessary for the continuation of my PhD programme.

I remain indebted to Netherlands Fellowship Programme that funded my PhD studies; to the Neys-Van Hoogstraten Foundation for funding the fieldwork in Indonesia; to Wageningen University Graduate School of Social Sciences for the Junior Grant that funded my studies at the Refugees Studies Centre of Oxford University; to the LEB Foundation and the University of Humanistics that shouldered some of my conference presentations; to Yayasan Kusuma Buana led by the late Dr. Firman Lubis who hosted my research in Indonesia; to Dr. Suniarti and Dr. Yogoswara of LIPI who were my scientific hosts in Indonesia; to Dr. Tyas Wulan of Soedirman University for helping me form the research team in Indonesia. Lastly, big big thanks go to the Sociology of Consumers and Households Group for all the financial, logistical, and technical support during my PhD studies in Wageningen.

I am fortunate to have been assisted by smart and enthusiastic individuals who formed my two research teams during the fieldwork in the Philippines and Indonesia. Special thanks go to Dulce Joy and Dennis Zozobrado for their assistance in data processing and statistical tests, Vincent Eugenio for the unique and beautiful book cover design, to my research assistants Ms. Elizabeth Avila (in the Philippines) and Ms. Fanny Dwipoyanthi (in Indonesia) who made my fieldwork less burdensome and more exciting. Thanks are due to my enumerators and PCUP colleagues in the Philippines: Victor Allan Ilagan, Merlina Retardo, Rossi Mancile, Lyza Perez, Grace de Polonia, Annie Nacianceno, and to my enumerators in Indonesia: Qurrotul Ayuni, Rridiyah Septiyani, Baskoro Setia Putra, Aruel Gtl, Jacksen Partogi Nainggolan, Supangat Aliansyah, Yahya Zakaria, and Wahyu Indra Prabowo. I will always treasure the warm accommodation my team experienced in the Philippines with the respondents in KV1, Engr. Elizabeth Matipo of the NHA KV1 Project Office, the Action Group led by Vangie Serrano, Sally Torres, and Doc Miranda, and in Indonesia with the respondents in BT, the RT and RW leaders and elders of BT, Ms. Soraya Isfandiari of Balai Pemantapan Kawasan Hutan XI who helped find the suitable resettlement site for my study in Indonesia, Mr. Candra Musi of the Perhutani Office, the family of Monalisa Silvia Rimbani, my Indonesian homestay family, and Pak Narso and his family.

I am very thankful to my promotor Professor Anke Niehof who unselfishly opened opportunities for me, educated, and trained me to be the best PhD candidate I could possibly become. I am likewise grateful to co-promotor Dr. Wander Van der Waart, who took a chance on me at the onset of my PhD studies and imparted so much learnings and guidance on methodological issues in my study as well as in conference presentations. To co-promotor Dr. Hilje Van der Horst and to Dr. Hester Moerbeek I owe thanks for their intellectual stimulation, academic guidance, morale support, and friendship. I am grateful to Professor Roger Zetter of Oxford University for his guidance and supervision during my stay at the Refugees Studies Centre.

I am grateful for the new friends I made at Oxford University (Camila, Aysen, Jorge, Akash, Antonia, Oleri, Danica, Abby). At Wageningen University special thanks go to Hedy, Carry, Margaret, and Stefan, for their invaluable assistance and guidance, to my friends and colleagues Hom, Gisella, Jarkyn, Feng, Guirguisso, Eirik, Christina, Zacharia, Theresa, Ella, Anja, Aysen, Pei, Eden, and Daniel Vincent, for their engaging discussions and co-publications, and to the WUR Philippine community led by Nora Van der Does-Gonzales and Dr. Connie Remoroza for their company through parties, dinner and endless chats. I deeply appreciate the enduring friendship and morale support of Alicia Diaz, Martina Robles, Allan Ilagan, Cynthia Rosales, Chloe Manlosa-Osano, and Beth Avila which I experienced whenever I was back in the Philippines for a visit or work.

To my Navarra family, especially to aunt May Navarra-Aquino, uncle Ely Aquino, aunt Lilian Karsten, and uncle Horst Karsten, I am forever in gratitude for the

kindness, care, love, and support they gave me during my stay in Europe and in the US. The same profound appreciation goes to my Nato and Quetulio family, my parents Dr. Nora Nato and Engr. Eddie Quetulio, my brothers Atty. Dilbert Quetulio, Bombing Quetulio, and Querald Quetulio. Your love and support were constant source of inspiration and motivation. Not to forget, special thanks to the Dunnells in UK. I will always cherish the love, the food, the English hospitality I tasted in your home during my fellowship in Oxford.

I would never be able to focus on my studies in Wageningen if not with the knowledge and assurance that Maribel, Mildred, and *Nanay* Divine were taking very good care of my children. You gave me peace of mind and I am greatly indebted to you. Last but not least, I am forever grateful for dutifully taking on my mother role in the family and letting me soar and fulfill my dream to earn a PhD degree abroad to Leo Hector Iglesias Navarra, my husband and my partner in life, and to Lenisse and Luis for their great understanding of my academic situation and unconditional love. I am more than blessed to have you as my children. This book is dedicated to Leo, his parents, to my parents, and to Lenisse and Luis.

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List of Abbreviations

BT	Bantarpanjang Translok
COHRE	Centre on Housing Rights and Eviction
FGD	Focus Group Discussion
HOA	Homeowners' Association
HUDCC	Housing and Urban Development and Coordinating Council
IRR	Involuntary Resettlement Risks and Reconstruction Model
KV1	Kasiglahan Village 1
LIPI	*Lembaga Ilmu Pengetahuan Indonesia* (National Science Institute of Indonesia)
NGO	Non-Government Organization
NHA	National Housing Authority
NU	*Nahdatul Ulama*
PCUP	Presidential Commission for the Urban Poor
PRRC	Pasig River Rehabilitation Commission
PMO	Project Management Office
RT	*Rukun Tetangga* (Neighbourhood Association, cluster of neighbours)
RW	*Rukun Warga* (Community Association, cluster of RTs)
RAP	Resettlement Action Plan
SNA	Social Network Analysis
UDHA	Urban Development and Housing Act 1992
UNHCR	United Nations High Commissioner for Refugees
WB	World Bank

Chapter 1

Introduction and Theoretical Framework

This introductory chapter acquaints us with the problem of the study, the research sites in the Philippines and Indonesia, the main theories and concepts that underpin the study, and the conceptual framework that reflects the interfacing of these theories and concepts. The chapter ends with a clarification of how the book is organized into chapters and the research questions that each empirical chapter addresses.

1.1 The Research Problem

"Every morning during my first few weeks in Translok we (referring to herself and other mothers) would carry our pails and go to the well to line up and fetch water for our family's daily water needs. We still didn't know each other so we would just smile politely at one another. I was too shy to strike a conversation with the other women and at the same time was preoccupied with sadness and loneliness in the new site. It was dusty, hot, and humid, there was not even a tree in sight. One time (around two weeks residing in the site) after coming from the well, I found myself at the wrong door again. I chuckled. I heard another laughter nearby and it's from a mother who also came from the well and seemed lost. She told me that since her family transferred to Translok she also found it hard to distinguish her house from the rest of the wooden houses in the location. It was my first conversation with her and we have been friends since then."
(female household head, BT, Indonesia, June 2012)

The story above draws us right into the very heart of this study which is to bring to light the building of social relations in a community of strangers who are all involved in involuntary resettlement. The housewife in the story presents a powerful and vivid image of her early days in the new environment that is rife with struggle. Loneliness consumes her and forging new connections with other resettlers seems impossible. However, the story ends in an upbeat tone as she describes how she made her first friend in the resettlement community. Other friends and acquaintances followed after that first connection she made.

While told in a unique way in this excerpt, this experience is not rare, for involuntary resettlement in developing countries occurs often and it is highly plausible that a similar event occurs in every resettlement episode. The setting changes, but the stories of the millions of individuals who are affected by forced resettlement do not. While the story is about loneliness and the emerging friendship of two women, its implications at the level of communities are much wider. Through the forging of friends and acquaintances resettled households stand a much better chance of lifting themselves up from the often destitute lives that characterize the period immediately after resettlement. It is this crucial process that this study unravels.

Since 1980s the World Bank has been leading the way in formulating a resettlement policy to mitigate the impoverishment risks of involuntary relocation (Picciotto and van Wicklin 2001). Resettlement experts agree on the standards set by the World Bank. Planners of involuntary resettlement have started drawing up resettlement action plans (RAP) that serve as a guide and are based on the nine interlinked risks identified by Cernea (2000) in his Impoverishment, Risks, and Reconstruction model. Among the nine risks identified, the resolution of eight – i.e. landlessness, joblessness, homelessness, marginalization, food insecurity, increased morbidity and mortality, loss of access to common property and educational loss – seems straightforward and can be dealt with by resettlement planners and managers. For example, in order to solve landlessness or homelessness, the resettlers can be provided with land and a house. But this is not the case of the ninth risk, that of 'social disarticulation' or the loss of social capital. Restoring or building social capital in a resettlement site is complicated, as intimated in the story above. Different factors are involved in social capital building in an entirely different and new environment. Perhaps this is the reason why despite its potential to fight poverty, social capital building in an involuntary resettlement setting

has remained an elusive topic in the research arena. This study tries to fill this void by unravelling the process and nature of social capital generation in such a context.

The decision to spend four years of my PhD programme at Wageningen University on untangling the social capital building in a forced resettlement context was strongly motivated by three things: the gravity of the involuntary resettlement problem, my extensive work experience in the area of involuntary resettlement in the Philippines, and my master's education at Kobe University, Japan. My long years of civil service as a development management officer in Presidential Commission for the Urban Poor (PCUP) in the Philippines has exposed me to the practice of involuntary resettlement involving underprivileged families and individuals. One of the main aims of PCUP is to protect the rights of these people to just and humane demolition as stipulated in Republic Act 1992 (or UDHA) and to assist them in community organisation activities in their new location. Government and non-government agencies in the Philippines who are directly involved in resettlement are in agreement that organising the new resettlers in the form of homeowners' associations is vital for their social integration in the site as well as for their collaboration with different resettle stakeholders.

When doing my master's studies in Japan in 2005-2007, I took a critical stance towards the resettlement programme in my country and did a case study on a Japan-funded KAMANAVA floodway project for my thesis.[1] In one of the courses I was following, I was introduced to the social capital theory and I learned about how social capital can significantly influence the development of nations, communities and businesses, and I read the work of important authors on the subject like Putnam, Fukuyama, Tocqueville, and Narayan. By the time the course ended I had made up my mind to examine social capital in an involuntary resettlement context in Southeast Asia for my PhD dissertation.

In the course of writing and reading literature for my PhD dissertation proposal I discovered two things. First, despite the common practice of promoting social capital formation in various ways, the rebuilding of communities in a resettlement context had never been scientifically investigated under the social capital lens. Second, the building of social capital across time was yet to be studied, in spite of the usual claim by social capital studies that building social capital takes time. This study aims to fills these gaps in academic research by addressing the following research problem:

How does social capital grow across time in an involuntary resettlement setting and what is the role of the context and its elements in shaping this growth?

1.2 The Problem in Two Different Settings: The Philippines and Indonesia

The research problem as formulated above necessitated the comparison of two research settings. According to Beteille (1990: 21) "our deepest insights into society and culture are reached in and through comparison." Undertaking the research in two countries would yield robust evidence on the patterns and nature of social capital generation in similar involuntary resettlement settings in Southeast Asia. The dissimilarities found

[1] Quetulio-Navarra, M. (2007). The KAMANAVA Flood Control Resettlement Project: As Perceived by Primary Stakeholders. Unpublished master's thesis. Graduate School of International Cooperation Studies, Kobe University, Japan.

between the two communities, such as those regarding institutional context, resettlement policy, location, socio-demographics, and culture, would allow me to examine the interaction of context with social capital building in the new communities. The nuances and variance found between the two cases were expected to yield illuminating insights on clearly identifiable factors that influence social capital generation across time. Such outcomes would not be achieved if the study only covered one setting.

Two resettlement communities in Southeast Asia, one in the Philippines and another in Indonesia, were chosen for this study. Both the Philippines and Indonesia recognize the universal right to adequate housing. Both countries are signatories to the United Nation's Declaration on Economic, Social and Cultural Rights, an international law that upholds the right to just and humane demolition, eviction, and resettlement. The right to adequate housing is also enshrined in their constitutions, but while Philippines has an existing national policy for involuntary resettlement, Indonesia has yet to draft its own version. Despite the acknowledgement of the victims' rights during involuntary resettlement, both countries still figure prominently in reports of the Centre on Housing Rights and Eviction (COHRE) in terms of increasing incidence of forced demolition and resettlement and rampant violations of the right to adequate housing. In the latest Indonesian 'Centre on Housing Rights and Eviction Report', more than 12,000 people were reportedly evicted in July and August 2008 to give way to "green space" and land reclamation projects (COHRE 2008). In the Philippines, 59,462 households relocated in the period 2001-2006 (HUDCC 2008) due to various infrastructure projects such as construction of railroads, cleaning up of waterways, road widening, and so on.

1.2.1 The Philippines: Country and Site of Field Research

The Philippines, officially called Republic of the Philippines, is an archipelago located in Southeast Asia in the western Pacific Ocean. To its north across the Luzon Strait lies Taiwan; west across the South China Sea is Vietnam; southwest is the island of Borneo across the Sulu Sea; in the south the Celebes Sea separates it from other islands of Indonesia; while to the east it is bounded by the Philippine Sea and the island-nation of Palau. Its location on the Pacific Ring of Fire and its proximity to the equator make the Philippines prone to earthquakes and typhoons. Its area spans 300,000 km² and includes 7,107 islands that are categorized broadly under three main geographical divisions: Luzon, Visayas, and Mindanao. Its capital city is Manila while its most populous city is Quezon City, which are both part of Metro Manila. Based on the 2010 census, the Filipinos now numbers 92.34 million people and population density is 308 persons per sq. km (NSCB 2014). It is estimated that half of the population resides on the island of Luzon. The country is the seventh most populated country in Asia and the 12th most populated country in the world.

According to the 2012 report of the International Monetary Fund, the Philippine economy is the 41st largest in the world, with an estimated 2013 gross domestic product (nominal) of $272.207 billion (IMF 2012). Primary exports include semiconductors and electronic products, transport equipment, garments, copper products, petroleum products, coconut oil, and fruits. Its unit of currency is the Philippine peso (₱ or PHP). The Philippine economy has been transitioning from one based on agriculture to one based more on services and manufacturing. Of the country's total labour force of around 41.2 million, the agricultural sector employs 31.5 percent but contributes to only about 12.5 percent of GDP. The industrial sector

employs around 15.1 percent of the workforce and accounts for 32 percent of GDP. The 53.4 percent of workers involved in the services sector are responsible for 55.5 percent of GDP (NSCB 2014; NSO 2014). Filipino and English are the official Philippine languages in the 1987 Philippine Constitution. Ninety percent of the population are Christians of which 80 percent are Catholics and 10 percent are Protestants. Around seven percent of the population are unemployed. In 2012, people living below the poverty line comprised 25.2 percent of the population (NSCB 2014).

The study area in the Philippines is situated in Barangay San Jose, municipality of Rodriguez, Rizal Province, within the Luzon Region (see Figure 1.1). It is a government-managed urban resettlement community named 'Kasiglahan Village 1' (KV1), a name that was derived from the flood-control program of the government, which was 'Pasiglahin ang Pasig' or 'revitalise Pasig'.

The resettlement program was a component of the Pasig River Environmental Management and Rehabilitation Sector Development Program funded by the Asian Development Bank for 100 million USD and implemented by the Pasig River Rehabilitation Commission (PRRC), a government agency (PRRC 2006). The river's waterway network is composed of the Pasig, Marikina, and San Juan rivers and numerous small streams and drainage canals. It is an important navigation route for barges transporting bulk goods and materials between factories located along the riverbanks and ships anchored in Manila Bay. The waterway network also provides drainage and flood protection to the Metro Manila residents.

As a result of decades of uncontrolled and indiscriminate discharge of untreated industrial and municipal wastewater and solid waste, the river system has become heavily polluted. Recognizing its historic, cultural and economic importance, the Philippine government has made it a paramount concern to restore its water quality, improve its environmental management, rehabilitate the river, and promote urban renewal along the riverbanks. Among the components of the program is the establishment of 10-meter wide environmental preservation areas (EPAs) along approximately 23 km of both banks of the Pasig River to primarily serve as a buffer zone between the river and the residents during possible flooding. The construction of EPAs would require the displacement of around 10,000 informal settler families then living along the riverbanks in dangerous, depressed, and unsanitary conditions. Relative to this, the PRRC prepared a Resettlement Action Plan (RAP) guided by ADB and Philippine resettlement policies. The RAP would be the basis of all the involuntary resettlement activities and aimed the peaceful and orderly resettlement of the families to affordable socialized housing sites. Among the three resettlement sites offered to the families, one was Kasiglahan Village 1, which is also the principal resettlement site.

The National Housing Authority (NHA), the government agency mandated to implement socialized housing programs in the Philippines, undertook the resettlement program. The resettlement package includes a house-and-lot package in a resettlement community that has basic services and primary public facilities. The house and lot is payable in 20 years at Php 250 (5.9 USD) per month. The package was supposed to be prepared in accordance with the Urban Development Housing Act, which provides a program for land use planning for the allocation of land for social housing for underprivileged and homeless city dwellers. It covers a wide range of provisions. KV1 was originally intended for the underprivileged families affected by the Pasig River rehabilitation program. However, because of the large number of informal settler

families in the urban centres who needed housing immediately due to man-made disasters (e.g. fire and garbage slide) and government infrastructure projects, KV1 had to accommodate those as well. According to the project manager[2], KV1 is a unique case since the site was bought with houses already built by a private developer. Usually, the building of houses is done by NHA alone. The site was inaugurated on October 15, 1999, but families started to resettle already in June 1999. An in-house project management office that represents NHA oversees the day-to-day operations in KV1.

The site has a total land area of 85.70 hectares with 9,915 housing structures of 32 square metres each. KV1 site consists of KV1 plains and KV1 suburban. KV1 Plains was developed first and accommodated the earliest resettlers. Then the suburban part was developed and later resettlers transferred. Plains and suburban are divided into 12 phases that are synonymous with blocks.

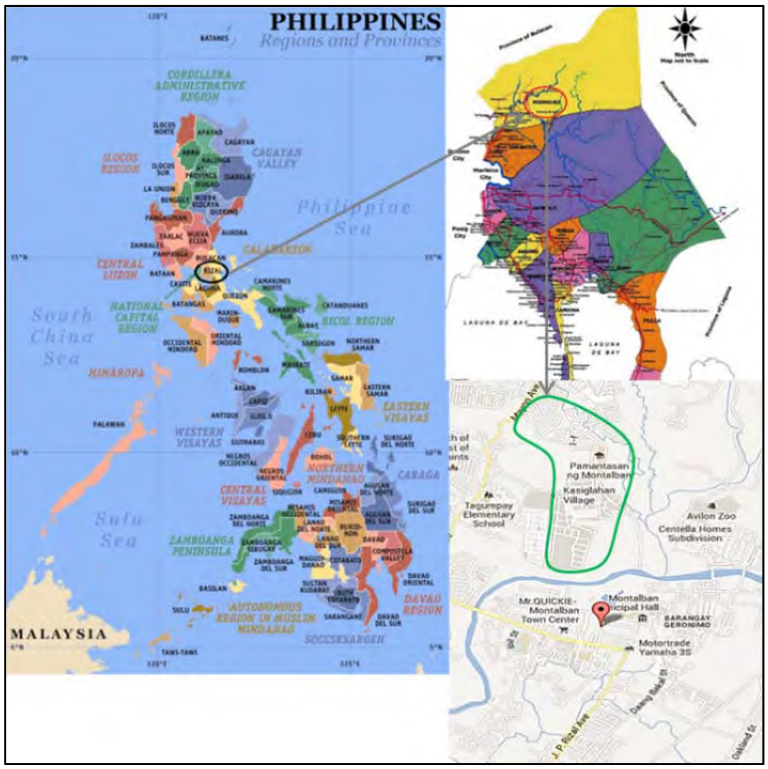

Figure 1.1 Maps of the Philippines, Rizal Province and Kasiglahan Village 1

(Source: Google maps)

1.2.2 Indonesia: Country and Site of Field Research

The Republic of Indonesia is an archipelago in Southeast Asia located between the Indian Ocean and the Pacific Ocean and bridges two continents, Asia and Australia. It shares land borders with Malaysia on Borneo, Papua New Guinea on the island of New Guinea, and East Timor on the island of Timor as well as maritime borders

[2] Based on an in-depth interview with Engr. Elizabeth Matipo, an officer in NHA and the Project Manager of the KV1 project.

across narrow straits with Singapore, Malaysia, the Philippines, and Palau to the north, and with Australia to the south. Indonesia's location on the edges of the Pacific, Eurasian, and Australian tectonic plates makes it the site of numerous volcanoes and frequent earthquakes. The country has as area of 1,919,440 square kilometers, making it the world's 15th largest country in terms of land area and the world's seventh largest country in terms of combined sea and land area. There are 17,508 islands in Indonesia of which about 6,000 are inhabited. Among these, the largest are Java, Sumatra, Borneo (shared with Brunei and Malaysia), New Guinea (shared with Papua New Guinea), and Sulawesi. The nation's capital city is in Jakarta. According to the 2010 national census, the population of Indonesia is 237.6 million, which makes Indonesia the world's fourth most populous country (BPS 2014). Population density in 2011 was reported at 126.8 per square kilometre. Fifty-eight percent of the population lives in Java, the world's most populous island.

Indonesia is the largest economy in Southeast Asia (BBC 2014) with an estimated gross domestic product (nominal) of US$878 billion based on the 2014 World Bank report (WB 2014a). The industry sector accounts for 46.4 percent of GDP and is the economy's largest. This is followed by services (38.6%) and agriculture (14.4%). Since 2012, the service sector has employed more people than other sectors, accounting for 48.9 percent of the total labour force, followed by agriculture (38.6%) and industry (22.2%). The country's official language is Bahasa Indonesia, but 583 languages are spoken throughout Indonesia, with Javanese counting the most native speakers. There are around 300 distinct native ethnic groups in Indonesia, among whom the Javanese group is the largest. The Sundanese are the second largest group. Six religions are officially recognized by the government: Islam, Protestantism, Roman Catholicism, Hinduism, Buddhism, and Confucianism. Eighty-seven percent of the population are Muslims, making Indonesia the world's largest Muslim nation. The national statistics office reported that in 2013, 11.47 percent of the population was living below the poverty line (BPS 2014).

The study area in Indonesia is located in *desa (*village) Bantarpanjang, *kecamatan* (sub-district) Cimanggu, *kabupaten* (district) Cilacap within Central Java Province (see Figure 1.2). The population is predominantly ethnic Sundanese. The site is a government-managed resettlement community called 'Bantarpanjang Translok' (BT), Translok being short for translocation. Bantarpanjang Translok has a total land area of 3.1 hectares with 97 housing structures. The resettlement community was built for poor households that were displaced by widespread landslides in nearby communities in 2000. Although the landslides took place in 2000, it took a year before the housing structures were in place. The community is divided into three blocks called RT1, RT2, and RT3 (RT stands for *Rukun Tetangga* or group of houses in a block). All households were victims of landslides. Their occupancy in the resettlement site is in a lease-like agreement.

The Cilacap Provincial Government and the Department of Transmigration of Cilacap are the agencies primarily involved in the Bantarpanjang resettlement project. An in-depth interview with a Transmigration officer in Cilacap who was directly involved in the supervision of the project, revealed that there was actually no budget earmarked for the Translok families affected by the 2000 landslides. However, given the urgency of the case, the Department reallocated some of their funds for the regular transmigration activities to the building of the Bantarpanjang Translok community. Construction of basic services and public places was done on a piece-meal basis due to lack of budget. In

order to acquire the land for the resettlement project, the Cilacap Provincial Government and the forestry agency Perhutani agreed to enter into a land switching contract in which the Cilacap Provincial Government compensated Perhutani for the land with a property twice the size of the target land.

Resettlement projects in Indonesia have been handled on an "ad hoc" basis. Up until now, the Indonesian government still has no national policy for resettlement. The Transmigration Ministry follows the Presidential Decree 55/1993 in the transmigration of families but the law only covers the aspect of land acquisition, not the provision of basic services and public facilities (Zaman 2002). The land and the houses are still owned by the provincial government and there is no option for the resettlers to acquire these.

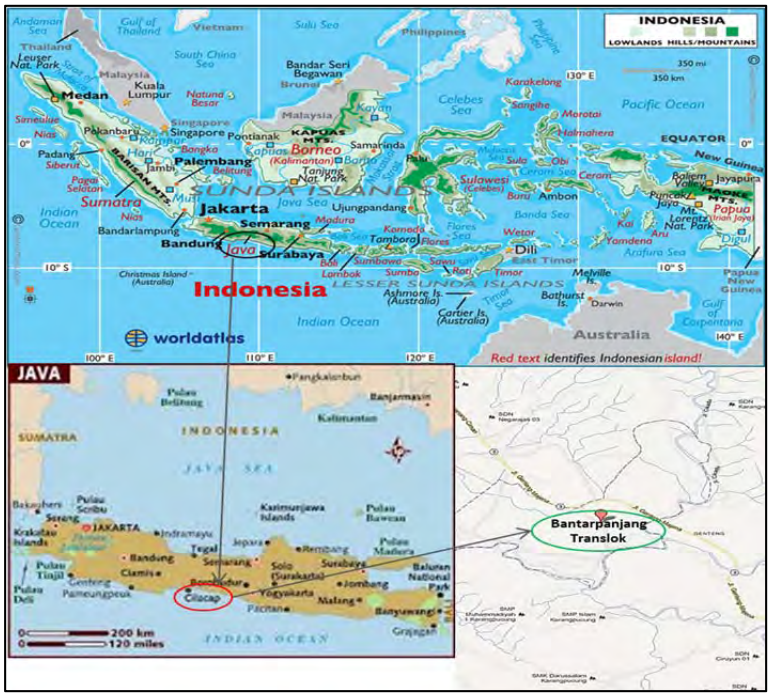

Figure 1.2 Maps of Indonesia, Cilacap Province, and Bantarpanjang Translok

(Source: Google maps)

1.3 Theoretical Framework: Social Capital and Resettlement[3]

This section discusses the theory of social capital and the concept of involuntary resettlement, which form the theoretical core of the study. Social capital and involuntary resettlement are first tackled separately, then the discussion proceeds to the

[3] Parts of this section were published as: Quetulio-Navarra, M., A. Niehof and W. Van der Vaart (2013), Social capital in involuntary displacement and resettlement. *International Journal of Social Sciences and Humanity Studies* 5(2): 140-154.

interfacing of these two. Later on, the concepts will be revisited in the discussions of theories and concepts that underpin the empirical chapters.

1.3.1 Social capital: Definitions and Features

The work of Putnam et al. (1993) entitled "Making Democracy Work" has undeniably popularized the investigation of communities under the social capital lens. In his study done in Northern and Southern Italy, Putnam succinctly illustrates with statistical analyses and a review of Italian historiography, how the density and scope of local civic associations, which reflect existing social capital, were instrumental in the widespread dissemination of information and social trust. These created conditions which supported effective governance and economic development. The findings in "Making Democracy Work" have led to the conclusion that social capital is the 'missing link' that can explain the disparities found in development experiences from national down to community and household level. Woolcock and Narayan (2000) point to the potential of ties and networks and the resources attached to them in development processes. Studies have linked social capital to poverty indicators such as income (Grootaert et al. 2002; Knack and Keefer 1997), livelihood (Barr 2000; Maluccio 2000; Fafchamps and Minten 2001; Nombo 2007), health (Baum 1999; Ferlander 2007; Bisung and Elliott 2014) education (Carbonaro 1998; McNeal Jr 1999; Lin 2001; Perna and Titus 2005), employment (Moerbeek 2001), and food security (Carter 2003; Martin et al. 2004; Ali 2005; Walker et al. 2007; Misselhorn 2009), sometimes with specific reference to gender (Mayoux 2001; Molyneux 2002; Silvey 2003). Social capital is often seen as a substitute for lack of other types of capital among poor people. However, in a situation of widespread poverty, when people are unable to reciprocate, the role of social capital has been found to be severely limited (Cleaver 2005; Nombo and Niehof 2008). Because of the recognized applicability of the concept of social capital and its correlation with the different dimensions of poverty, it has been used in evaluating the adaptation and integration of involuntary displaced individuals into their new social worlds.

Studies on social capital in involuntary resettlement are guided by the definitions set forth by Bourdieu and Wacquant, Coleman, and Putnam. Bourdieu and Wacquant (1992: 119) defined social capital as the "sum of resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition". Coleman (1994: 302) gives the following description of the concept: "social capital is defined by its function. It is not a single entity, but a variety of different entities having two characteristics in common: they all consist of some aspect of social structure, and they facilitate certain actions of individuals who are within the structure." Putnam (1995) saw social capital as connections among individual and features of social organisation such as networks, norms, trust that emerge from these connections as facilitating coordination and cooperation towards mutual benefit. Later on, Lin (2001) put forward a more theoretical definition of social capital: the resources embedded in social relations and networks and used by actors (individual or group) for actions. According to Lin social capital works because of four mechanisms: (1) the flow of information is facilitated (2) social ties may exert influence to the agents (3) social ties and relationships may be perceived as social credentials and (4) social relations reinforce identity and recognition. Resources within the ambit of social capital are social resources that are derived from social connections and come in the form of tangible

goods such as a car, money or house, and intangible ones like endorsements, education, reputation, or security. Social networks exist in hierarchical organisations and in the interrelations among individual actors. Thus, transactions and exchanges happen within organisations, between organisations and among actors (Lin 2001).

Social capital is multi-dimensional (Stone 2001). Ties and networks are structural social capital, while trust and norms of reciprocity comprise cognitive social capital. Between cognitive and structural social capital, structural social capital has gained different versions and attracted different arguments. Putnam (1995) asserts that social capital comes in two forms: 'bonding' social capital or strong ties between socially proximate people, often related through friendship or kinship, and 'bridging' social capital or weak ties between people who belong to different social groups. For the World Bank (2014b), social capital is composed of horizontal and vertical ties. The first are connections between people that take the form of social networks and associated norms, which influence community productivity and wellbeing. Vertical ties are "bridging" ties that transcend various social divides (e.g. religion, ethnicity, socio-economic status). Both types of ties should be present in a community in order to prevent the pursuit of narrow interests and obstructing access to information and material resources that can benefit the entire community.

Woolcock and Narayan (2000) believe in the potential of ties and networks and the resources attached to them in aiding development. To them social capital comes into three functional forms: 1) bonding social capital or strong intra-community ties that give families and communities a sense of identity and a common purpose; 2) bridging social capital or weak extra-community networks that make it possible to cross social divides; and 3) linking social capital, the vertical dimension that "reaches out" or "scales up" people's ties to resources, ideas, and information offered by the formal institutions beyond their community. According to them the poor generally possess abundant bonding social capital, some bridging social capital, and little or no linking social capital. On the other hand, Briggs (1998) views social capital as having two dimensions: the supportive social ties that aid people in 'getting by' or 'survive' and the leveraging ties that help individuals to 'get ahead' or 'prosper' in life.

Granovetter (1973) classifies ties into strong and weak ties. The former can be characterized by intensity, intimacy, frequency of contact, acknowledged obligations and provision of reciprocal services, while the latter have those characteristics to a far lesser degree and the resources involved are more dissimilar. Strong ties are the ties with people in one's immediate social network, like family, friends, and kin. Weak ties are those with people outside this network, such as acquaintances and co-workers. Between the two types of ties, Granovetter posits that weak ties bring more benefits to an individual since they "provide people with access to information and resources beyond those available in their own social circles" (Granovetter 1982).

Like previous research, this study also observes the definitions of social capital given by Bourdieu and Wacquant, Coleman and Putnam. Apart from this, we incorporated the views of Lin on social resources, those of Stone on the multi-dimensionality of the concept, the forms of social capital according to Putnam, Woolcock and Narayan, and Granovetter's and Briggs' views on the interplay of social capital dimensions in getting by or getting ahead. The application and operationalization of these views and concepts are clarified in the empirical chapters.

1.3.2 Perspectives on Social Capital Building

Two competing views on social capital building have figured in social capital research: the institutional perspective and the historical perspective. These two perspectives along with the determinants of social capital building are discussed below.

Institutional Perspective

The international development community led by the World Bank (WB) advocates the central role of the institutions in nurturing social capital in a community. According to the World Bank (2010a), institutional interventions through their policies, programs, and projects can build and strengthen the social capital of the individuals, households, and communities concerned (Levi 1996; Brehm and Rahn 1997; Hall 1999; Maloney, Smith et al. 2000; Onyx and Bullen 2000; Schmid 2000; Woolcock and Narayan 2000; Rothstein 2001; Uslaner 2001; Lorensen 2002; Petersen 2002; Preece 2002; Soubeyran and Weber 2002; Halpern 2005; Krishna 2007). The WB has set up a social capital page on its website that aims to educate the website visitors on social capital theory and its significance for fighting poverty, particularly in developing countries. Apart from recognizing the value of establishing ties within and across communities, the WB also claims that the potential of these ties depends on the support they get from the state as well as the private sector. Decades ago, North (1990) already stressed that the ability of the social groups to act according to their collective interest is conditioned by the quality of the formal institutions they belong to.

Historical Perspective

The historical perspective of Putnam is a controversial one when juxtaposed with the WB view. Putnam et al. (1993:179) are adamant that social capital is path dependent and that "historical turning points […] can have extremely long-lived consequences." For Putnam et al. (1993), social capital cannot be enhanced in the short term since it is pre-determined by the historical context of civic engagement. Civic engagement involves just about everything from reading newspapers, political participation, social networks and interpersonal trust to involvement in associations. In the book "Making Democracy Work", it is shown how the stocks of social capital in a civic region of North Italy such as Emilia-Romagna and Tuscany positively affect the performance of the regional government, unlike in the less civic regions in South Italy like Calabria and Sicily. Putnam traced this back for the northern and southern regions of Italy to their historical antecedents over a thousand of years ago after the collapse of the weak governments in both regions. Whereas the horizontal collaborations predominantly emerged in the North and resulted in social contracts that later on evolved into voluntary organisations and paved the way to the birth of a "civic community", the opposite happened in the South. There, vertical social and political arrangements emerged, leading to a culture of social hierarchy and a collective action dilemma among its inhabitants. People in the South cannot overcome this dilemma because they do not have enough stocks of social capital to begin with.

In the research by Guiso et al. (2004) on the role of social capital (in the form of trust) in financial development in different regions in Italy, the similarity of social capital in the place of origin and in the place of residence proved to shape people's financial transactions in the new place of residence. In another study on the role of culture in the

economic development in 69 regions in eight European countries, historical variables such as the level of generalized trust, correlated with the present regional trust (Tabellini 2010).

1.3.3 Involuntary Displacement: Definitions and Typology

Owing to the dramatic increase of involuntary resettlement in terms of directly affected individuals and episodes in the period after the Cold War, numerous studies were undertaken in order to gain a thorough understanding of its different elements. In the development arena, the term involuntary displacement is synonymous with "forced resettlement", "involuntary resettlement", and "forced migration". These terms have been used interchangeably in resettlement-related works and refer to population movement from one place to another that is pervaded with force, lack of the affected people's consent and choice, and impoverishment.

The World Bank (2010b) asserts that "involuntary displacement occurs when the decision of moving is made and imposed by an external agent and when there is no possibility to stay." Others consider involuntary resettlement differently from displacement and refer to it as the process of assisting the forcibly displaced people in establishing their new lives in the new location through compensations for lost assets and livelihoods, lands and by providing access to resources and services (McDowell and Morell 2007; WB 2010). Spanning from 1945 until 1985, resettlement was viewed as the most fitting solution for the ballooning number of refugees (Chimni 1999). There are three types of involuntary displacement: development-induced displacement and resettlement, disaster-induced displacement and conflict-induced displacement (FMO 2010; WB 2010).

Development-induced displacement and resettlement

This type of displacement and resettlement of families in chunks or communities is brought about by development projects initiated by the government needing "right of way" for the construction of infrastructures. Their dislocation usually pushes the affected families into impoverishment (Cernea 1985; Cernea and McDowell 2000). Individuals who are forced to move and resettle under this type are called 'oustees', 'relocatees', 'project affected persons' (PAPs), 'development refugees' 'resettlement refugees', and 'forced resettlers' (Turton 2003). It was estimated that there are more than 10 million people per year who enter the cycle of involuntary displacement and relocation due to dam and transportation-related development programs alone (Cernea 2000). The World Bank's decade-wide review of its projects involving involuntary resettlement, yielded an estimate of 90-100 million forcefully resettled people due to development projects (McDowell 1996).

Disaster-induced displacement

This category includes displacement of people due to natural disasters (floods, volcanoes, landslides, earthquakes), environmental change (deforestation, desertification, land degradation, global warming) and human-made disasters (industrial accidents, radioactivity (FMO 2010). The World Bank (2010) has estimated that 2.3 billion people will be affected by natural disasters by the end of this decade, which is a very sharp spike from the 541 million victims of disasters during 1970-1979. It has also

been reported that the number of people affected by natural disasters has already outrun population growth, affecting a bigger proportion of the world's population every decade (WB 2010b).

Conflict-induced displacement

Armed conflict including civil war, generalized violence, and persecution on the grounds of nationality, race, religion, political opinion or social group, are just some of the forms of conflict that force people to move from one place to another locally or beyond the international borders (FMO 2010). From a global refugee population of 2.4 million in 1975, the number was almost four-fold (10.5 million) in 1985, registered a steady increase (14.9 million) in 1993, and reached its peak in 1993 after the end of Cold War with 18.2 million (Castles 2003). In 2000, the United Nations High Commissioner for Refugees (UNHCR) reported that the number of recognized refugees based on its definition decreased to 12.1 million (UNHCR 2000). A steady increase in the number of internally displaced persons was recorded from 1.2 million in 1982 to 14 million in 1986 and over 20 million by 1997 (Cohen and Deng 1998). Combining annual applications in Western Europe, Australia, Canada and the USA, the number of asylum seekers grew significantly from 90,400 in 1983 to 323,050 in 1988 and reaching its peak by the end of Cold War at 828,645 in 1992. The figures dropped in 1995 to 480,000 but rose again in 2000 with 534,500 applications (Castles 2003). In 2012, at least 928,200 asylum seekers worldwide applied for refugee status, this figure was the highest since 2009 (UNHCR 2012).

Persons directly affected from this type of forcible movements are called refugees and asylum seekers and are defined as follows by international law:
"A *refugee* is a person who owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is outside the country of his nationality, and is unable to or, owing to such fear, is unwilling to avail himself of the protection of that country."
"An *asylum seeker* is a person who has left his/her country of origin, has applied for recognition as a refugee in another country, and is awaiting a decision on his/her application" (UNHCR 2000).

Although the three types of involuntary displacements are mentioned, only the development and disaster-induced displacement contexts are investigated in this study.

Impoverishment, Risks and Reconstruction (IRR) Model

Parasuraman and Cernea (1999) stress that resettlement outcomes are significantly influenced by the role of institutions in displacement and resettlement activities through their policies and programs. The World Bank's standard in handling involuntary resettlement is to 'improve' (get ahead) or at least 'restore' (get by) the economic and social base of the displaced (WB 2001). Relative to this, international organisations and national governments who are involved in involuntary resettlement programs have been applying the Impoverishment, Risks and Reconstruction (IRR) Model developed by Michael Cernea, a widely adopted approach in resettlement projects (Cernea 2000). The IRR Model is also applied in this study. It identifies the following nine interlinked risks that are inherent to displacement:

1. Landlessness
2. Joblessness
3. Homelessness
4. Marginalization
5. Food Insecurity
6. Increased Morbidity and Mortality
7. Loss of Access to Common Property
8. Social Disarticulation
9. Educational Loss

Among all these nine risks, the "social disarticulation" risk is the most daunting to tackle effectively and the one that is most neglected in research as well. Cernea and McDowell (2000:30) assert that:

> *Forced displacement tears apart the existing social fabric. It disperses and fragments communities, dismantles patterns of social organization and interpersonal ties; kinship groups become scattered as well. Life-sustaining informal networks of reciprocal help, local voluntary associations and self-organized mutual service are disrupted. This is a net loss of valuable social capital, that compounds the loss of natural, physical, and human capital. The social capital lost through social disarticulation is typically unperceived and uncompensated by the programs causing it and this real loss has long-term consequences.*

It is suggested that the way to reverse this is to embark on community building. In another model, "Scudder's Five-Part Model for Relocation Process", the concern about the community's social dimension is also integrated in the process. It is the fourth stage, termed "Potential development and community formation", but according to Scudder (1993) this stage apparently often amounts to "wishful thinking".

Applying the IRR Model in a number of WB assisted water projects in India, Thangaraj (1996), discovered how the first eight risks (the "educational loss risk" was identified later on) are organically linked to each other. In the Litttipali Rehabilitation Colony, the displaced population suffered from social disarticulation as a result of lost ties with others coupled with loss of socio-economic status. The resettlement process dissolved the emotional bond that held the families together as everyone tried to survive and with money as a major vehicle for it. The lack of adequate housing, common resources, and the feelings of insecurity and inferiority also prevented them to establish a good relationship with their host community. Conversely, in resettlement sites located at Upper Indravati, loss of social capital never took place as the families were given the opportunity to decide on matters. Instead of access to land and irrigation in the command area, they preferred to to choose for the preservation of their social relations and an economic resource base in the resettlement site.

A review done by Das et al. (2000) on internal displacement in South Asia showed how the political displacement situation in the region was intertwined with the depletion of social capital of the affected individuals; during the rehabilitation process in different places their social networks broke down at the same time. The situation was much worse for women who were denied kinship and family network support during the moving episodes. The care and concern women showed to their family members was not reciprocated by these individuals.

The same was found in a study by Tan et al. (2009) on the Three Gorges Dam project in Sichuan, China. The resettlement of more than 10,000 rural migrants in peripheral urban areas not only marginalized them in terms of location and in the urbanization process but also in the development of their social capital. In addition, compared with men, women were found to have less coping capacity to the on-going displacement process due to lack of relevant social networks and low educational and skills levels. Leaving out the "social disarticulation risk" in the strategy design in a resettlement program for a flood control project in the Philippines exacerbated the economic and social suffering of the affected families in the new resettlement site (Quetulio-Navarra 2007). In a study done in post-conflict Sierra Leone about the resettlement program attached to the Bumbuna Hydroelectric Project, it was revealed how the country's diasporas in Europe and USA could be a great help in this time of crisis through their pledges and donations (Mazzei 2006).

1.3.4 Social Capital Formation in a Resettlement Context

Mobility of existing social capital

While displaced persons often leave behind most of their social networks, parts of it may be transported to their new locations. Victims of conflict-induced displacement do social scanning prior to relocation. The nature of their case often enables them to choose among countries where they can resettle. Hence, apart from a resettlement country that has a good relocation program, they also will opt for one with a community that has a pre-existing network of ethnic groups, relatives and friends, or simply just compatriots, and that will allow them to bring their families with them.

The mobile nature of social capital has been evident among adult refugees in Alberta, Canada, who tried to maintain their familial ties by actually bringing some of their family members with them (Lamba and Krahn 2003). These stocks of social capital somehow compensated for their lack of financial capital and the problems with using their human capital. They also tried to expand their social relations by regular contacts with friends of the same ethnicity and extended family members. Interactions with their sponsor family or with a Canadian host volunteer started at the time of their arrival in Alberta. The majority of the new arrivals maintained these relationships.

In contrast, refugees who come to the United States usually do not bring family members with them but have a large pre-existing social network primarily comprising people from the same country of origin (Potocky-Tripodi 2004). Half of the respondents have six or more relatives living in the same county and about 70 percent of the refugees have forged friendships with six or more people within the same county. Moreover, half of the respondents had some contact with US government agencies during their first year in the country. In a Norwegian refugee settlement context, Valenta (2008) explored the dimensions of the social worlds of Iraqis and former Yugoslavians. The study revealed that the majority of the refugees had friends of different ethnicities and more compatriot than Norwegian friends. The compatriot networks were kept separate from their Norwegian ties and were denser than those with the Norwegians. It can be inferred that the presence of pre-existing ties and networks in the new country assured these conflict victims that they were relocating to a good place and that this facilitated resilience and sociability, despite the psychological and economic shocks brought about by displacement and war.

Refugees' reluctance to 'cross over' to the mainstream

Crossing over or establishing ties with the indigenous locals comes with a price, which ranges from learning the indigenous language and cultural norms, to being subjected to social sanctions within the own ethnic group. The refugees have to ascertain that the benefits of crossing over outweigh the costs, like in the case of the Somali parents in Australia who had to establish bridging capital with their children's teachers to ensure better educational outcomes for them (Ramsden and Taket 2013). On the other hand, this explains the ethnic-centric networks of the Iraqis and former Yugoslavians and the few ties they formed with the native Norwegians, in which they invested relatively little (Valenta 2008). While nurturing the relationships with their country mates in their spare time through various activities, they maintained ties with the Norwegians only by accidental face-to-face interactions. Hence, these ties remained weak and one-sided. Nonetheless, resettlers who did forge friendship with the natives claimed that the relationships gave them a positive image in their own eyes and in those of others, and inspired positive feelings of social inclusion and recognition by the host community and a sense of belonging to the mainstream society. For those who tried to bridge connections but were unsuccessful, feelings of social exclusion and being a minority were reinforced. Overall, they found it tough to build bridges to the mainstream.

It is not only connecting to the mainstream that poses a big challenge for refugees, crossing over to other refugee-ethnicities is also very difficult. Sometimes the formation of social bridges has to be induced. Using a participatory approach, Suzuki (2004) investigated the process of community organisation among Burmese refugees in Winnipeg and Toronto with himself in the role of catalyst. Burmese are considered a minority among the refugees in Canada and have been deemed unable to integrate in Canadian society. They are low-income earners, non-skilled workers and are yet to develop a network of relationships with other Burmese. Prior to the project, there was no community organisation to enhance the new refugees' integration and their well-being. The existing Burmese associations were composed of long-term residents, such as professionals and businessmen, whose main objective was to lobby for the restoration of democracy and protest against human rights abuses in Burma. This situation changed after Suzuki made the new Burmese refugees aware of what they could gain by organizing themselves within their community. They responded positively to the idea of creating an association that would provide assistance in settlement and self-help for the existing community. A community-based organisation was set up. In Suzuki's evaluation half a year later, the members reported a decline of ethnic tensions since the formation of the multi-ethnic community association.

Sticking to 'tried and tested' ties and sloughing off 'useless' ties

While pre-existing ties constitute the refugees' social capital, development displaced persons are stuck with strangers as their potential source of social capital. Establishing ties with these strangers rarely takes place and, instead, they just maintain their ties from their previous community and sever their connections with individuals who do not reciprocate. After two years of having been relocated, low-income women beneficiaries of a housing project in Massachusetts US still relied on their leveraging ties that were part of their pre-resettlement networks. Most of them did not make new ties in the new location and, at the same time, sloughed off their useless or 'draining ties' during the course of resettlement (Curley 2009). The same was found among English speakers and mono-lingual Vietnamese speakers who were relocated in the Hope VI project (Kleit 2010) and the public tenants who were involuntarily relocated

to a better community as part of an urban regeneration project in Australia (Baker and Arthurson 2012). They still relied on the same part of the social network even after their transfer to the new community. Resettlement only slightly changed the previous pattern of social support and socializing. Kleit concludes that if an individual relied previously on neighbours for favours or was not keen on making friends or acquaintances, he or she would continue to do so.

Homophilous social relationships in development-induced displacement

It has been observed that families or individuals who have been relocated due to development projects seamlessly connect with 'homophilous' people, individuals with whom they share certain lifestyles and socioeconomic or demographic characteristics (Lin 2001). Low-income women who were evicted and resettled back to the renovated site in a housing redevelopment project in the United States (the Hope VI Program), relied on homophilous social networks for social support (Wellman and Frank 2001). Social support varied from personal favours, like asking somebody to look after their home while out of town, to assistance at times of emergency (Kleit 2010). In a similar project in Massachusetts (Curley 2009), a longitudinal study involving 28 women from three relocation groups revealed that their homophilous ties (in terms of gender and socioeconomic situation) were the bedrock of their social networks, from which both emotional and instrumental support (i.e. food, loans, child care.) were derived. This particular type of social connection can be considered as partly bonding and partly bridging social capital, because the relationships cut across ethnicity.

It was also revealed that ties can dissolve when mutual trust and reciprocity have evaporated and the once functional source of social capital has become burdensome because requests for assistance have become repetitive and are not reciprocated. Worse, it can also wreak emotional havoc when one gets involved in somebody else's problems. Such ties have been referred to as 'draining ties': "relationships to people that drain one's household of resources through frequent requests for assistance with food, money, or other assistance that is not reciprocated, as well as ties to people that bring one down emotionally with constant complaining or involvement in their problems" (Curley 2009: 237). Zontini (2002) observed the same phenomenon among Filipino and Moroccan migrant women in Southern Europe who experienced maintaining and creating social capital as a burden.

Facilitation of trust and establishment of ties through adequate social services

Delving deeper into how a social housing resettlement program (Hope VI) had fared in increasing the poor families' access to social capital by changing the economic mix of their neighbourhoods, Curley (2010) looked into the relationship of particular social capital dimensions with neighbourhood quality. The social capital dimensions are generalized trust, shared norms and values, local social support, number of neighbours known by name, number of neighbours considered friends, number of neighbours seen socially, and civic engagement. The neighbourhood quality measures are neighbourhood satisfaction, neighbourhood safety index, neighbourhood problems index, and neighbourhood resources index. The study shows that the community's socioeconomic make-up as well as other individual and household characteristics are not of great importance in creating generalized trust, shared norms and values among neighbours. But the institutions and facilities in the neighbourhood, place of attachment and safety, do play a significant role in the process of social capital building, and are positively related to the level of social capital in the community.

Determinants of Social Capital Building

Social capital studies on involuntary resettlement have illustrated how different determinants can influence the building of social capital among refugees, asylum seekers and families or households affected by development projects. Determinants of social capital include factors in the social structure and the position of the individual in the social structure, which can either facilitate or constrain social capital formation (Lin 2001). These determinants can be demographic and socio-economic individual and household characteristics or features of the institutions involved.

Household and individual attributes
Age. Age featured as a factor that shaped the size of the social networks among refugees in Canada who came from different regions (Lamba and Krahn 2003). Most refugees older than 50 usually had children in Canada to welcome them. Willems (2003) also found age to be an important factor in the social networks of Congolese, Rwandese, and Burundese refugees in Dar es Salaam. The youngest age group (below 26 years old) had more ties with older people than with individuals belonging to the same age group, reflecting their dependency on older people. The age group 26-35 had twice as many ties with their age mates as with younger peers due to their high level of mobility within and outside Dar es Salaam.

Ethnicity. This was established as a major factor in the density and size of social networks among migrants in Norway. Valenta (2008) found the migrants to be clustered ethnically, having compatriots as workmates, relatives, friends, neighbours, refugee-guides, teachers, etcetera. In conflict-related relocation communities the presence of pre-existing networks that can be tapped by newcomers is common. In the resettlement process of Kurdish refugees in London, Wahlbeck (1998) considers the strong ethnicity-based formal organisations and informal networks within the community as crucial. The ethnicity-based cohesion among the Middle-Eastern refugees in Finland was responsible for the forging of 'ethnic entrepreneurship' in the new community, generating employment opportunities for the migrants and, at the same time, responding to their special needs, tastes and preferences that the mainstream business sector could not provide (Bun and Christie 1995). The Vietnamese refugees in the United Kingdom also benefitted from ethnic associations in terms of access to health care and social services (Bertrand 2000). Similarly, East-African Asian refugees turned to the pre-existing ethnic community for emotional, material and financial support (Robinson 1993) and established Bosnian ethnic communities in New Zealand provided a source of support for newly-arrived Bosnian refugees (Madjar et al., 2000). Interestingly, in Norway there are also immigrants who opted to live away from their ethnic neighbourhood because they viewed the community as a breeding place for stigma and as a potential ghetto (Valenta 2008).

Length of residency. The Dar es Salaam study (Willems 2003) also shows duration of residency in the resettlement site as a determinant of the size of networks or number of ties that forced migrants can create. Congolese, Rwandese, and Burundese who arrived in Dar es Salaam five years earlier reported significantly more ties than resettlers who came to the area one to two years before.

Status and cultural distance. The study by Valenta (2008) in Norway found that a low status position of refugees and a greater cultural distance between the refugees and the natives can obstruct the development and maintenance of social capital. Between the

Iraqis and the former Yugoslavians (Croats and Bosnians) the former suffered from being culturally distant to the locals. Croats and Bosnians are Europeans and have a secular or non-Muslim orientation. Hence, they were culturally more similar and acculturation for them took less effort than for the Iraqis. The Iraqis,with their different cultural and religious background, remained bonders who struggled to integrate and were subjected to xenophobia. Immigrants who occupy a high position in the work-place are confident and motivated to build bridges with the mainstream circle. On the other hand, the shared social and cultural practices or events like engagement and wedding parties, joint food preparation, and sharing meals facilitated participation and interaction among Somalian women refugees in Australia who were traumatized by war (McMichael and Manderson 2004). For resettlers who deem themselves inferior to the receiving society, the chances of cultivating friendship with the locals are bleak. Similarly, the lack of suitable cultural capital prevented Somali refugees in the United States to reach out to the mainstream, which resulted in occupation and social services deprivation (Smith, 2013).

Language. Language can make a difference for an individual's amount of social capital, as shown by a comparison between English and Vietnamese speakers during pre- and post-redevelopment of their neighbourhood in a housing project in the United States (Kleit 2010). While the percentage of English speakers' social support ties in the neighbourhood after displacement slightly increased, those of the Vietnamese speakers drastically decreased and their dependence on social ties for social support increased. The resettlement process did not only relocate the families but also their social support ties, with only a minor change for the English speakers but a dramatic one for the Vietnamese speakers.

Gender. Gender makes a difference as well. Compared to before resettlement, Dar es Salaam male refugees forged more ties with women. The opposite was the case with women, who had more connections with men during pre-relocation but gained more ties with women after resettlement. These differences were due to lifestyle changes after resettlement. The majority of the women refugees were married and had children. They became stay-at-home wives, a social situation where they were likely to meet each other. Constrastingly, the men were more mobile in the resettlement context, providing them with opportunities to socialize with the opposite sex (Willems 2003). First world countries research also report larger network sizes for women (Burda, Vaux et al. 1984; Antonucci and Akiyama 1987; Pugliesi and Shook 1998; McLaughlin, Vagenas et al. 2010) and a smaller network size for men in developing countries (D'Exelle and Holvoet 2011).

Institutional Factors. The quality of institutions and social services available in the resettlement community directly correlates with the growth of social capital among its residents, as shown in research in a relocation project site in United States (Curley 2010). However, there is also a case wherein the dismal quality of social service in a relocation project site, particularly the provision of peace and order, spurred the forging of working relations among the resettled residents. This happened in the case of a new government resettlement site in Philadelphia where unbridled violence prevailed (Clampet-Lundquist 2010). The adults and teenagers considered their local ties and the information flowing through them as indispensable for their protection strategies to feel safe in their new residence. The shared common space such as benches in front of the buildings and a community centre that offered various activities for both kids and adults, positively facilitated the establishment of connections among the resettlers.

Strangers (including the criminals) became neighbours and even friends. The common spaces reinforced the people's motivation to create new social support to protect them from drug trafficking-related violence in their new locality. The design of the house or dwelling unit and how the houses are arranged in blocks are also considered determinant of social capital. Kalmijn and Flap (2001) showed that "assortative meeting and mating" are shaped by institutionally organized arrangements such as the physical setting of the neighbourhood, which influence the type of people one meets and with whom one can create personal relationships.

1.4 Conceptual Framework and Research Questions

The conceptual framework in Figure 1.3 pictures the weaving of these theories and concepts previously discussed into one grid that underlies the present study on the building of social capital across time in an involuntary resettlement context in the Philippines and Indonesia. The arrow represents the timeline element in the study and suggests the direction of social capital building in a new resettlement community. The framework is divided into four periods with each period influencing the following period. The four periods of social capital building starts with before resettlement, followed by the first year in the site after resettlement, then the following years in the site, ending with the year of the field study. For a clear understanding of the framework, each period is discussed in relation to the relevant research questions which will be addressed by the empirical chapters later on.

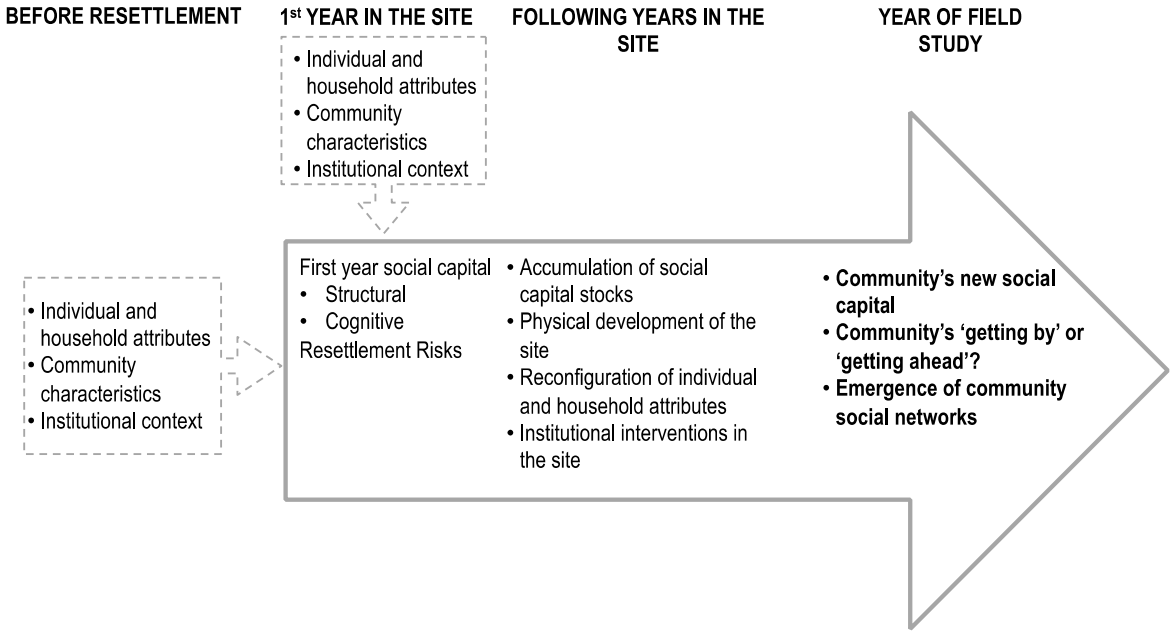

Figure 1.3 Conceptual framework of the study

Before Resettlement Period

During resettlement, households bring with them fragments of their past that can influence the social capital built and the level of involuntary resettlement risks experienced by the households during the first year in the resettlement site. These

fragments include their characteristics as household heads and those of their households, characteristics of the previous community, and the institutional context in the community of origin.

First Year in the Site Period

As expected, the process of being resettled in new sites brings about changes in the attributes of the household head and the household, spawns a new community with its new set of characteristics and sets up a new institutional context. These new elements that are created or shaped by the resettlement process in the first year in the location interface with the before resettlement elements and have an impact on social capital and the involuntary resettlement risks experience of the households in that period. These before and first year resettlement periods are tackled extensively by addressing the following three research questions:

1. What is the state of the community a year after the involuntary resettlement in terms of risk experience and structural and cognitive social capital building?
2. Do the before and after resettlement profile (individual and households, community, institutional context) account for resettlement risks experience and social capital building during the first year in the site and if so, in what way?
3. What factors can explain the possible differences between the two sites?

Following Years in the Site Period

This period covers the first year in the site until the year before the year of the field study. From the year they resettled in the site through the following years the households accumulated stocks of social capital that at some points can surge and stabilize. The process is expected to be impacted by physical changes in the community during this time, individual and household attributes (e.g. household size, employment, civic engagement) and the nature of institutional interventions in the location. The corresponding research question reads:

4. How did the structural social capital in the two sites develop over time?

Year of the Field Study Period

The accumulation of social capital stocks, site physical development, reconfiguration of the individual and household attributes, and the institutional interventions that take place during the 'following years in the site period' are all intertwined with this particular period. They influence the new social capital of the community during the year of the field study, determine whether the households in general will stay in the 'getting by' stage or progress to 'getting ahead', and also affect the nature of the social networks of households and community leaders at the time the field study was conducted. Three research questions hinge on this:

5. What does the comparison between the two settings tell us about the impact of personal and household characteristics, institutional, cultural and historical factors on structural capital formation?
6. Do the institutional interventions in the site and social capital interplay with the evolution of the economic, physical, and social wellbeing of the households from their first year in the site to several years later? If so, in what way?
7. Does gender influence the social network features of the household and community leaders after involuntary resettlement? If so, in what way?

1.5 Plan of the Book

This book has seven chapters. Chapter 2 presents the design of the study and the methods used. Parts of this chapter are based on papers already published in international journals. The calendar method was the main method used in collecting retrospective quantitative data from the respondents. The different methods will be discussed in more detail in the empirical chapters (Chapters 3-6). The study areas will be introduced in this chapter as well as my reflections on ethics and issues encountered during the fieldwork in the Philippines and Indonesia.

Chapter 3 covers the period of the year before the resettlement of the households and the first year of resettlement in the new sites. It seeks answers to research questions 1 to 3. The profiles of the respondents, households, community, institutional context, and social capital level before and after the resettlement are compared. These profiles are turned into variables that are linked to the investigation of the risks experience of the households under the IRR model and the structural and cognitive social capital in the communities one year after the resettlement. Factors that explain the variance between the two settings are identified and explained.

Chapter 4 covers the period of first year in the resettlement site until the year of the field study that is 11 years in Indonesia and 12 years in the Philippines. It addresses research questions 4 and 5. In this chapter, I investigate the building of the different dimensions of structural social capital across time under the historical-institution debate lens. The impact of personal and households characteristics, institutions, history, and culture on shaping social capital in an involuntary resettlement context is examined and discussed.

Chapter 5 covers the first year in the resettlement site and the year of the field study. It deals with research question 6. The economic, physical, and social wellbeing of the households during their first year in the site are compared to those in the period when I did my fieldwork. I then analyse the impact of resettlement inputs and social capital on economic, physical, and social wellbeing.

Chapter 6 covers the year of the field study in the two sites. It answers research question 7. Gender influences on social network formation of the Indonesian households and of the community leaders in the Philippines are examined through social network analysis. The analysis yields results on the nature of the social networks formed in an involuntary resettlement context after a decade in terms of friendship formation, geographical spread, and brokers and influential persons in the networks.

The book ends with Chapter 7, which summarizes the main findings of the study based on the research questions, integrate the various insights gained from the research, state the conclusions of the study, and pose recommendations for policies, interventions and further research.

Chapter 2

Study Design and Methodological Approaches

This chapter presents the study design and the methodological approaches that guided the study. These are also reflected in the empirical chapters of this book. The first part of the chapter discusses the design of this research and the methods that were utilized. It ends with a reflection on ethical and methodology-related issues encountered while doing this study. The second part of the chapter is devoted to the discussion of the calendar method that was extensively applied in this study to gather the retrospective quantitative data. The results of the application of this method are presented in this part as well.

2.1 Part One

2.1.1 The Study Design

In order to be able to answer the research questions in relation to the theoretical arguments discussed in Chapter 1, in the design of the study a comparative approach and a longitudinal perspective were employed. Furthermore, a combination of quantitative and qualitative methods characterizes the study's methodological design. Whereas the study populations in the Philippines and Indonesia are defined and described in Chapter 1, the sampling of the target respondents will be presented in the current chapter.

Comparative Approach

> *Comparative sociology is not a particular branch of sociology; it is sociology itself, in so far as it ceases to be purely descriptive and aspires to account for facts.*
> Durkheim (1966: 139)

As Durkheim formulated so eloquently, thinking in comparative terms is inherent in sociological research. A sociologist always investigates a social reality in implicit or explicit relation to another social reality. No social phenomenon can be studied in isolation, without comparing it with another social phenomenon (Oeyen 1990). The goal of comparative research is to search for similarity and variance in two or more phenomena being compared in order to reveal universals or general processes across different contexts, separate more general patterns and isolate regularities from the surrounding context. "Comparisons not only uncover differences between social entities, but reveal unique aspects of a particular entity that would be virtually impossible to detect otherwise" (Mills et al.2006: 621).

The selection of cases in this study was guided by two principles: that they should be identical for purposes of analysis and under certain definitional criteria (Smelser 1976) and that it should be theoretically justified (Teune 1990). Two cases, one in the Philippines and one in Indonesia, are compared in this study. The cases satisfy the criteria I set for this study. Both concern communities in Southeast Asia that were built and managed by the government as resettlement sites for involuntary resettlers. The resettled households in both countries had incomes that were below the minimum standard of living, and the ages of the communities were sufficiently similar. At the time of the fieldwork the Philippine site was 12 years old, and the Indonesian site was 11 years in existence. The particular criterion of the age of the resettlement site was crucial for the longitudinal perspective that was utilized for this research. Although comparable in important aspects, the two locations differ as well. This allows an analysis of the effect of differences in context on the way in which social capital evolves. Differences are seen in terms of cultural traditions, physical location, institutional context, national resettlement policies, religion, ethnicity, demographics, and socio-economic profile. The examination of the theoretical arguments set forth in the preceding chapter is greatly drawn on these differing features of the households.

Longitudinal Perspective

Longitudinal research designs that measure repeatedly the same people or other units of observation through time have been regarded as the social sciences' most powerful approach for studying cause and consequence (Axinn and Pearce 2006). Tracking the 'how' and 'when' in the evolution of the resettled households' social capital formation from their first year of residency until over a decade later requires the use of a longitudinal perspective.

The Philippine households who are victims of development and disaster related displacements from different areas within greater Metro Manila, started transferring to the government resettlement site in 1999. The Indonesian households who are all victims of widespread landslides that took place in 2000 in the mountains and other nearby villages within the Cilacap province, started resettling to the government-built resettlement site in 2001. The fieldwork in the Philippines was conducted in 2011 and in Indonesia in 2012.

Since the study was conducted during 2011-2012 and not set up at the establishment of the sites 12 and 13 years earlier, the data were collected retrospectively instead of prospectively. This was made possible primarily through the calendar tool tailored for this study and additionally through in-depth interviews and relevant secondary data. The calendar tool aimed to enhance the reliability of the retrospective data through its unique features of incorporating parallel domains and landmarks that could trigger memory recall 12 to 13 years back. Strictly speaking this study does not have a longitudinal study design, but it uses longitudinal data, considering that the data were collected retrospectively in a timeline ranging from a year before the resettlement to 12 to 13 years later.

Combination of Quantitative and Qualitative Methods

Data for this study were gathered by combining qualitative and quantitative methods. Qualitative methods, such as in-depth interviews, exploratory interviews, observation, focus group discussions and life histories, were blended with quantitative methods such as structured interviews and surveys, either sequentially or simultaneously. They hinge on the premise that combining quantitative and qualitative approaches generates a better understanding of the research problem than using either approach alone (Creswell 2003; Axinn and Pearce 2006; Doyle et al. 2009). It has been argued that quantitative research is weak in understanding the context or setting in which people engage and in hearing their 'voices'. Also, personal biases and interpretations of the researchers are seldom discussed though they may have an impact in various stages of data collection and analysis.

To a certain extent, qualitative research makes up for these weaknesses. However, qualitative research also has its weaknesses, like biases created by the personal researcher-subject interaction and the difficulty of generalizing findings to a larger group because of the limited number of subjects studied. Thus, mixing both methods provides strengths that offset the weaknesses of both quantitative and qualitative research (Jick 1979; Rossman and Wilson 1985; Greene et al. 1989; Morse 1991; Flick et al. 2012; Guest 2012). According to Niehof (1999), the two methods actually go together and are mutually dependent in the sense that numbers in qualitative data cannot be ignored when dealing with meanings, and meanings in quantitative data cannot be ignored when dealing with numbers. In the same vein, Scrimshaw (1990)

asserts that combining quantitative and qualitative research techniques is imperative to both obtain accurate information on behaviour and to interpret the meanings behind behaviours. She also says that combining both types of methods enhances both validity and reliability, as qualitative methods are recognized as appropriate in terms of validity, whereas quantitative methods are considered better at strengthening reliability or replicability. Greene (2007) formulates such a mixed methods approach in terms of complementarity: different methods bringing to light different facets of one phenomenon. This study also takes such a complentary strength stance.

The mix of methods in this study also reflects an integration of the etic and emic perspectives. The etic or outsider perspective refers to behaviour as observed and documented by the researcher, the emic or insider perspective refers to the subjective views of the respondents and the meanings they attach to events. The first are captured by quantitative data, the second by qualitatively data. In an etic approach, the interpretation of behaviours or attitudes is done without referring to the emic meaning of the observed phenomenon (Harris 1964; Pelto 1970; Greene 2007).

The combination of quantitative and qualitative methods is apparent in every empirical chapter of the book. The stories, quotations and observations gathered during the fieldwork reveal meanings, as well as validate the different numbers and dates reported by the respondents. Moreover, the amalgamation of quantitative social capital data collected in the survey with the wide-ranging qualitative data yielded insights into three levels of social capital information, namely at individual, household, and community level.

2.1.2 Data Collection and Analysis

Fieldwork Process

Philippines

Carrying out a study in the Philippines, my own country, made some things easier for me. For instance, I was not required to secure research permits, I had colleagues who made up my research team, and I already had a network of persons who knew about the resettlement program I would investigate. My fieldwork in the Philippines started in February 2011 and ended in December 2011. It was undertaken in three stages: preparatory stage, quantitative data collection, and the qualitative data collection.

Preparatory stage (February-April). This stage consisted of meetings with key people who were involved in the KV1 resettlement programme, familiarization visits to KV1, collection of relevant secondary and primary data, fine-tuning of the data collection tools, and the composition of the research team. Several meetings were held with people from the National Housing Authority (programme's implementing agency), the Presidential Commission for the Urban Poor (a government agency where I have been working), John J. Carroll Institute on Church and Social Issues (a church and university-based organisation) and the Action Group (an issue-based community organisation in KV1). The meetings with these people, also members of the inter-agency committee created for the programme, resulted in securing important information as well as secondary data related to the programme. By visiting I was able to learn about the physical structure of the site and built rapport with community

leaders and households in KV1 who would be helpful when conducting the household survey. Based on the preliminary information, the data collection tools were refined. At the same time, I was also busy forming my research team that would be composed of a research assistant, interviewers, and a contact person in KV1. Ms. Elizabeth Avila, my research assistant, and the interviewers were all development management officers in the Presidential Commission for the Urban Poor. They had been working with poor urban families in the country and were familiar with household surveys. My contact person in KV1 was a widow who was one of the earliest resettlers in the site.

Quantitative data collection (April-August). This involved the training-workshop with the research team on how to utilize the calendar tool and how to conduct calendar interviews. Quantitative data were mainly collected by the calendar tool. A discussion on calendar tool can be found in Part 2 of this chapter. Because it was the first time that the research assistant and interviewers would use this tool, several mock interviews among them were done to get a good grip on the use of the tool and to prepare them for establishing rapport with the respondents so that these would be able to sit through and finish the interview. The average interview time was 102 minutes. A pilot testing of the tool was done in a similar resettlement community and the household survey in the target community followed.

Qualitative data collection (September-December). This stage followed the household survey. Several in-depth interviews (semi-structured) were conducted with different individuals in and outside KV1 (i.e. community leaders, local government leaders, police officer, gang leaders, project managers), focus group discussions were done with selected men and women in the site, and participant and non-participant observation inside the community was conducted.

Indonesia

Setting up the fieldwork in Indonesia necessitated much more time and resources than the Philippine fieldwork. Apart from the usual fieldwork protocols, I had to learn Bahasa Indonesia (the official Indonesia language) and I had to do translations on my data collection tools and interviews. The field activities started in September 2011 and ended in August 2012. As in the Philippines, the fieldwork was carried out in three stages: preparatory, quantitative, and qualitative.

Preparatory stage (September 2011-April 2012). This stage involved the reconnaissance visit to Indonesia, securing research permits, settling in Indonesia, formation of the research team, learning Bahasa Indonesia, fine-tuning and translation of the data collection tools, training of the research team, and pilot-testing the tool.

The reconnaissance visit to Indonesia in September 2011 yielded the following results. First, I introduced myself to Professor Firman Lubis, a good friend and former colleague of my acdemic supervisor and at that time the Executive Director of Yayasan Kusuma Buana (YKB) in Jakarta[4]. His foundation agreed to host my research in Indonesia and it was through him that I came to know key persons for my research. Second, I established contacts with the relevant government agencies, such as LIPI, the national institute of sciences in Indonesia, and with Perhutani, a semi-government agency in charge of the country's forestry programs and previous owner of the land

[4] Sadly, Professor Lubis passed away in September 2012.

now occupied by the resettlers. After investigating possible sites around central Java, the site named "Bantarpanjang Translok", located in Cimanggu, Cilacap, was chosen because of its close similarity with the Philippine case in terms of construction year, households profile, and presence of supportive project managers. During this visit I also collected information on the requirements for a research permit.

I flew back to Indonesia in February 2012 and first reported to YKB, where I was given office space and facilities. Securing different permits from the different government agencies and obtaining the researcher visa spanned six months of processing (started in October 2011), and series of follow-up and coordination. I would often meet with LIPI officials, of whom Dr. Sunarti offered her agency as scientific host for my research and provided me with secondary data on Cilacap and Cimanggu. Moreover, through her I got to know Dr. Tyas, of the Soedirman University in Purwokerto.

I moved to Cimanggu and lived in a room arranged for me by Perhutani, the forestry agency connected with the resettlement project I would be studying. The Perhutani people were concerned about my safety and insisted that they would find me a place to stay in Cimanggu. They also provided the motorbike I could rent during the fieldwork. Important information and secondary data relative to the resettlement programme was collected during meetings with the Perhutani staff. I also met with the village leaders but was advised not to start my fieldwork until I had my research permit.

I met with Dr. Tyas, an assistant professor at Soedirman University in Purwokerto, the closest university to the research site. Through her I was able to form my research team. I also had several discussions with Dr. Tyas, who is a sociologist herself and very knowledgeable of the Cimanggu community. Eventually, I began to form my research team. I wanted a female research assistant (RA) to prevent problems in the Muslim resettlement community. Furthermore, the RA should be a master student or have a master degree and should speak English, Bahasa Indonesia, and Sundanese, the local language in Translok. It took a while for Dr. Tyas to find Ms. Fanny Dwipoyanthi, a Sundanese herself, a master student and sufficiently fluent in English. I was helped by Dr. Tyas and colleagues in looking for Sundanese-speaking interviewers who had a laptop of their own. Eventually, persons who met the criteria could be hired.

Meanwhile, I started learning Bahasa Indonesia. Apart from self study, I also hired a personal tutor who would teach me Bahasa Indonesia at my place for one hour a day. Having some basic Bahasa Indonesia made it easy to establish connections with the bureaucrats, local government officials, and the households in Cimanggu. Everybody was showing their appreciation for my efforts to speak Bahasa Indonesia. Being able to speak the Indonesian language made my research participants warm up with me faster and led to their active participation in my fieldwork.

Fine-tuning and translation of the survey tool were also done during this stage. I met with different key people from LIPI, Soedirman University, Perhutani, and the community regarding the adjustments I needed to do on the Philippine version of the survey tool so that it would be appropriate for the Indonesian context. Based on these meetings and consultations I refined the tool, incorporating the suggestions I got and keeping in mind the research context. I forwarded this to my database programmer who designed an electronic data entry program for the survey tool. After receiving the survey tool in an electronic data entry version, I forwarded it to a translator at the Soedirman University for its translation into Bahasa Indonesia.

Quantitative data collection (April-July 2012). This involved the training of the research team, pilot-testing the tool, and the household survey itself. Dr. Tyas offered her home to use for the training activities. Series of orientations on the calendar method were conducted with the research team. Subsequently, the survey tool was introduced. Mock interviews were done among the team members, stressing how they should develop the rapport with the respondent and maintain it while entering the information on their laptop. Then, the tool was pilot-tested and the household survey could start.

Qualitative data collection (May-August 2012) started right after I settled in Cimanggu sub-district. It involved semi-structured in-depth interviews, focus group discussions, and participant and non-participant observation.

Data Collection Methods

Collection of Secondary Data

Gathering secondary data through archival research in both sites was imperative for establishing the dates when the basic services and public places in the site were constructed, determining the number of households who relocated per year, and creating a comprehensive profile of the resettlement sites. While it was easy to secure these data in the Philippine setting, in Indonesia it was quite difficult, especially at the level of the project managers. In a meeting with a project official in Cilacap I was informed that they might have lost all the documents pertaining to Bantarpanjang Translok while transferring to new offices multiple times. There were no back-up data in their computer and neither did the Transmigration Central Office in Jakarta have a copy of the documents relating to the site. To compensate for this, several in-depth interviews had to be done with persons who were knowledgeable on the project.

Qualitative Methods

Purposive sampling was applied for the qualitative methods while observing the 'saturation' point principle (Kumar 2014). In the Philippines, I did all the qualitative data collection myself. In Indonesia, I did the interviews with the bureaucrats who could speak English and my research assistant did the interviews with people who were based in Cimanggu while I observed and supervised the interview. Since I knew a little Bahasa Indonesia, I could understand the discussion. If clarifications were necessary I would interrupt the discussion for some probing in Bahasa Indonesia. All the interviews and focus group discussions were audiotaped, transcribed, and translated into English. After each interview, the participant was given a small token as a symbol of my gratitude for participating in the research.

Key informant interviews

Key informant interviews were carried out in both sites during the preparatory stage of the fieldwork. The interviews were semi-structured and would last 40 minutes to one hour. The interviews aimed to get first-hand information on the county's resettlement program, the profile of the resettlement programmes in the two sites from the broad stroke level down to the details of the project. Hence, different bureaucrats from the government agencies, officers in the project management office (Philippines), local government officials, community organisation leaders, and some household heads were interviewed. Twelve key informant interviews were done in the Philippines and 14 in Indonesia. Some of these individuals were also asked for the in-depth interviews.

In-depth interviews

Boyce and Neale (2006) define in-depth interviewing as a data collection method that entails intensive individual interviews with a small number of individuals to explore their perspectives on a given idea, program, or situation. I designed an interview guide with open-ended questions to give the participants room for flexibility with their answers. The interview guide was customised according to the occupation and role of the participant in the resettlement programme. Participants were given the option to choose where I could do the interview. Most of the bureaucrats and local government officials preferred to have the interview in their offices. Few preferred to have the interview in a restaurant far from their officemates and bosses. Interviews with community leaders, household heads, and gang leaders (Philippines) were done either in their homes or in public places such as market and school. On average, each in-depth interview lasted around one-and-a-half hour. In the Philippines, 15 interviews were done and in Indonesia 17 interviews were conducted.

Focus group discussions (FGDs)

Morgan and Spanish (1984) define focus groups as a qualitative method for gathering data, that brings together several participants to discuss a topic of mutual interest to themselves and the researcher. When I ran a preliminary statistical analysis on the survey data collected and striking and interesting results emerged, these were discussed in the FGD I did with selected household heads in both communities. Focus groups complement and strengthen quantitative data such as those collected through a survey (Morgan and Spanish 1984; Bernard 2011). The FGDs were also utilized to elicit the participants' perspectives and feelings on the composition of their social capital as well as on the relationships of the households in the community. The response of the participants on the topics and their reactions to the answers of the other participants were closely observed during the process and were integrated in the analysis.

Two FGDs in each country were conducted. I tried to achieve a balance in the selection of participants, taking into consideration gender, year resettled, age, and the blocks where they lived. I moderated the focus groups in the Philippines with the help of my research team members who recorded and filmed the activity and took notes. The participants were provided with lunch, snacks, and were given a little token of appreciation for their participation. In Indonesia, the FGDs were moderated by my RA in Sundanese. I observed and would interrupt the discussion when I thought it was necessary to clarify or validate an answer or a comment. All the focus groups were guided by open-ended questions (see Appendix) and appropriate and prior adequate training was given to my research assistant in Indonesia.

Observation

Observational methods have the potential to produce unique insights and reflections (Axinn and Pearce 2006). I employed both participant and non-participant observation in the two settings during the course of the fieldwork process. Observation focused on the nature of engagement at different levels (e.g. inter-household, organisation members-community leaders) and in different contexts (within their block, in public places), the social activities in the community, and conversation topics. In the Philippines I participated several times in community meetings and meetings of the community leaders. In Indonesia, I participated in community meetings and farming activities of women. When putting myself 'in the shoes' of the people I was observing, questions and insights would just surface suddenly. I never hesitated to ask them

immediately about things that needed to be clarified or corroborated by them. I documented the observations and expriences in my fieldwork diary.

Quantitative Methods

Three quantitative methods were employed in this study: household survey, social network analysis, and the calendar method. Only the household survey and the social network analysis are discussed in this section while the calendar method comprises the second part of this chapter.

Household Survey
A household survey was undertaken in both resettlement sites. In the Philippines the survey had three parts: the household composition sheet; the calendar instrument; and the evaluation sheet for the respondent and the interviewer. In Indonesia it had four parts: the household composition sheet; the calendar instrument; the social network matrix; and the evaluation sheet for the respondent and the interviewer. While the household composition sheet and the evaluation sheet are both self-explanatory, the social network matrix and the calendar instrument warrant a separate discussion.

Before conducting the household survey, the survey tool was pilot-tested in both locations. In the Philippines, a small resettlement community located in Barangay Minuyan, San Jose Del Monte, Bulacan Province was chosen for the test. Like my target respondents, the families were involuntary resettlers from Tondo, Manila. They relocated to their present resident 12 years ago. My research assistant already did a kind of "social preparation" with the families. They lived close to her home and she knew some of the families personally. After doing the interviews with nine families and a roundup session with the research team, issues related to the tool were discussed. Subsequently, revisions on the tool and interview procedures were done.

In Indonesia, a resettlement community situated on top of the mountain in Desa Cisalak, Kecamatan Cimanggu, was chosen for the pilot testing. Households resettled there in 2000. Ten households were chosen for the test. It took one whole day of pilot testing. After the pilot test, a check-up meeting was conducted with the interviewers, pointing out the strengths and limitations of their initial interviews. The tool was also critiqued and revisions were done.

Population and sampling
In the Philippines, the 150 household-head respondents were chosen through proportional random sampling with replacement from a sampling frame of 6,144 households, which was provided by the Project Office. The population is composed of two types of house owners – the 'original house and lot owners' who are also known as program beneficiaries of the socialized housing program of the government and the 'second-hand house and lot owners' who are not the intended beneficiaries but bought the house and lot of the original owners. The Project Office did not have the exact numbers of these two types of residents, but based on qualitative data it was estimated that around 30 to 40 percent of the 6,144 households were 'rights buyers'. Since there was no updated master list of the beneficiaries, it was imperative to validate the status of the respondents and prepare replacements for those respondents who were no longer living in the area. Those who needed to be replaced were known after a tedious verification process in the field. The 150 respondents are all original owners.

Sixty-eight percent of the KV1 respondents were female and 32 percent male (Table 2.1). More than half of the respondents were within the age bracket of 25-45. Only 27 percent of the respondents reached college or studied in technical school after high school, 47 percent finished or reached high school, and 25 percent only studied until elementary level. The average household size was 5.58 and the average yearly household income was Php 88,103.00 (2,065.72 USD). Thirty-three percent were housewives or husbands staying at home, 22 percent were labourers, 16 percent had a business in the community, while another 16 percent said to be unemployed. The resettlers in KV1 were victims of development projects, natural disasters (like flooding along Pasig river), man-made disaster (garbage slide in Payatas) and wide-scale fire. Most of the respondents (60.7%) were residing in the Plains part of KV1. The resettlement started in 1999. Twenty-two respondents resettled in the community in 1999, 31 in 2000, nine in 2001, 21 in 2002, 32 in 2003, 22 in 2004, eight in 2005, four in in 2006, and one in 2009. The majority of the households came from different parts of Metro Manila, 30-50 kilometers away from the resettlement site.

All the 76 legitimate household beneficiaries in BT were interviewed. As I found out later, also in Indonesia there were 'second-hand' house owners who were not victims of disaster. During my first visit to the site in 2011, I was informed that there were 170 households living in the resettlement site. But when I came back in 2012 the number was 136, and a month later it became 97. Nobody had a list of all the households living in BT, so I relied on the previous report of the community leaders. Considering the small number of households in BT, I decided to include them all in the survey. When conducting the survey I discovered that not all 97 houses were occupied and that some of the households were not original occupants, hence not my target respondents. After removing them from the dataset, the final sample size became 76.

Table 2.1 shows that the majority of the respondents in Indonesia are male (94.29%). Most respondents (68.6%) belonged to the age bracket of 41-60. Almost all of the respondents are married (97%). The majority only reached or finished elementary education (74%) with high school as the highest education level (5.71%). Over 50 percent of the respondents were either doing elementary jobs (31.4 %) or farming (25.7%). All were Muslims with but divided into two ways of practicing Islam; 68.6 percent were affiliated with Nahdatul Ulama, the others were Muhammadiyah. All were ethnic Sundanese. The average household size was 3.96 and the average household income was IDR 10,975,006.58 (973.082 USD). Nine households resettled in BT in 2001, thirty in 2002, twenty-six in 2003, three in 2004, three in 2005, one in 2007, one in 2008, one in 2009, and two in 2011. All were victims of landslides and came from nearby villages and mountains five to seven kilometres away.

Table 2.1 Profile of the Respondents in the Philippines and Indonesia

N=150	Philippines		N= 76	Indonesia	
Variables	**%**	**Frequency**		**%**	**Frequency**
Gender					
Male	32.00	48	Male	92.11	70
Female	68.00	102	Female	7.89	6
Age					
25-35	20.00	30	20-30	3.95	3
36-45	31.00	47	31-40	23.68	18
45-55	29.00	43	41-50	34.21	26
56-65	14.00	21	51-60	30.26	23
66- more	06.00	9	61-more	7.89	6
Civil Status					
Single	5.30	8	Single	2.63	2
Married	75.30	113	Married	93.42	71
Separated	3.30	5	Widowed	3.95	3
Widowed	6.70	10			
Co-habiting	9.30	14			
Education					
Elem.school or less	25.00	37	Never been to school	3.95	3
High School	47.00	71	Elem. school or less	71.05	54
Beyond high school	27.00	41	Junior High School	19.74	15
			High School	5.26	4
Religion			**Islam Practice**		
Catholic	74.00	111	Nahdatul Ulama	67.00	51
Iglesia ni Cristo	19.00	29	Muhammadiyah	33.00	25
Others	07.00	10			
Mother tongue			* Not applicable		
Tagalog	97.30	146			
Bisaya	2.70	4			
Occupation					
Entrepreneur	16.00	24	Farmer	23.68	18
Labourer	22.00	33	Entrepreneur	13.16	10
Govt/private employee	14.00	21	Elementary occupation	31.58	24
Housewife	32.70	49	Govt/private employee	7.89	6
Retired	2.00	3	Housewife	5.26	4
Unemployed	16.00	24	Others	15.79	12
Household Size					
1-3	18.67	28	1-3	34.21	26
4-6	54.00	81	4-6	63.16	48
7-9	22.00	33	7-9	2.63	2
10 or more	5.33	8			
Household Income Quartile (Philippine peso, PhP)			**(Indonesian rupiah, IDR)**		
<48000	25.00	36	<4560000	25.00	19
>=48000 and <90000	25.00	35	>=4560000 and <9000000	27.63	21
>=90000 and <130656	25.00	36	>=9000000 and <14850000	22.37	17
>=130656	25.00	35	>=14850000	25.00	19

Table 2.1 cont.

Present Address					
Plains	60.70	91	RT 1	26.32	20
Suburban	39.30	59	RT 2	36.84	28
			RT 3	32.89	25
			RT 5	3.95	3
Year Resettled					
1999-2002	55.30	83	2001-2004	89.47	68
2003-2006	44.00	66	2005-2008	6.58	5
2009	0.70	1	2009-2011	3.95	3

Social Network Analysis
Chapter 6 of this book is dedicated solely to the discussion of the community-level social network in Indonesia and the social networks of community-leaders in the Philippines. Social network analysis (SNA) was utilized in the investigation of the networks. SNA is a set of theories and tools that aim to detect and interpret the patterns of social times among actors (Nooy 2005).

As mentioned earlier, the collection of data on the respondents' network in Indonesia was part of the household survey. In the Philippines, the gathering of data regarding the networks of the community leaders was done separately from the household survey. A one-page questionnaire that contained all the names of the household heads in the Indonesia community was prepared, while in the Philippines the names of all the leaders in all the phases in KV1 were listed. In the interview with the household heads (Indonesia) and community leaders (Philippines) they were asked how they would classify each individual in the questionnaire - don't know; acquaintance; or friend – and a code was used for each category.

Data Processing and Analysis
The data collected qualitatively were audiotaped, videotaped, and noted in the field diary. The Philippine data were subsequently transcribed, the Indonesia data transcribed and translated. Secondary data and primary data were checked and sorted. Qualitative data were subjected to qualitative content analysis. Primary and secondary data as well as qualitative data were used to validate and complement the quantitative data. The quantitative household and social network data were checked for inconsistencies, then coded and entered into Excel. Later on they were migrated to the Statistical Package for Social Sciences (IBM SPSS Statistics 19) and STATA version 11 for analysis.

2.1.3 Reflections on Ethics and Fieldwork Experience

Doing fieldwork in two different contexts was tougher than I had anticipated. Issues that are neither mentioned in field methods textbooks nor taught in the graduate school emerged unexpectedly. However, in the end they made the fieldwork experience more exciting and enriching.

Let me first report the ethics-related issues. Securing consent for the fieldwork in a community should not only be done from the respondents themselves but also from those who are in charge and powerful in the community. The people at the top should give their endorsement and approval from their level down to the community leaders.

Without this, fieldwork would be impossible. In the Philippines, this entailed a lot of courtesy visits to the people in charge, leading me to the community leaders in KV1 who then helped me in the conduct of the fieldwork. In Indonesia, it was another story. Apart from the research permit which I had to secure from four different levels of government (central government, province, district and sub-district), I also needed to gain the social approval of the RW and RT leaders and the elders in the community. This necessitated several visits to their homes and attending *slametans* (parties). Speaking some Bahasa Indonesia helped a lot. The rapport I was able to establish with them trickled down to the households in Bantarpanjang Translok. However, this kind of rapport building also spawned an issue. Some elders tried to take over my fieldwork in terms of choosing FGD participants, venue for FGDs, people I should interview, etcetera. It was crucial to make clear that I would be the one to decide on these matters without offending them and putting a strain on my relationship with them. I left the community still friends with everybody. I also realized how a small token of gratitude could go a long way. I would never visit these individuals without bringing them something, usually food. They would always tell me not to do this, but I felt that they appreciated that I was thankful for their time and assistance. In return they would also offer me food or would even invite me for meals at their home.

Before the start of the survey the respondents would be informed that the information they would share would be held confidential and their names would not be revealed. This was part of the introduction spiel for every interview. However, it was different when I had to interview gang leaders in KV1. I had to convince first the community leaders about the confidentiality of the interview so they would lead me to the gang leaders they knew. A police officer insisted to accompany me during the interview to ensure my safety, but I declined because I thought I would not get truthful answers with a police officer present. I conducted the interview with each gang leader in the presence of the community leader who had led me to him.

In Indonesia, an encompassing issue that I had to come to grips with was familiarizing myself with the social norms in the community. The interviews would stop at 11:00 a.m. and at 3:00 p.m. because interviewers and respondents had to perform their prayers. The respondents, no matter how poor they were, would offer snacks during the interview and it would be impolite if any of it would be left untouched. I never declined any invitation to attend a community meeting, a dinner or snacks at a respondent's or elder's place. My homestay family told me it would be impolite to decline such invitations. However, each time I would go I would also bring something for the family. I also had to learn that I had to take off my slippers once I entered a house and always reach out my right hand for a handshake.

2.2 Part Two

2.2.1 Calendar Method[5]

Since the collection of retrospective data was central to this study, a data collection methodology was chosen that would be best suited for that task, i.e. – as explained below - a tailor-made calendar method. Moreover, in order to get further insight in the quality of the retrospective data obtained, methodological sub-studies were carried out. This part of Chapter 2 discusses both the rationale of the calendar method as well as the empirical results on data quality of the current study. In doing so, this chapter also presents further details about the study design, operationalizations and measurement instruments as employed in the household surveys in the Philippines and Indonesia.

Collecting extensive retrospective data such as life histories in the field of social sciences has been fraught with recall errors compromising the quality or even the validity of the data collected (Glasner and Van der Vaart 2009). Data collection of life histories gets even more challenging when it has to be done with hard-to-reach populations such as households who are victims of involuntary displacement and resettlement. These people have a low level of income, education and literacy, live in complex societal situations and have low trust in authorities (Colson 1991).

Calendar instruments have been found to be a good substitute for longitudinal research and an effective way to collect retrospective data from life histories (Freedman et al. 1988; Belli 1998; Glasner and Van der Vaart 2009). The calendar provides respondents with a graphical time frame in which life history information can be represented. The method enables them to visually relate events to each other, thereby deriving timing and content cues from the autobiographical context. For the researcher, the method makes it easier to discover incompleteness and inconsistencies in retrospective reports. Unlike the conventional interview, calendar interviewing maximizes the quality of recall by using what is available in the structure of autobiographical memory (Belli 1998). Furthermore, the utilization of conversational interaction and graphical time frames to collect life history information, may enhance respondent motivation and recall accuracy (Belli and Callegaro 2009; Nelson 2010). Compared to conventional questionnaires, the calendar method yields greater recall accuracy as regards the

[5] This section has been published/accepted as:

Quetulio-Navarra, M., Van der Vaart, W., and Niehof, A. (2012). Data Quality in the Application of Tailored Calendar Methods in Hard-to-Reach Population: Results and Lessons. Conference Proceedings. *ACSPRI Conferences*, *RC33 Eighth International Conference on Social Science Methodology*, April 9-13, 2012, Sydney, Australia, pp. 1-23.

Quetulio-Navarra, M., Van der Vaart, W., and Niehof, A. (2012). Application of Third-Party Help in a Hard-to-Reach Population. Book Chapter. In: *Good Work: the Ethics of Craftsmanship*, H. Kunneman (ed.) Amsterdam: Humanistics University Press, 2012 - ISBN 9789088504181 - pp. 197 - 210.

Quetulio-Navarra, M., Van der Vaart, W., and Niehof, A. Can 'Third-Party Help' Improve Data Quality in Research Interviews? A Natural Experiment in a Hard to Study Population. *Field Methods*. Accepted in February 2014 and for online publication in 2015.

number of reported events, dates and characteristics of events (Van der Vaart 2004; Yoshihama et al. 2005; Belli et al. 2007; Van der Vaart and Glasner 2007). The application of the calendar method in this particular study helped to trace the formation of the households' social capital from a year before the resettlement until 2011 in the Philippines and 2012 in Indonesia.

2.2.2 Structure of the Calendar Instrument

The calendar instrument in this study served as a visual aid as well as a data entry tool for both the interviewer and the respondent (cf. Van der Vaart 2004; Van der Vaart and Glasner 2007; Belli and Callegaro 2009). The instrument differed by form between the two settings. In the Philippines, where the calender instrument was first applied, paper and pencil were used, while in Indonesia I used an electronic data entry programme. Changing the form into an electronic one for Indonesia was a result of the experience in the Philippines where the processing and encoding of the voluminous data collected had proven to be very time-consuming.

The electronic data entry program saved me a lot of time and resources since I did not need to hire encoders for entering the data into an Excel database and wait for the encoding of the data to finish so I could proceed to data processing and analysis. While doing the interviews, the interviewers directly entered the answers in the Excel programme. At the end of the day, I collected the data and saved them in two external drives for back-up. Like in the Philippine survey, I checked the interviewers' work every night for inconsistencies and omissions that would have to be addressed the following day. Having all the data readily available at the last day of survey allowed the quick setting up of the database and the application of relevant statistical tests.

The questions in the instrument are modifications of the social capital measurement tool developed by Krishna and Shrader (2000). The calendar collected information on the following six major life domains of the respondent who is a household head:

1. Respondent's marital history
2. Children's information (e.g. residency status, schooling)
3. Household-related information (e.g. household size, household income)
4. Physical features of the community (e.g. number of basic services, number of public places)
5. Respondent's social engagement (e.g. number of friends made, number of acquaintances made)
6. Respondent's perception of the community (e.g. whether the community is peaceful or not)

Under these major life domains are sub-domains (see Appendix 1). The calendar instrument has two kinds of reference periods: the 'timeline' and the 'before resettlement and after resettlement' periods. The maximum timeline in the Philippines spanned 14 years (1998-2011), in Indonesia it was 13 years (2000-2012). The 'timeline' section asked the history of the respondent on particular areas (e.g. marital status, making acquaintances and friends, participation in social activities, etc.) from the year before the resettlement until the time of the survey. The respondents had different years of entry in the community, hence their reference period likewise varied. On the other hand, the 'before and after' section required answer from the household head on the

period before the resettlement and the period after the resettlement without particularly focusing on specific years. The 'timeline' calendar was organized by year from a year before the resettlement until the survey year. Each year was already written/encoded on the tool. The interviewer only had to cross out the years that did not apply to the respondent or disregard the years that are not applicable (laptop mode).

There were three general types of entries for the above domains. Some domains like the respondent's information and social activity sections required the entry of words, numbers, or codes, for example information on names and numbers of friends. Other domains that focussed on durations, like employment history and visitation periods to public places, required the respondent to drag a line from left to right on the horizontal grid. Some domains required the combination of dragging a line (for paper and pencil mode) and entry of a code. A sample filled-out paper and pencil mode calendar instrument can be found in Appendix 2 and a copy of the calendar tool is in Appendix 1.

Key features of the calendar instrument

The calendar instrument has both features that it shares with similar instruments and unique features. First, the order of the domains in the instrument is arranged in such a way that they serve as retrieval cues in the interview process. The first thematic domains elicit information that have been time tagged and can easily be retrieved with relatively high accuracy, such as the marital status history and birthdates of the children. These thematic domains then spin off into much more detailed areas such as number of kids in school in particular years, household composition, employment, etc. In addition, during the course of recollection of information, the interviewer would use the "year before resettlement" and the "year they resettled" as landmarks, which varied according to the year the respondent transferred to the community.

Second, the visual nature of the survey tool enables the interviewer and the respondent to do real-time checking for flaws in the data, such as gaps in the timeline for employment/unemployment, household income and school attendance of children. The interviewer can probe deeper or ask for clarifications on some striking answers or disparities like in the case of a sudden drop or increase in the number of friends or acquaintances made in a particular public place or social activity. So, unlike the standard survey questionnaire, this instrument is flexible in a way that it allows the respondent to choose the order of answering in the different domains, while interviewers can go back and forth on the different sections or themes on the questionnaire.

Third, a customised training was conducted with the interviewers. The interviewers were experienced enumerators, but they were used to do standard interviews that need only a little probing and last for only 30 minutes to an hour. Several workshops were conducted to orient them on the calendar instrument and at the same time refine it. They were trained on how to fill out the instrument, do the right amount of probing, help respondents recall, avoid prompting the respondents on their answers, check gaps and inconsistencies, and lastly how to establish rapport with the respondent and maintain their participation in the interview for two to three hours. Series of mock interviews were done among the interviewers themselves as well as pilot testing of the tool. Subsequently, the necessary revisions were made.

A significant modification of the calendar instrument that is a unique feature of this study, is the opportunity for respondents to answer parts of the calendar interview "with help of third parties" or "without help of third parties". During the pilot testing it could be observed that some respondents asked for help and in the recollection of information and other household members and neighbours were eager to help. The modification was to add a particular section to the tool that asks for the name of the "helper" as well as his or her relationship with the respondent and to mark the sections on the tool where assistance was needed. It is assumed that 'helping' is related to data quality. Whereas 'helping' might be an indicator of 'lower data quality' since the respondent apparently needs help, 'higher quality' may actually be achieved because the respondent is gaining help. Since it became clear that allowing help of third parties during interviews would be unavoidable, it was decided to perform a natural experiment within this study to evaluate the consequences of third party help for data quality.

The involvement of 'bystanders' or 'third parties' in research interviews is contested and its benefits are not self-evident. In standard survey interviews it has long been a golden rule that only the selected respondent should be interviewed and that no other person than the interviewer should be present during the interview (Fowler and Mangione 1990). However, research has demonstrated that third party presence does not always influence data collection negatively (Edwards et al. 1998; Boeije 2004). A study of Aquilino (1993) showed that presence of the spouse can be positively associated with increased report on sensitive information about the marital relationship. The studies of Taietz (1962) and Silver et al. (1986) did not find any significant positive or negative effects of third party presence on the quality of the respondent's reports on objective information. The strict rules for standard interviews were also questioned by the emergence of 'conversational interviewing' (Conrad and Schober 2005), which allows interviewers to reformulate questions while containing the meaning of the question. Flexible interviewing styles are common in calendar studies, combining conversational interviewing with scripted questions and going through the various life history domains in a flexible way (Belli 1998; Belli et al. 2007). Belli et al. (2004) report that bystanders hardly emerged themselves in the interview and they found no difference between conventional interviewing and calendar interviewing.

None of these studies examined purposeful active involvement of third parties in answering questions, even for situations in which the requested information is 'shared information' (e.g. about a community) that is not available in documents but is known by many members of a population. Also personal or family-related information might be shared socially between community members, particularly in more collectivistic oriented cultures. Collaborative recall is generally found to increase accuracy of shared information (Karns et al. 2009). This may be explained by the fact that different people may remember different aspects of the event which together will lead to more accurate recall (Harris et al. 2008; Karns et al. 2009).

The overall quality of the data collected through the calendar tool modified with respect to the participation of 'third party help' was investigated and the results are shown below.

2.2.3 Results of the Calendar Method Application

Considering that the calendar tool relies heavily on the recall capacity of the respondents even though aided by the parallel domains and landmarks in the instrument, data quality cannot be taken for granted. Hence, the issue of data quality became a specific topic of investigation. The investigation did not cover both settings, it only utilized the Philippine data of the 150 respondents. The results were already reported in three papers, of which two have been published and one accepted. What is presented here is the abridged version of the sub-study on overall quality of the data collected through the calendar instrument and the quality of the data collected with 'third party help'.

The results below not only illustrate and analyse data quality, but also present an impression of patterns in the longitudinal data. The numbers are too small to do further longitudinal analysis, but some descriptives figures will be presentend over the full 12-years (and longer) recall period.

I. Overall quality of the data collected

To investigate the quality of the retrospective information on the social capital of the Philippine resettlers obtained by the calendar tool, the following questions were addressed.
What are the indications of data quality in terms of:

1. recall accuracy regarding dating of events
2. decay with time and heapings in time in the longitudinal pattern of reports
3. completeness of reports, including "don't know" answers
4. respondent and the interviewer evaluations of the calendar method.

Topics studied included: dates of availability of public services, visits to public places, community activities, organisation memberships, number of friends and acquaint-ances, and number of individuals for support.

The data were measured based on different forms of reports:

1. Actual dates for the basic public services.
2. Actual 'numbers' reported for each year of the recall period, a) regarding the number of friends, acquaintances and visits to public places b) participation in community activities, number of friends and acquaintances.
3. Names of people or organisations (number of names was counted for analysis): (a) membership in organisations, (b) individuals they had frequent face-to-face interaction with, (c) individuals they frequently relied on for support, (d) leaders for particular community issues, and (e) third-party help.
4. Instances of transitions for each year were summed into numbers for: (a) change in household size, (b) job change, (c) job loss, and (d) sickness in the household.
5. Scales for the evaluation of the calendar instrument.

The data obtained through the application of the calendar tool were evaluated in terms of the *data quality* indicators discussed below. In addition, to make the analysis of the data results more enriching and meaningful, triangulation of the findings with those of ethnographic research was done by using in-depth and key informant interviews, non-participant observation, focus group discussions, and archival data collection.

Accuracy of dates
The accuracy of date reports was analysed by looking into the deviations between the reports of the respondents on the operational years of particular neighbourhood services and validated (existing) data that served as a standard for comparison.

Heaping and decaying
Another promise of the calendar tool is that "heaping" of answers on major time points is significantly avoided as well as the "decaying" or declining of answers with the passing of time (Tourangeau, 2000: 1348). The existence of heaping does not mean by definition that this is an artefact, it may be a 'true' heaping. Heaping may also include 'rounding', which stands for higher reports of round or convenient numbers or dates (like 5 and 10, or 1995 and 2000), in demographic research referred to as digit preference. To check whether there was evidence of "heaping" and "decaying" in the reports of the respondents, the frequency of reported events on several domains are scrutinized at a yearly rate.

Completeness of KV1 calendar tool timelines
The completeness of the timelines was examined in terms of the number of gaps or omissions in the timelines as well as domains skipped or never answered.

"Don't Know" answers
A high level of "don't know" answers on particular questions is considered an indication of low data quality. The frequencies of "don't know" answers were summed for analysis.

Third party help
It is assumed that 'helping' is related to data quality, though it is not clear beforehand whether 'helping' might indicate lower or higher data quality.

Respondent evaluation
The evaluations of respondents are examined as data quality indicators. More positive evaluation scores are associated with higher data quality (Freedman et al. 1988; Belli et al. 2007).

Field results

Interview duration
The mean time taken to complete the KV1 survey was 101.9 minutes. Table 2.2 shows the bivariate association between the interview duration and several demographic and socioeconomic characteristics of the respondents. The presence of "third party help" induced a longer mean time spent on the interview (101.5 minutes) than an interview with no "third party" involved (95.9 minutes; t=2.9065.1, p=0.004). All other background variables were unrelated to interview duration (see Table 2.2)

Table 2.2 Mean Time Spent (in minutes) in Completing the Questionnaire

Variables	Mean	Chi-Square	P-value
All respondents	101.9		
Gender		0.98	0.32
Male	97.8		
Female	98.6		
Age		0.13	0.99
<29	111.4		
30-39	100.6		
40-49	98.7		
=>50	95.3		
Marital Status		1.47	0.99
Single	114.6		
Married	97.9		
Separated	99.0		
Widowed	92.0		
Cohabiting	97.5		
Education		1.96	0.96
Elementary school or less	100.7		
High School	101.3		
More than high school	97.8		
Occupation		2.44	0.96
Farmer	92.5		
Entrepreneur	98.9		
Labourer	113.3		
Government/private employee	98.2		
Housewife	95.5		
Retired	72.5		
Household size		3.29	0.92
1-3	89.6		
4-6	97.9		
7-9	100.3		
10 or more	116.9		
Entry Year		5.73	0.57
1999	87.5		
2000	100.2		
2001	96.1		
2002	93.3		
2003	94.1		
2004	90		
2005	92.5		
2006	85		
Mother Tongue		0.51	0.47
Tagalog	98.3		
Visayan	101.3		
"Third Party Help"		5.1	0.02*
Without help	95.9		
With help	101.5		
HH Income Quartile		3.12	0.37
<48000	102.4		
>=48000 and <90000	93		
>=90000 and <130656	94.4		
>=130656	103.7		

*significant at p<0.05

Accuracy of dates

Part of the Event History Calendar is the Neighbourhood History Domain that asked respondents to recall historical information about the availability of basic services and public places in the community like electricity, water, and school, among others. The accuracy or correctness of dates (year when a public service started to become operational) gathered through the Event History Calendar was checked against the dates constructed on the basis of interviews with program managers, local government leaders, and community leaders as well as archival data.

As shown in Table 2.3, deviations from the correct years were discovered in the recall of the respondents on the time basic services became available or operational. These deviations range from one to four years. Among these services, school got the highest recall rate accuracy (88% correct dates), while electricity got the lowest recall accuracy (44% correct recall). The low rate of recall on electricity can be explained by the fact that some of the respondents still do not have an electricity connection because they cannot afford the fees. They rely on candles and gas lamps, and if they have extra money they tap their neighbour's electricity connection at an agreed amount. So the date at which electricity became available is not so salient to them. On the other hand, the high recall rate for the school operations shows the importance of schools in a resettlement community. In this case, the respondents' memory on this topic may strongly be associated with negative experiences. In-depth interviews and desk research revealed that during the early years of Kasiglahan Village, the absence of schools was a big issue. Families relocated to the site without a school facility for their children. Strong complaints were lodged to the Project Management Office (National Housing Authority) and several months later (in 1999), some unoccupied housing units were converted into classrooms. One unit would hold around 50-100 students with one teacher, and some students needed to bring their own chairs to ensure that they would have a chair to sit on during classes. A year later, a small school was constructed in the community. But still, it was not enough to accommodate all school-age children in the community, so classes were held in three shifts. All these issues may have contributed to the saliency of the school becoming operational and may thus have enhanced recall.

Table 2.3 Deviations Between Respondents' Report of Basic Services Operational Date and Composite Measure of Operational Date

Deviations (in years)	Water %	Electricity %	Daycare %	School %
0	49	44	56	88
1	40	20	15	12
2	11	19	18	1
3	0	15	11	0
4	0	1	0	0
TOTAL	100	100	100	100

A correlation test on these recall deviations and socioeconomic and demographic variables, only revealed a relationship (of -0.524) between day care centre recall and resettlement year. Regression output shows a significant relationship between the deviation of day-care recall (in years) and the resettlement year, as the resettlement year increases by one year the deviations (in years) in day care recall decreases by 29 percent (-0.28758). This implies that the recall error decreases with time. This can be explained by the construction of different day care centres in different areas and in different years (mostly in later years 2005-2006).

Heaping and decaying: explorative instpections
Tables 2.4 to 2.7 below present retrospective reports as gathered in 2011 ("year 13" since resettlement) about activities and information regarding all preceding years ("1 to 12"). The patterns in the reported data are scrutinized for patterns of 'heaping' and patterns of decay. While all reported patterns can be true, the rationale is that recall bias might be recognized if data show very specific patterns. In case of 'decay' the pattern would show a clear decline of reports for more remote years (so for years closer to year 1). In case of 'heaping' the pattern would have the form of very clear 'peaks' in the data: certain year reports might show specific high levels, a bias that may occur if people report more activities for 'rounded' years or periods, or for years/periods at the borders of recall periods. Its too far-fatching here to perform an in-depth analysis of the patterns in all the reported variables; the tables below will be evaluated at face value for potential (extreme) heaping and decay patterns. The absence of such patterns doesn't guarantee that data quality is high, but their presence at least would be warning signal.

Heaping and decaying were inspected in frequency reports of the respondents that reflected the trajectory of their social behaviour, particularly regarding public places, community activities, social function, and individuals frequently met. Reports on these events were plotted yearly and to homogenize the respondents who came in the site in different years, the years were organized and labelled as before resettlement (BR), first, second, third, fourth, until 12th year during resettlement. Year 13 was dropped since it only covered five to eight months. The yearly rates of occurrence and frequencies were plotted over the 12- year calendar period. The yearly rate was calculated as number of events, number of friends or acquaintances, and number of individuals in a year divided by the sample size for that year.

Table 2.4 presents the figures for the variable 'Visits to public places'.The average rates shown in the table do not reflect a clear heaping pattern.There also seems to be no visible decay with passing of time: more often frequencies increase with time.

Table 2.4 Mean Numbers of Visits to Public Places, as retrospectively reported in 'year 13'.

Public Place	Before	After Resettlement (Year of Stay)											
		1	2	3	4	5	6	7	8	9	10	11	12
Deep well	200	365	334	302	255	231	223	193	179	151	150	115	41
Well	174	202	207	154	135	100	93	82	68	67	60	52	60
Public faucet	110	138	140	119	109	103	63	30	50	61	133	162	216
Sidewalk	196	244	229	229	228	226	226	232	229	225	249	257	268
Church	60	74	67	66	67	65	63	64	67	65	49	44	46
Basketball court	12	19	16	16	16	13	13	13	13	15	10	7	7
Stores	275	307	303	301	304	296	302	295	293	285	287	292	286
Wet market	247	251	198	203	206	206	205	202	209	208	207	202	199
Day-care centre	15	16	26	24	23	21	29	35	27	18	19	21	29
School	30	33	31	38	41	39	42	43	44	43	33	31	23
Health centre/ hospital	4	4	3	4	4	7	6	6	6	8	7	5	7
Multi-pur. hall	5	7	6	7	6	11	21	25	17	14	10	15	17
Internet shop	0	6	6	6	6	6	9	8	5	6	9	2	3
NHA office	1	13	12	12	13	11	11	11	12	13	1	1	1

In the same vein, no consistent heaping and decay are visible in reports on: acquaintances made in public places, friends made in public places, and numbers of acquaintances and friends made during community activities.Thus, there are no signs of serious recall error.

Membership in organisations

Table 2.5 presents the percentages of respondents who retrospectively reported (in "year 13") to have joined various associations present in the community.

Table 2.5 Membership in Community Organisations (percent to total respondents), as retrospectively reported in 'year 13'.

Organisation	Before	After Resettlement (Year of Stay)											
		1	2	3	4	5	6	7	8	9	10	11	12
Homeowner's Assoc.	11	36	36	39	43	44	45	48	46	47	45	44	40
Neighb. Assoc.	3	3	5	5	5	5	5	6	6	6	6	5	4
Transportation Group	2	1	2	2	2	3	3	2	1	1	1	2	2
Federation/Alliance	0	1	1	1	1	1	1	1	1	1	1	2	2
Cooperative	2	4	4	5	6	7	6	6	7	5	4	5	8
Religious group	8	11	11	11	11	13	15	14	13	14	18	11	9
Parent-Teacher Assoc.	4	4	6	7	7	7	8	8	9	11	8	10	8
Women's/Men's Grp.	3	5	5	6	6	7	8	8	9	13	7	6	6
Fraternity/Sorority	2	3	3	3	3	3	3	3	4	4	5	6	8
Employees' Union	1	1	1	1	1	1	1	1	1	2	1	0	0
Sports Group	1	1	1	1	1	2	2	2	2	3	2	2	2
Health Committee	1	1	1	1	1	1	1	1	1	2	1	2	2

The decreasing direction of the recall on organisation memberships from year 12 to year 1 (better visible from about year 7 to year 1) can be interpreted as a reflection of decay in the memory of the respondents, which can be attributed to the difficulty of the recall task. Unlike in previous questions in which the respondents were asked to give numbers, in this domain they were asked if they were members of a certain kind of organisation and if they were, they had to give the name of the organisation. This illustrates the difference between episodic memory (pertaining to concrete information) and semantic memory (estimates). No heaping pattern can be seen.

Number of individuals frequently engaged with
Respondents were also asked to give the names of different individuals they frequently engaged with for the 13-year timeline. These individuals can be their neighbours or friends, government representatives, non-government representatives, and church representatives. They could give up to 10 names for ordinary individuals and up to eight names for government, NGO and church representatives.

Table 2.6 Average Number of Individuals Frequently Engaged with, as retrospectively reported in 'year 13'.

Individuals	Before	After Resettlement (Year of Stay)											
		1	2	3	4	5	6	7	8	9	10	11	12
Persons freq. met	5	6	6	6	6	6	6	6	6	7	6	7	7
Gov't. reps.	0	1	1	1	1	1	1	1	1	1	1	1	1
NGO reps.	0	0	0	0	0	0	0	0	0	0	0	0	0
Church reps.	0	1	1	1	1	1	1	1	1	1	1	1	1

Table 2.6 presents the effect of recall task when collecting episodic memories and semantic memories. Unlike in the previous domains (public places and community activities) where respondents reported quite a number of friends made, they reported few individuals whom they frequently engaged with. Apart from this, some decay pattern may be recognized for 'persons frequently met'. No heaping is reflected.

Average number of persons usually relied upon
Apart from eliciting the foregoing information, respondents were also asked to give the names of the person they would frequently ask for help on different matters for the 13-year timeline. They could give up to eight names.

There are no patterns of heaping and decay found in Table 2.7, but it is surprising that the numbers on this domain are extremely stable. There could be some amount of bias in the recall. The interviewers reported that questions on this domain would usually instantly generate lament from the respondents on how hard it is to get help from the community, how everybody is poor and that they can only rely on few individuals such as their spouse, eldest child, in-laws or close friends.

Table 2.7 Average Number of Persons Relied on for Assistance

Need	Before	After Resettlement (Year of Stay)											
		1	2	3	4	5	6	7	8	9	10	11	12
Emotional support	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.1
Food security	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5
Money	1.8	1.9	1.9	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.9	1.8	1.8
Job	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Child care	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.7
Emergency	1.4	1.4	1.4	1.4	1.3	1.3	1.4	1.4	1.4	1.3	1.3	1.3	1.3
Water	0.4	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Electricity	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Health	0.4	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4
Education	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3
Home improvement	0.8	1.0	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0
Comm. improvement	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.3	0.3	0.2
Business opportunities	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Completeness of KV1 calendar tool timelines

Thorough inspection of the 150 filled-out calendar questionnaires revealed that there were no gaps or omissions in the timelines for all domains. This is an indication of good data quality, which can be attributed to the thorough training of the interviewers and the constant reminder to them that they should go over the questionnaire again and check for timeline gaps or domains missed before leaving the respondent. Apart from this, the researcher and the research assistant would do routine checking of the accomplished questionnaires. Illegibly written codes or answers and unclear marginal notes the interviewer wrote on the tool during the interview were verified and clarified. An example is a blank timeline on household income, which would mean that the household did not have an income in a particular year but just relied on food rations.

"Don't Know" answers

Questions in Section P of the tool required respondents to give the name of the person who acted as a leader in the community in problematic situations. Regarding school-related issues, 31 out of the 150 respondents answered "don't know" before resettlement and after resettlement there were 29 "don't know" answers (Table 2.8). Twenty-nine interviewees did not know who acted as their leader in violence-related issues in their previous community and after resettlement 24 did not know this. Thirty-two persons likewise replied "don't know" when asked to give the name of their leader in the disaster situation before resettlement, which figure decreased only by 1 after resettlement. This can imply that they really did not know the names of the leader or they could not recall them. Either way, the before-after differences are negligible.

Table 2.8 Frequency and Percentage Presentation of "Don't Know" Answers

Question	Frequency		Percentage	
	Before Resettlement	After Resettlement	Before Resettlement	After Resettlement
Leader in solving school-related issues	31	29	20.67	19.33
Leader in solving violence-related issues	29	24	19.33	16
Leader in solving disaster-related issues	32	31	21.33	20.67

Third Party Help

More than one-third of the respondents mentioned "fast recall" as the reason for asking help from a third party during the interview (Table 2.9a). The intervention of the third party was only allowed in domains that aimed at collecting information about the household across the 12-year timeline period, such as changes in household size, employment status, job change, and sickness status of the household members.

Interview evaluation

Most of the respondents (43%) found the calendar interview easy, while 21 percent found it hard (Table 2.9a). Seventy-nine percent enjoyed the interview session and four percent did not. These results are complemented by the ratings given by the interviewers to the sessions they undertook with the respondents. They considered 71 percent of their interviews as easy and with 76 percent enjoyment rate (Table 2.9b). When one respondent was asked why she enjoyed the interview, she replied with a delight that the session made her remember old friends who helped her long time ago.

Table 2.9a Interviewees' Evaluation Rating

Interview Rate%			Enjoyment Rate%			Reason for "Help" %		
Easy	Moderate	Hard	Did not Enjoy	Moderate	Enjoyed it	Sickness	Fast recall	Others
43	36	21	7	14	79	6	78	16

Table 2.9b Interviewers' Evaluation Rating

Interview Rate%			Enjoyment Rate%		
Easy	Moderate	Hard	Did not Enjoy	Moderate	Enjoyed it
71	20	8	5	19	76

Conclusions and discussion on applying the calendar instrument

The instrument was able to capture the different transitions in the lives of the households from a year before the resettlement until 12 years later. The quality of the data thus obtained could be investigated and the questions raised regarding data quality can now be answered.

The high rate of recall on the history of the operation of some of the basic services in the community shows how the tool triggered recall among the respondents. The 88 percent recall rating on the school issue corroborates previous findings on the effective-

ness of landmark events pertaining to children in the facilitation of high-quality recall. The absence of a school for their children was quite an issue among the parents and the events that followed further fossilized their memory on it. The low incidence of "don't know" answers also indicates good data quality. Hardly any heaping was found in the data. No signs of classical recall error and decay with time were found for most of the issues. The pattern of stable or changing frequencies, or frequencies that decreased toward the present, could often be explained by situational factors (e.g. the unavailability of water services explaining visiting the public faucet or wells). Although there is little evidence of recall bias, on certain specific issues, e.g. when names were asked, an overall pattern of decline in numbers with passing of time seems to be visible (decay). The latter suggests recall error due to omissions in episodic memory. The question arises whether the patterns in findings that show no clear signs of recall bias can be attributed to estimates (reconstructions based on semantic memory) and how correct these estimates are.

The absence of gaps in the completion of the timeline is also a positive indicator of the suitability of the tool. This may be credited to the visual feature and landmarks of the instrument coupled with the training of the enumerators plus the constant reminder to check for completeness before finishing the interview. The ability of the interviewer to establish rapport with the respondents was important for sustaining the participation of the respondents. The interviewers reported that there were times when the respondents would show impatience because of their impending household chores or a crying toddler, but the interviewers would politely and cheerfully request for their continued participation and the respondents would oblige. Sometimes the interview was done while the respondent was cooking lunch or taking care of a child. The weather could be very hot and there was no electric fan. It was imperative for the interviewer to remain focused and resilient in such circumstances. No timeline skipped and domains missed means more reported events. Additionally, the instrument was also found appropriate for a hard-to-reach population. All in all the outcomes do not signal serious weaknesses in the retrospective reports. This is reassuring for data quality and given the rather difficult recall task this suggests that the event history calendar functioned well.

In addition to the calendar method, this study contained another specific procedure regarding data collection: a natural experiment with 'third party help'. The impact of this procedure on data quality is examined in the next section.

II. Impact of 'third-party help' on data quality

Some respondents were helped by bystanders in answering questions, a situation that emerged in the pilot interviews. Recognizing this challenge in the data collection process, our study expanded the calendar method by introducing a social feature. We designed a natural experiment in which the option of "third party help" was added to the our calendar method for certain parts of the interview. The impact on data quality of third party help in a calendar interview was explored. The question to be answered was: what is the impact of "third-party help" in a flexible calendar interview on the quality of retrospective data as collected from a hard-to-reach population?

Natural field experiment
Allowing a "third party" to help the respondent in answering questions in certain sections of the calendar instrument could be called a natural field experiment. Help was allowed only for non-threatening or sensitive information. Although help could be initiated by the respondent, it usually was spontaneously offered by bystanders. The "helper", a household member, neighbour or friend, was allowed to give suggestions, but the respondent had to give the definitive answer. In the calendar tool the name of the "helper" and his or her relationship with the respondent was registered and sections where assistance was provided were marked. Help was restricted to reports on:

1. Names of leaders for particular community issues.
2. Actual dates for the start of new basic services (like electricity).
3. Number of transitions in each year for: (a) increase or decrease in household size, (b) job change, (c) job loss, and (d) sickness in the household.

The usual census definition of a "household" was followed: people living under one roof and sharing household resources. "Job change" refers to situations in which the wife or the husband left the previous job and started a new one, and "job loss" pertains to the instance in which the wife or the husband lost employment or a job. "Sickness" pertains to any type of illness of any member of the household.

Except for reports on names of leaders, the 'help allowed' sections were lumped together in the questionnaire. Instructions were given to respondents and helpers on the sections where 'help' was allowed and it was made clear that the helper could leave the interview when assistance was no longer needed. The distinction between shared (help allowed) and private (help not allowed) mode of reporting was established to enhance recall of shared information as well as to ensure more self-disclosure and less social desirability bias on personal questions (de Leeuw 2005).

Data Quality Indicators
Data quality indicators regarding the reports were established and are largely similar to those used in the above section on 'overall data quality':

"Don't know" answers regarding 'names'. A high level of "don't know" answers on names of certain community leaders was taken as an indication of low data quality. "Don't know" answers were summed for analysis.

Accuracy of dates. The accuracy of date reports was analyzed by comparing reports on the operational years of particular neighbourhood services (like the availability of electricity) with existing archival data.

Number of reported household-related transitions. Given the fact that retrospective accounts will involve memory loss, it was assumed that when comparing the conditions "help" and "no help" higher numbers would indicate higher data quality (cf. Becker and Sosa 1992; Jacobs 2002).

Respondent evaluation. In addition the evaluations of respondents were examined as data quality indicators. More positive evaluation scores have been shown to be associated with higher data quality (Freedman et al. 1988; Belli et al. 2007).

To validate and complement the retrospective data gathered through the calendar the following sources were used:

1. Interviews with some community leaders and residents in the site;
2. In-depth and key informant interviews to gather information on key persons in the community and on the history of the resettlement project;
3. Archival data collection regarding the construction dates of the public places and basic services, physical profile of the site, and profile of the resettled households.

Results

"Third Party Help": general characteristics

Out of the 150 respondents 55 had "help" from either family members or neighbours. Reasons mentioned for asking or accepting help were "fast recall" (78%) and "illness" (6%), while the remaining respondents reported other reasons. Table 2.10 shows that the 'with help' and 'without help' groups were quite similar regarding age, marital status and educational level, but that there were differences regarding gender, distance to their place of origin and occupation.

Table 2.10 Characteristics of Respondents According to Receiving Help or Not

Variables		With Help % N=55	Without Help% N=95	Chi-square/ *Kruskal Wallis	P-value
Sex				7.225	0.007***
	Male	32.0	24.0		
	Female	68.0	76.0		
Age				*6.144	0.105
	<29	3.3	2.1		
	30-39	27.3	30.5		
	40-49	32.7	36.8		
	=>50	36.7	30.5		
Marital Status				0.317	0.573
	Not Married	24.7	23.2		
	Married	75.3	76.8		
Occupation				7.764	0.173
	Unemployed	17.4	40.0		
	Housewife	38.9	0		
	Element. Occupation	11.1	32.6		
	Government/private employee	16.7	12.6		
	Entrepreneur	15.9	13.7		
	Retired	0	1.1		
Educational Level				*1.419	0.492
	Elem. School or Less	24.8	22.1		
	High School	47.7	49.5		
	More than high school	27.5	28.4		
Place of Origin				*16.043	0.042**
	<30 km away	66.7	40.0		
	=<30-60 km away	30.1	23.2		
	=<61 km or more away	3.4	36.8		

significant at *p<0.10, **p<0.05, ***p<0.01

Male respondents were more likely to get "help" than female respondents. During interviews men were usually accompanied by their wife, while this was less so the other way around (men tended to be working outside). In addition, husbands were

more impatient than wives in recalling information and would then ask the "help" of their wife or children. Also respondents who came from communities nearest to the resettlement site would elicit more "help" than those who came from places further away. Households from nearer communities resettled in the site in geographic clusters and coming from the same or a neighbouring city facilitated help behaviour.

The 'with' and 'without help' groups show dissimilar (sex related) occupation frequencies caused by the 'housewife' category. It appeared that all housewives received "help" from third persons due to the fact that their neighbour friends were housewives as well (and would see them being interviewed). Thus, "help" would often come spontaneously, without the respondent asking for it. It was also interesting to see that the "helper" would show the same enthusiasm in recalling the information. The respondent and the "helper" would even do a 'high five' in case their memories on particular information matched.

Data Quality

"Don't Know" Answers Regarding Names of Community Leaders. Respondents were asked whether neighbourhood families and community leaders would gather to address issues relating to school, violence and disaster. If the answer was positive, they were asked to name the leader for each issue. "Don't know" answers, meaning not able to recall the name of a community leader before or after resettlement, were recorded for each problem area and summed. Table 2.11 shows that for each issue "don't know answers" are significantly fewer for those who had help than those who did not have help. When splitting up the numbers into between before and after resettlement the significant differences remain. Furthermore t-values indicate that for each issue the impact of help was stronger in the remote period (before resettlement: t=2.53, 2.72, 2.53) than in the more recent period (after resettlement: t=2.23, 2.07, 1.84), suggesting that help is especially effective for longer recall periods.

Table 2.11 Scores of "Don't Know Answers" of the Two Categories of Respondents (Before & After Resettlement Combined)

Variables	DK With Help	DK Without Help	DK Total DK TOTAL	T	p
Leader in solving school-related issue	29%	71%	50%	1.9	
(N=123)	(18)	(44)	(62)	3	0.05
Leader in solving violence-related issue	28.3%	71.7%	44.2%	2.7	
(N=120)	(15)	(38)	(53)	1	0.01
Leader in solving disaster-related issue	28.6%	71.7%	50%	3.2	<0.0
(N=127)	(18)	(45)	(63)	9	1

Accuracy of Date Reports. Respondents were asked to recall historical information about the years when electricity, water, day care and school services became operational in the community. In the "without help" category the year of establishing the school year is best recalled (84.0% correct dates), followed by 'day care' (55.9%), 'water services', (48.4%), and 'electricity' (44.7%). Receiving "help" by a third party did not change this rank order and resulted in very similar percentages. Only accuracy on 'school' dates is notably higher (92.6%) but the difference is not significant (χ^2=2.41 df=1 p=0.13).

Thus, "third party help" appears to be largely unrelated to the degree of accuracy of these date reports.

Number of Reported Household-Related Transitions. Reports on transitions pertained to changes in household size, sickness status of adults and children, job changes, and job losses during the 12-year period. Table 2.12 shows that "third party help" generated more transition reports in all domains, though three of the differences are not statistically significant. The figures suggest the positive value of getting "assistance" in recalling and enumerating household transitions, in particular those related to sickness and the husband's job.

The differences between 'with help' and 'without help' show no linear pattern of recall loss over time (figures not presented). However, when collapsing the recall period into recent years (1st to 6th year) and remote years (7th to 12th year) for two domains the positive impact of help appears to be significantly greater for the remote years. This applies to the reported number of sick adults (corr=-0.75; p=0.005) and reported number of 'husband job losses' (corr=-0.52; p=0.087). Thus for some issues help seems to be especially effective for remote recall periods.

Table 2.12 Mean Number of Household Transitions Per Year for Each Variable Over the 12 Year Period After Resettlement, as Reported With Help and Without Help

Variable	Mean "With Help" (N=55)	Mean "Without Help" (N=95)	Difference	T	p
Household size	0.17	0.12	0.04	1.77	0.10
Sick Adult	0.15	0.09	0.06	2.90	0.01
Sick Child	0.35	0.11	0.24	11.28	<0.01
Wife Job Change	0.04	0.03	0.01	1.56	0.15
Husband Job Change	0.06	0.03	0.03	3.23	0.01
Wife Job Loss	0.02	0.01	0.01	1.33	0.21
Husband Job Loss	0.02	0.01	0.01	2.49	0.03

* Calculated over the 12 years and weighted by the N per year.

Interview Evaluation

Not much difference was found between the evaluations by individuals who had 'help' and those who did not. Since help was allowed only for the questions on the first few pages of the tool and constituted just one feature of the interview, it may not have that much impact on the total interview evaluation.

Conclusions and discussion of applying the "third party help" option

"Third party help" increased reports on household-related transitions (like job changes and sickness) and it lowered the number of "don't knows" in recalling names of community leaders. Furthermore, it was found that for name recall and some household transitions help seems to be especially effective for remote recall periods. "Third party help" had no significant effect on recalling years of establishment of community facilities, though there was some improvement in data quality. In line with studies on 'bystander presence' that found marginal to no negative effects on data quality (Taietz 1962; Silver et al. 1986; Smith 1997), also in our case "third party help" did not worsen data quality as compared to standard interviewing. Indeed, on several indicators it actually improved data quality.

In order to judge whether these results on 'help' might be generalized to other settings, similar studies should be evaluated in context. A restriction of this study is that it focuses on a limited number of issues within only three substantive domains (names of community leaders, starting dates of community services, number of household transitions). The outcomes on 'names, dates and numbers' may be determined by this selection of topics. Also the findings might be steered coincidentally by helpers who happened to be more knowledgeable about household affairs and leader names than about basic community services.

Since this was a natural experiment we did not have control over the composition of categories of respondents. Third parties offered help spontaneously and/or respondents asked for it spontaneously. This may have led to self-selection effects (De Leeuw 2005) which may cause differences in outcomes between the 'with help' and 'without help' group. In our case, both groups hardly differed on personal characteristics. However, differences were found on variables that seem to be related to the opportunity to get help: being a man (supported by his wife) and place of origin (affiliations due to the same geographic background). These group differences do not seem to represent a selection effect, but indicates that this method, as intended, is particularly useful in populations that are typified by strong bonds between persons who often share information and who are readily available to assist during interviews. This may apply not only to our sample but to resettlement communities in developing countries in general, whose inhabitants are characterized by a shared displacement experience and homogeneity in terms of socio-economic and demographic variables. In the same vein, there are many other target groups, e.g. residents of care homes, employees in organisations, to whom this 'third party' approach might be beneficial.

The relatively high recall accuracy regarding operational years of public services and low percentages of "don't know" answers indicate that the calendar instrument resulted in relatively good data quality in general. But adding "third party help" further increased accuracy for a substantial part of the data. The costs to reach this benefit are rather low: 'help' seems to add only a little to the average interview duration (5,5 on 96 minutes) and did not lower the respondents' positive interview evaluation. These evaluations corroborate positive calendar assessments in other studies (Freedman et al. 1988; Belli et al. 2007; Glasner 2011), showing that this method is appropriate for socially and economically deprived populations.

Conclusion: Quality of data collected through calendar tool and with third-party help

The sub-study yields evidence about the usefulness and applicability of the calendar tool in social capital studies that aim to trace the formation of social capital in a community comprising of households who are economically and educationally challenged (a so-called 'hard-to-reach population'). In the light of the given data quality indicators, the tailored calendar tool was able to facilitate better recall of information among the resettled households in KV1. Nonetheless, Glasner (2011) has warned researchers that although the calendar procedures can yield data consistency and completeness, this can reflect biased reconstruction rather than high validity. Hence, careful probing is indeed necessary. The positive assessment of the respondents and the interviewers of the calendar instrument used in this study further confirms the findings of other studies as regards its acceptability and the positive evaluation of respondents

and interviewers (Freedman, Thornton et al. 1988; Belli, Smith et al. 2007; Glasner 2011).

In the same vein, the help of another person in the interview did not negatively affect data quality, but rather improved it for most issues. By means of a natural field experiment this study demonstrated that data quality in calendar interviewing can be enhanced by allowing "third party help" in reporting retrospective information. It fits to its logic that the effectiveness of "third party help" is dependent upon the extent to which *and* among whom the information probed for is shared. As long as the research design restricts "third party help" to suitable questionnaire domains and as long as it can assure that only persons who share the target knowledge are eligible to "help", then such a structured "third party help" may be a valuable addition to current interviewing practices.

Chapter 3

The Communities Before the Involuntary Resettlement and a Year Later

This chapter marks the start of the social capital building story of the involuntarily resettled households in Kasiglahan Village1, the Philippines, and Bantarpanjang Translok, Indonesia. It covers the experience of the households in both countries during the period of a year before the displacement and one year after moving to the sites. The chapter is divided into two major parts: the first part highlights the risk experience of the households after the displacement, as examined under the lens of the Involuntary, Risks and Reconstruction Model. The second part discusses the different facets of the household's transformation and zooms in on the state of their social capital before and after their transfer to the sites.

Parts of this chapter have been published/are under review as:

Quetulio-Navarra, M., Niehof, A., Van der Horst, H., and Van der Vaart, W. (2014). Short-Term Risk Experience of Involuntary Resettled Households in the Philippines and Indonesia. *Habitat International*, 41:165-175.

Quetulio-Navarra, M., Niehof, A., Van der Vaart, W., Van der Horst, H., and Suliyanto, S.E. (2012). The Disruption and Rebuilding of Social Capital During Involuntary Resettlement in the Philippines and Indonesia. *International Journal of Social Sciences and Humanity Studies*, 4(2):307-323.

Quetulio-Navarra, M., Niehof, A., Van der Vaart, W., Van der Horst, H. History and Institutions in the Rebuilding of Social Capital After Forced Resettlement in the Philippines and Indonesia. *Population, Space, and Place*, submitted in November 2013.

3.1 Risk Experience of the Philippine and Indonesian Households

3.1.1 Introduction

Resettlement studies are in agreement that the displacement of poor families worsens their poverty (Cernea 1985; Cernea and McDowell 2000). Yet, involuntary resettlement still takes place frequently. According to the latest Indonesian 'Centre on Housing Rights and Eviction Report', more than 12,000 people were reportedly evicted in July and August 2008 to give way to the "green space" land reclamation projects (COHRE 2008). In the Philippines, 59,462 households were relocated in the period 2001-2006 (HUDCC 2008) because of various infrastructure projects. Though more recent data are lacking, there is no evidence that the pace of displacement is slowing down. Despite evidence of the negative effects of displacement on the households' livelihoods, the governments of the Philippines and Indonesia view involuntary resettlement as a development opportunity for both the poor resettlers and the public. It is believed to stimulate regional development, economic development, employment opportunities, and poverty alleviation, among others (Arndt and Sundrum 1977; NEDA 2011; WB 2012).

The Impoverishment, Risks and Reconstruction (IRR) model (Cernea 2000) identifies nine interlinked potential risks inherent to displacement. It has been widely utilized in resettlement studies and projects. It is an analytical guide for identifying the impoverishment risks incurred by involuntary displacement (Muggah 2000; Cernea and Schmidt-Soltau 2006; Price 2009; Dhakal et al. 2011; Bang and Fewa 2012) as well as a basis for an anti-poverty approach (Hong et al. 2009; Wilmsen et al. 2011;).

In assessing the risks and the effectiveness of interventions, most attention is directed at the actions and frameworks provided by institutional actors. While institutional actors are important, the factors that mitigate risks of impoverishment are much more wide ranging. In addition to the institutional context, also cultural factors can be crucial. Furthermore, the IRR model does not adequately explain the differences across households. Household characteristics may cause great diversity in poverty outcomes. In previous studies, differentiation of poverty risks was made by extrapolating from the already problematic poverty profile of the households. In other words, poverty before resettlement would increase the risk of further impoverishment after resettlement. In this chapter we provide evidence that such reasoning does not always hold true and that other household characteristics need to be taken into account.

Through the comparative study of risks brought about by involuntary resettlement in the Philippines and Indonesia at both household and community level, this chapter sheds light on a wider range of factors that mitigate poverty at the level of households and communities during the first year of resettlement. If we understand the wider range of factors that mitigate poverty risks, as well as the underlying dynamics, we are in a better position to gear policies towards preventing impoverishment after resettlement. Furthermore, such knowledge would increase the analytical strength of the IRR model.

Involuntary displacement and resettlement

Cernea's (2000) Impoverishment, Risks and Reconstruction (IRR) model highlights the intrinsic risks for impoverishment through displacement as well as the ways to alleviate

the risks. The IRR model was conceptualized and developed in 1996, in a series of studies. Based on their findings, Cernea (2000) identified the following nine interlinked potential risks involved in displacement:

1. Landlessness
2. Joblessness
3. Homelessness
4. Marginalization
5. Food Insecurity
6. Increased Morbidity and Mortality
7. Loss of Access to Common Property
8. Social Disarticulation
9. Educational Loss

Although these risks are all inherent in a resettlement episode, the intensity of their manifestation can vary among individuals and households, and can be site-specific (Cernea and McDowell 2000). Invariably, forced evictions affect the poorest and most disadvantaged groups in any displacement context (Leckie 1994; Stanley 2000), while resettled individuals who have social, educational, and economic advantages can cope with and recover from the debilitating effects of the displacement faster than those without such benefits (Parasuraman and Cernea 1999).

According to Parasuraman and Cernea (1999) the outcomes of the resettlement are significantly influenced by the approach of institutions to the displacement and resettlement activity through their policies and programs. In a dam-related resettlement in China, the "inputs" from the government resulted into maintaining or raising the income of the Chinese resettlers (McDonald et al. 2008). The opposite transpired in a development-induced resettlement case in Indonesia (Nakayama et al. 1999), in Xiaolangdi, China (Webber and McDonald 2004), and in the Philippines (Quetulio-Navarra 2007) where the inadequacy of the interventions of the project implementers led to failure.

Risks investigated in this study

Although Cernea (2000) included nine risks in his model, in this chapter only eight risks will be addressed. The risk of "loss of access to common property" was not investigated and the risk of "increased morbidity and mortality" was reduced to morbidity risk only. The manifestation of these eight risks (nature and extent) in the Philippines and Indonesia was examined by first establishing indicators for the eight risks followed by designing a risk index based on these indicators. Data on a year before the resettlement and a year after the resettlement were compared and a score system was applied: -1, if there is a positive change (less risk); 0, if there is no change; and +1, if the change is negative (more risk). The scores for each risk were combined in a "total risk score". The indicators (before and after resettlement) were the following:

Landlessness. Landlessness was analysed by looking at the landownership situation of the households.
Homelessness. This risk was assessed by looking at housing-related data: house ownership and quality of the house (materials, floor size, number of bedrooms).
Joblessness. Based on the preceding qualitative investigation, the magnitude of joblessness that affected the household was determined based on the data regarding the employment status of only the household heads.

Marginalization. The characteristics and extent of marginalization were determined by utilizing data on household income, number of factors that divide the community, number of social services the households did not have or had limited access to, reasons for denied social services, and perception of the resettlement site as peaceful and harmonious.
Food Insecurity. Level of food insecurity assessed by the percentage of household income spent on food.
Increased Morbidity. Morbidity was measured by the number of ill adults and children and the number of basic services available in the previous and present communities.
Social Disarticulation. Social disarticulation in the two communities was measured by examining reports on the number of support ties, memberships in organisations, and relationship of the community with the local government, central government, NGOs and international organisations, and availability of public places.
Educational Loss. The gravity of loss of education was based on reports on the number of school-age children who stopped going to school after the resettlement.

3.1.2 Methodological Design

In the Philippines, a household survey was done in April-June 2011 in Kasiglahan Village 1 (KV1). Resettlement of families started in 1999. In Indonesia, a survey was conducted in April-June 2012 in Bantarpanjang Translok (BT). This resettlement community was built for households that were displaced by landslides has been accommodating households since 2001. (See Chapter 1 for more details on the sites).

The 150 respondents in the Philippines were chosen through random sampling from a sampling frame of 6,144 households who are either 'original house and lot owners' or 'rights buyers' (bought the house and lot rights from the original owner). The Project Office did not have the exact numbers of these two types of residents, but qualitative data yield that around 30 to 40 percent of the 6,144 households were 'rights buyers'. The 150 respondents are all original owners. In Indonesia, all 76 legitimate beneficiaries of the resettlement project in the community were interviewed.

Similar data gathering methods were applied in both sites. A household survey was conducted that included a household composition sheet and a tailored-calendar tool (see Chapter 2). Qualitative methods included key informant interviews, group interviews, participant and non-participant observations, in-depth interviews and focus group discussions. For this chapter, only the calendar data on a year before and a year after the resettlement were analysed. The calendar collected histories pertaining to the following six major life domains of the respondent:

1. Respondent's profile
2. Children's information
3. Household-related information
4. Physical features of the community
5. Respondent's social engagement
6. Respondent's perception on the community

Analysis of quantitative and qualitative data

The quantitative data were entered into Excel and were analysed using SPSS version 19. The data on a year before and a year after resettlement were utilized and risk

indexing was done for each potential risk. Multiple linear regression analysis was conducted on the identified dependent and independent variables (see Table 3.1). The dependent variable is the total risk score of a household and the independent variables were grouped into those that reflect the respondent's socio-economic and demographic profile as well as household characteristics and the institutional context variables. The latter pertain to the factors that represent the interventions and influence of both local and central government level on the resettlement community. The qualitative data were recorded, transcribed and content analysis was applied.

Table 3.1 Dependent and Independent Variables for Regression Analysis

Dependent Variable	**Explanation**
Total Risk Score	Sum of all scores on the eight different risks
Independent Variables	
Demographic, Socio-Economic, & Household Characteristics	
Age	
Gender	Dummy variable, Female=1 (Philippines) Dummy variable, Male=1 (Indonesia)
Educational level (after resettlement)	
Husband's employment status	Dummy variable, where Employed =1
Income (after resettlement)	
Household size	
Membership in org.	
Number of support ties	
Institutional Context (after resettlement)	
Living in plains (KV1)	Dummy variable, Plains= 1
Living in RT1 and RT 3 (Translok)	
Number of basic services	
Number of public places	
Number of denied social services	
Rate of community relationship with:	Dummy variable, Very low=1; Low=2; Moderate=3; High= 4; Very High=5
Central government	
Local government	
NGOs	
International organisations	
Church/mosque	

3.1.3 Results

Involuntary resettlement risk index

This section presents a discussion on the resettlement risk indexes in the Philippines (Table 3.2a) and Indonesia (Table 3.2b).

Land Ownership
As shown by the mean score (-1.00) for land ownership risk in Table 3.2a the KV1 resettlers did not experience any risk in losing land, rather the opposite happened. Before resettlement, the respondents did not own the land they were occupying (legally or illegally), which qualified them for the socialized housing program. After the relocation, each household was given a house and lot by virtue of an Award Certificate that is payable in 20 years at Php 250 (5.9 USD) per month. After they have paid the full amount, they will be given a land title.

The opposite was the case for the Indonesian respondents (Table 3.2b). Having owned their land, at least a small plot for their house and for farming, after the landslide they became landless (mean risk score of 1.00). The resettlement project funds could not afford to replace their lost lands and they cannot purchase the land where they are presently residing. Series of negotiations between the Cilacap Transmigration Department and the Provincial Government did not result in a positive outcome. A leader in BT said:

> *We have been working with the RW leader and the village head on the possibility of acquiring the land where we are staying right now. But nothing is happening. This is really worse than when we were on the mountains. Before we owned the land where our houses were built and also had land for farming. But the landslide swallowed everything. We are scared now because anytime the Bupati (head of the district) wants to take back the land where we are staying now, we have to leave.*
>
> (Interview with a male community leader, BT Indonesia, June 2012)

Housing Situation
The KV1 households are also better-off when it comes to housing, as shown by a -2.03 mean risk score (Table 3.2a). Before the displacement, the households were renters, living with parents or relatives, or living in shanties under the bridge, on sidewalks, or along the railroad tracks. None of them owned a house. Immediately upon their arrival in KV1 they were awarded a house secured with tenure. The ready-made houses they were given have a standard floor size of 28-30 square metres and are made of concrete with unfinished and unpainted walls. The houses have no divisions for bedrooms, rough flooring, one window in front of the house and one at the rear, a kitchen area and an untiled toilet. Those who had money with them when they transferred or who were able to bring some parts of their previous houses (door, windows) were able to improve the given house by adding bedrooms, finishing and painting the walls and laying tiles in the bathroom. Those who could not afford to improve the house would just use a curtain to separate their bedroom from the rest of the house. The question whether they were happy with their housing situation met with mixed answers. Those living before in shanties were happy that their houses were now made of stone and that they could enjoy security of tenure and were no longer afraid of eviction anytime. They

also would not be facing disaster again and now had an asset that their children could inherit in the future. One lady said:

> *Now I don't worry about strong rain or even storm because we now live in a house that has stone walls and a solid roof. Previously, I was scared every time there was a storm or even heavy rains with strong wind because our roof and walls made of very light materials and they could be just blown away at any moment.*
>
> (Survey interview with a female respondent, KV1 Philippines, June 2011)

In contrast, the Indonesian resettlers were in a worse housing situation (mean risk score 1.75; Table 3.2b). Before, they owned their houses, but when they transferred to BT they were only given a "permission certificate" from the village head which gives them the right to use the house but not own it. If before their houses were made of concrete, after the landslide they transferred to a wooden house with no divisions for bedroom(s) and a kitchen and no provision for a toilet inside the house. Eight public toilets were built for the resettlers. One mother shared:

> *It was hard accepting that we lost our previous house to the landslide and had to start a new life here in Translok. During the first few weeks, every single night when I was lying on my bed to sleep I would stare at the iron sheet ceiling and ask myself if I could continue living in this small, hot, wooden house. But we had no choice.*
>
> (FGD woman participant, BT Indonesia, June, 2012)

Employment Situation

The employment risk score in the Philippines is very low (0.01). Only 5.4 percent of the respondents became jobless after the transfer. Those who experienced a worse-off condition in terms of employment attribute it to the distance of KV1 to their previous job and the unrecoverable loss brought about by the garbage slide in Payatas. KV1 proved to be far from their workplace (50-70 km) and commuting everyday would be costly and time consuming. Some of them had to rent a small room near their job, to sleep there during the weekdays, while those who could not afford the cost of renting a room in the city were not able to retain their jobs. The families who resettled due to the garbage slide in Payatas lost their source of livelihood. Before they were living in a community that served as a garbage dumpsite for nearby cities. They had junk shops or they were doing "collect and sell" of junk items such as bottles, paper and metal scraps. In the interviews they told us that jobs in their previous community were abundant and making money from the garbage was good. It was a stinky and dirty job but it generated fast money. They lost these jobs and businesses when the huge and tall mountain of garbage slid and buried their houses, some family members, and their junk shops. The dumpsite was closed immediately and they relocated to KV1. Their new community could not offer them jobs and life just became harder. Livelihood training was done with these households heads a few years after the resettlement, because a training budget became only available later on.

The Indonesian resettlers also scored low on this risk (0.04), with 5.3 percent of the household heads losing their jobs. Since most of the resettlers were farm labourers it was not hard for them to find work in the rice fields after they transferred. Some even revealed that the resettlement got them closer to the rice fields; if previously they would walk for two to three hours to reach the rice fields, now they only had to walk for one hour from Translok. Some of them were also able to forge a special arrangement with Perhutani that allowed them to plant some crops for own household consumption or for selling on Perhutani land in the forest at a very minimal payment.

Marginalization

In aggregate, the KV1 relocatees were a little better off after the transfer than in their previous circumstances. The difference in the household income before and after the resettlement was not so great. Nonetheless, while some were able to relocate their businesses – such as stores and computer shops – to KV1, there were also those who found that the displacement had destroyed their income. A number of them did not even have any income at all in their first year in the site because they lost their jobs.

Similarly, access to social services (e.g. livelihood and housing assistance) also did not change much in KV1. But when it came to reasons (e.g. place of origin, years of stay in KV1) why they thought they had limited or no access at all to some social services, some of the respondents shared during the survey that according to them some social services were only designed for the early arrivals in the area or for those who came from particular places such as Payatas or the flood areas in the capital. Based on the interviews with the KV1 project managers, it can be said that there is some truth in this claim. They revealed that the beneficiaries living along the Pasig River and also those who came earliest, had their own budget from the government for livelihood training, water connection fees, etc. Due to the urgency and gravity of their case, the households from Payatas also received a lot of assistance. Food rations, livelihood training and some business capital were funnelled to this group. The other resettled households had to rely on the regular budget provided by the central government.

Psychological marginalization does not seem to have been a big issue. Factors (e.g. education level, economic status, gender, political parties) that divided the community decreased and the respondents viewed their new community as peaceful and harmonious. Compared to their previous situation where they lived in mixed neighbourhoods, KV1 is more homogenous. Almost everybody is considered "underprivileged and homeless" by the project managers. However, currently a growing social issue in the community is the increasing number of 'second-hand house and lot owners' (see Chapter 2) who are not considered bonafide beneficiaries of the project. They live in the area because they bought the right to live in the house from the original owners. One respondent remarked:

> *They [second-hand house and lot owners] should not be living with us. They don't belong here, they don't even smile at us when they meet us on the streets and they built these big houses that seem so different from ours.*
>
> (Survey interview with a female respondent, KV1 Philippines, April 2011)

The BT households also score positive when their marginalization conditions were indexed and summed, yielding a mean risk score of -0.28. Based on the increase in household income, they were not economically worse-off. However, in terms of access to social services during their first year in Translok, almost everybody expressed the same sentiments regarding their suffering from the very poor basic services in the resettlement site. Basic services, like piped water, electricity and health services, were provided gradually and public places were built based on the availability of budget. There was no individual water connection when they transferred to the place and they had to fetch water (which according to them was "unsafe" for drinking) several times a day from wells built in the site. They also complained about the toilet system in the location. A household head said:

> *In the mountains we did not have problems with the toilet. We just needed to find our own "toilet space" along the river and we didn't need to keep it clean. When we came here we had a new system of using the toilet- we needed to line up, wait for our*

> *turn to use the toilet, and keep it clean, which is difficult when you share the toilets with everybody here.*
>
> (Survey interview with a male household head, BT Indonesia, May 2011)

Psychologically, the families did not seem to experience marginalization after the relocation. The number of factors the respondents saw as dividing their community only marginally increased and the percentage of household heads that perceived that their new community was not peaceful and harmonious slightly decreased.

Food Security

The food security risk index for the Philippine case registers a low mean score of 0.15, with 24.7 percent of the respondents adversely affected and 9.3 percent more food secure. The risk score could be explained by the higher price of food items in KV1 due to an increase in transactions costs coupled with the reported increased the number of children after resettlement. During the early years in KV1, going to the centre of the Rodriguez Municipality was costly because only few jeepneys (public transport) were available and the roads were really bad. Therefore, some households were forced to buy food inside KV1, being peddled on foot or by tricycle, at a much higher price. Conversations with the residents revealed that if before the resettlement they could eat three times a day, after the transfer the number of meals was reduced to two. It was observed during the fieldwork that families would usually prepare cheap noodle soup (0.35 cents) for the main dish together with rice.

The Indonesian resettlers' state of food security after the relocation improved a little as evidenced by a mean risk score of -0.09, with 11.84 percent of the households at risk and 9.3 percent of households doing better. Some of the households that lost their gardens to the landslide, after transferring to Translok were able to arrange (with Perhutani, friends or relatives) a new garden lot where they could plant their crops again (cassava, peanut, eggplant, etc.). Others who also had an increase in household income found food in BT more accessible because of the stores around and the peddlers coming to their place to sell food. Public markets were also more accessible than before. When living in the mountains, they would only go to the market once a week to buy food items that were not available nearby.

Morbidity

Based on the morbidity index, the Philippine households are slightly at risk (0.53 risk score). However, this score is largely due to the reduction in the number of basic services provided in the resettlement site and does not reflect a higher incidence of illness in the household. Although the houses were already constructed when the families came to KV1, the basic services were provided only gradually, depending on the release of the budget from the central government. In the Indonesian case resettlement did not increase morbidity at all (mean risk score -0.33).

Social Disarticulation

The KV1 residents did apparently not suffer from social disarticulation risk after the move, as shown by the -0.39 mean risk score. Their support ties and membership in organisations slightly decreased along with the number of public places in the site compared to their previous communities, but the community relationship with the local government, central government, NGOs, church, and international organisations improved a little. Interviews with the community leaders and project manager revealed that it was not hard to get the assistance of these different entities at the start of the

project because of the project's aim and magnitude. KV1 is a large-scale socialized housing project that was originally meant for households who were living along the Pasig River. Consequently, NGOs, the church as well as the Asian Development Bank got involved in the project. An important reason why these agencies were willing to invest in the community (building a church, paving roads and school construction, among others), is the fact that the households in principle owned the houses and lots they were occupying. They would no longer be evicted and the facilities constructed in the community would not be demolished because of land ownership issues.

Similarly, the BT residents seemed to improve in terms of social articulation after the resettlement with a mean score of -1.25. There were more public places in Translok than in their previous place of residence and the number of individuals who would help them in times of need (support ties) actually doubled. There were more persons who would support them emotionally or otherwise, during emergencies, for food needs, child care, and financial needs. A woman remarked during an informal conversation:

> *One of the good things I like in Translok is that I can now borrow money from a money lender to buy something that I like or buy some stuff from a seller and pay later with or without additional interest. We did not have these kind of arrangements before in the mountains.*
>
> (Participant observation with women farm labourers, BT Indonesia, June 2012)

Education

A low risk score (0.01) was seen in the Philippine case for educational loss. This can be attributed to the discouraging schooling situation in the site during its first year. In-depth interviews and desk research revealed that during the early years of the resettlers in KV1, the absence of schools was a big issue. Families relocated to the site without a school facility to accommodate their children. Strong complaints were lodged to the Project Management Office (National Housing Authority) and several months later (in 1999) some unoccupied housing units were converted into classrooms. One unit would hold around 50-100 students with one teacher. A year later a small school was constructed. But that was not enough for all school-age children and classes had to be held in three shifts. Because of this some kids just stopped going to school. A young gang leader in the community indicated in an in-depth interview that some of the gang members also stopped going to the local university to avoid being hurt in gang riots.

A low risk score (0.07) is also visible in the Indonesia case. The small number of children who stopped going to school may be due to the fact that the day care centre was built late 2001 and up until now children going to the nearby elementary school had to take a muddy road to go to school. A young father shared:

> *My children suffer in going to school during rainy season. They have to take off their slippers and walk in the mud to get there. If I'm around I carry them so they do not have to take off their slippers, but I also need to work early in the rice field.*
>
> (Survey interview with a father, BT Indonesia, May, 2012)

Table 3.2a Resettlement Risk Index in the Philippines

Philippines N=150

Potential Risks Areas	Mean	SD	Worse Off%	Same%	Better off%
Land Ownership	-1.00	0.00	0.00	0.00	100.00
Housing Situation	-2.03	1.16	1.30	10.70	88.00
Employment	0.01	0.46	5.40	88.00	6.00
Marginalization	-0.03	1.51	32.70	34.70	32.60
Food Security	0.15	0.56	24.70	66.00	9.30
Morbidity	0.53	1.03	57.30	25.30	17.30
Social Disarticulation	-0.39	2.09	34.00	18.70	47.20
Education	0.01	0.16	2.00	96.70	0.07
Total Risks Score	**-2.75**	**3.55**	**15.30**	**9.30**	**75.30**

Table 3.2b Resettlement Risk Index in Indonesia

Indonesia N= 76

Potential Risks Areas	Mean	SD	Worse Off%	Same%	Better off%
Land Ownership	1.00	0.00	100.00	0.00	0.00
Housing Situation	1.75	1.13	88.16	9.20	2.60
Employment	0.04	0.26	5.26	92.11	1.32
Marginalization	-0.28	1.09	19.70	34.20	46.05
Food Security	-0.09	0.57	11.84	67.11	21.05
Morbidity	-0.33	0.57	5.26	73.70	21.05
Social Disarticulation	-1.25	1.29	5.26	26.32	68.42
Education	0.07	0.25	6.58	93.42	0.00
Total Risks Score	**0.90**	**2.28**	**53.90**	**19.74**	**26.32**

Total Post Resettlement Risks

As can be gleaned from Tables 3.2a and 3.2b, the Philippine households fared better (mean risk score of -2.75) than the Indonesian resettlers (mean risk score of 0.90). This is due to the fact that the KV1 households gained a house and lot after displacement, while the Indonesian households lost their house and land. In order to ascertain which among these dimensions yield these results, the total risk score was regressed against a number of variables that are grouped into three models (see Table 3.1).

Regression results are shown in Table 3.3 for the Philippine case and in Table 3.4 for the Indonesian case. Table 3.3 shows that in Model 1 only the variables husband's employment status and the number of memberships in organisations can account for the level of involuntary resettlement risks experienced by the households in KV1 with an R-square of 12.8 percent. Model 2 (R^2= 28%), which regressed the institutional context variables with the total risk scores, yields four significant variables – the number of public places in KV1, community relationships with the local government, NGOs, and international organisations. However, the combination of these two dimensions (Model 1 and 2 variables) explains best (at 38.9%) the variance in the post-resettlement risks in KV1. Three of the variables that reflect socio-demographic and household characteristics are significant: education of the household head, memberships in organisations after the resettlement, and the husband's employment status. These are the strongest predictors for risks.

Table 3.3 Effects of Socio-Demographic, Household Characteristics and Institutional Context on The Involuntary Resettlement Risks in the Philippines (pairwise deletion of missing values)

N= 150

	MODEL 1		MODEL 2		MODEL 3	
	B	**SE**	**B**	**SE**	**B**	**SE**
Age	-0.030	0.023			-0.132	0.022
Female	-0.120	0.532			-0.116	0.480
Education	0.086	0.144			0.185**	0.139
Husband's employment status	0.207**	0.603			-0.215***	0.538
Income	0.030	0.557			0.089	0.503
Household size	-0.087	0.128			-0.040	0.116
Membership in organisations	-.215**	0.383			0.014*	0.031
Number of support ties	-0.031	0.034			-0.150	0.356
Living in Plains Continuation			0.043	0.471	0.237***	0.519
Number of basic services			-0.047	0.073	-0.005	0.078
Number of public places			-0.177**	0.092	-0.179**	0.096
Number of denied social services			0.158	0.080	0.125	0.082
Rate of community relationship with central government			-0.043	0.305	-0.032	0.306
Rate of community relationship with local government			0.327***	0.300	-0.259**	0.316
Rate of community relationship with NGOs			0.317***	0.249	0.255***	0.256
Rate of community relationship with international organisations			0.282***	0.267	-0.349***	0.282
Rate of community relationship with church			0.106	0.216	0.183**	0.230
R^2	12.8%		28.0%		38.9%	

significant at *p<0.10 ,**p<05 &, *** p<0.01.

Surprisingly, education is negatively related to risk. This challenges the usual claim of resettlement studies that "education" alleviates the harmful effects of involuntary resettlement. The result tells us that the higher the education level of the household head has, the higher risks the household will face during resettlement. Compared to the lower educated, the more educated household heads lost more after resettlement. Previously they had better jobs and better salaries and, therefore, could afford to rent a better house and had access to basic services. Some were able to keep their jobs in the city for a while, but the rent or the transportation expenses put a strain on their food and health budget. One respondent said:

> *Life was so hard here in our first year. We lost our source of income and my family had to rely on food rations and relief goods such as rice, noodle soup, canned sardines from the government, church, and NGOs. We would line up for the food distribution and stock up food rations in our house that we would eat little by little.*
>
> (In-depth interview with a mother, KV1 Philippines, May 2011)

An unemployed husband and a decrease of membership in organisations (voluntary and involuntary) increase the vulnerability level of a household after relocation. While the husband's unemployment is self-explanatory, membership in organisations is about access to resources which may cushion individuals and households against risks.

Six institutional context variables proved to influence the households' susceptibility to the risks inherent to involuntary resettlement. These are: living in Plains, number of public places in KV1, the community's relationship with the local government and international organisation (all reducing risk) and the community's relationship with NGOs and church (both, surprisingly enhancing risk). Plains was developed first in the resettlement project (around 1998) and the first groups of resettlers transferred there. Later on, KV1 expanded and the location of the next phase of the project was referred to as Suburban. Although Plains is now more developed than Suburban, the situation was dismal during its early years. Perhaps because it bore the brunt of "trial and error" in the implementation of a large-scale project. A community leader from Plains shared:

> *They [referring to NHA] resettled us all here to die. Housing was terrible, basic services were very minimal, and no jobs available. I don't think they were really concerned with our welfare.*
>
> (In depth-interview with a male community leader, KV1 Philippines, May 2011)

Apart from this, respondents told us that it was also not peaceful in the area at that time. There was a high incidence of stealing, snatching, and gang riots, which they attributed to the bad condition of the area, the worsened economic situation of the households, unemployment, and the tendency of the fraternities or gangs from groups of resettlers coming from the same community to prove to the other fraternities and gangs that they were superior.

The outcome on the number of public places (not the basic services) as influencing the level of risk a household might experience underscores the social and economic value of public places to the KV1 households during their first year in the community. Public places like sidewalks and markets functioned as venues for making new friends and acquaintances and as spaces for economic activities.

The risk level outcome in KV1 was also a result of the community relationship with the local government, NGOs, church and international organisations. However, while a better relationship between the community and the local government and the international organisations would mitigate the risks brought about by the resettlement, this not the case for the relationship with NGOs and church. A project manager admitted that basic services and basic facilities in KV1 were built late due to budgetary constraints. Households complained non-stop about the nature of service delivery in KV1. NGOs intervened, but their lobbying efforts only exacerbated the social issues in KV1, eventually negatively influencing the cooperation of the households. Similarly, when the community or the households forged a good relationship with the church, most of the time it resulted in a patron-client like relationship that limited connecting with other people who did not share the same religion or faith, thereby preventing expanding the social networks that are a potential well of resources.

Table 3.4 shows the regression results for the risk score of the Indonesian households. Three variables turned out to be significant in Model 1 with an R square of 18.60 percent: the education of the household head (by far with the strongest impact), the husband's employment status, and membership in organisations. In Model 2 (R^2= 19.50%), the variables number of public places and the relationship of the community with the local government turned out as predictors of risk level in BT.

Table 3.4 Effects of Socio-Demographic, Household Characteristics and Institutional Context on The Involuntary Resettlement Risks in Indonesia (pairwise deletion of missing values)

N= 76

	MODEL 1		MODEL 2		MODEL 3	
	B	**SE**	**B**	**SE**	**B**	**SE**
Age	.045	.256			.101	.274
Male	.069	1.094			.016	1.201
Education	.262**	.432			.247**	.451
Husband's employment status	.246**	1.361			-.250*	1.454
Income	-.059	.276			.003	.347
Household size	.008	.200			.060	.216
Membership in organisations	-.208*	.279			-.133	.301
Number of support ties	-.107	.045			-.162	.051
Living in RT1			.045	.755	.044	.782
Living in RT3			.086	.697	.010	.715
Number of basic services			.032	.227	-.051	.236
Number of public places			-.234*	.267	-.166	.281
Number of denied social services			.096	.146	.167	.168
Rate of community relationship with central government			.134	.484	.116	.524
Rate of community relationship with local government			.349***	.295	-.324**	.296
Rate of community relationship with NGOs			-.215	1.071	-.217	1.053
Rate of community relationship with international organisations			.071	1.256	-.019	1.316
Rate of community relationship with Mosque			.021	.394	-.012	.391
R^2	18.6%		19.5%		35.9%	

significant at *p<0.10 ,**p<05 &, *** p<0.01.

As with the KV1 regression results, Model 3 provides the best explanation for the resettlement risk score in BT (R^2=35.9%). Significant variables are education, husband's employment status, and relationship with the local government. Like in the KV1 case, the higher the level of education of the household head the higher the resettlement risks score, for which the same explanation applies. A good relationship between the community and the local government decreases the risks since social programs that can mitigate impoverishment in the locality usually emanate from the local government.

3.1.4 Discussion and Conclusions on the Outcomes of the Risk Model

The research in these two different resettlement contexts presents robust evidence on the multi-dimensionality of resettlement risk causes. The analysis shows that while the institutional context is important, individual and household characteristics add to the explanation of risks experienced during the first year in the resettlement.

The resettlement program policy of the country concerned proved to greatly influence the manifestation of the eight risk factors identified by Cernea (2000). The resettlement program showed large differences between the two sites. The Philippine KV1 resettlers

gained assets in the form of housing and land because there is a national policy on resettlement and socialized housing in the Philippines that protects the right to housing and aims at humane relocation. The presence of a national policy made the KV1 residents aware of their rights, as apparent in the case of their lobbying for building a school in the site. On the other hand, the Indonesian Translok resettlers were never compensated for the loss of their houses and land to landslides due to the absence of a country policy on resettling natural disaster victims. Hence, they had no formal grounds to demand basic facilities and just compensations.

The multivariate analyses showed that in both sites there is no significant impact of the respondents' age, gender, income and household size on the total risk score. Both the Philippine and Indonesian households experienced four risks with two risks emerging in both cases (employment and education). Nonetheless, it is apparent that the risks manifested themselves differently in the two cases. The physical environment both in the previous and the resettlement residence influenced the emergence of risks related to food security and morbidity. The Indonesian households were able to prevent food insecurity after the resettlement because they continued their practice of planting crops in the mountain area through new arrangements. It also helped that most men quickly found jobs and continued to work as farm labourers in the nearby rice fields after the transfer. In the Philippine case, however, households were unable to avoid food insecurity during their first year in the site. They were not accustomed to growing their own crops, had no access to land for farming and relied on their income from non-agricultural activities to secure the high-priced food items from peddlers coming to the site.

The multivariate analyses showed that in both the Philippine and Indonesian case the individual and household variables add substantively to the institutional ones in explaining risk. Moreover, in both cases the same socio-demographic variables (employment, membership in organisations and the unexpected negative impact of education) were influential and their weight as relative to the institutional variables does not differ greatly (12-18% versus 39-36% R-square). Regarding the institutional factors, a noteworthy difference is the absence of significant relationships in the Indonesian case. It is also shown that irrespective of the level of significance, the sign of all effects is similar (positive or negative) in both cases, except for the influence of NGOs and church which, unexpectedly, enhanced risk in the Philippines.

3.2 The Disruption and Rebuilding of Social Capital

As shown in the first part of this chapter, in both sites social capital does not seem to have been generally negatively affected by the displacement episode. The account of the social capital building in the two sites continues in this part of the chapter, with a focus on the disruption and rebuilding of the households' social capital. Furthermore, the before and after resettlement profile (individual, household, civic engagement, community, social capital, institutions) is here described in more detail as compared to the previous part. The social capital built during the first year is examined through two angles. First, it is explored how the households' profiles (except for social capital) in the new resettlement site shaped the new social capital. The second angle is that of the history-institution debate, in which these profiles will be reorganized under the historical argument of Putnam and the institutions argument of the World Bank. We

shall test which argument can provide the best explanation for the community's social capital outcomes during their first year in the resettlement sites.

3.2.1 Social Capital Building in Involuntary Resettlement: Competing Views

As explained in Chapter 1, a plethora of studies have demonstrated that involuntary displacement and resettlement of poor households due to disasters and infrastructure projects bring more harm than benefits to the people involved. While landlessness, homelessness and joblessness are the obvious risks brought about by involuntary resettlement, social disarticulation is a risk that, while not immediately visible, can profoundly affect the chances and wellbeing of households (Cernea 2000). Cernea and Mc Dowell (2000:30) assert that "forced displacement tears apart the existing social fabric [and that there] is a net loss of valuable social capital, that compounds the loss of natural, physical, and human capital."

Putnam (2000) refers to social capital as connections among individuals, social networks and the norms of reciprocity and trustworthiness that emerge from them. Both tangible and intangible resources can be obtained through one's social connections (Lin 2001). Woolcock and Narayan (2000) stress the importance of both vertical and horizontal ties. Social ties can be classified according to three dimensions of social capital. The strong ties between members of a household, kinship network or community are referred to as "bonding social capital." The weaker extra-community networks that make it possible to cross social divides such as religion, class, ethnicity, socio-economic status are called "bridging social capital". And, third, "linking social capital" is the vertical dimension that "reaches out" or "scales up" poor people's ties to access resources, ideas, and information offered by institutions beyond their own community. If poor families leverage their strong bonding ties to "get by" or survive, their bridging and linking social capital is crucial in "getting ahead" or in attaining development and growth (Briggs 1998).

Social capital determinants matter. They include factors in the social structure and the social position of the individual that facilitate or constrain the formation of social capital (Lin 2001). Determinants can be social and physical location (Mahler 1995; Williams and Pocock 2010), ethnicity, geographic location, occupational backgrounds with similar economic status and political influence (as cited in Harriss 2002), roles of development practitioners and policymakers (Fox 1996; Heller 1996; Bebbington 1999; Woolcock 2001), households' socio-economic status and demography (Menjivar 1995; Knack and Keefer 1997; Pugliesi and Shook 1998; Moerbeek 2001; Grootaert et al. 2002; Barr 2004; Nombo and Niehof 2008). The design of the house or dwelling unit and how the houses are arranged in blocks are also considered determinants of social capital. Kalmijn and Flap (2001) have shown that "assortative meeting and mating" are shaped by institutionally organized arrangements such as the physical setting of the neighbourhood.

For Putnam (1993) it is historical factors such as civic engagement of the individuals in the society that most probably determine social capital accumulation. But these cannot be enhanced in the short term. This historical factor includes shared cultural practice. The World Bank's (2010a) view, however, emphasizes creating or building social capital through mechanisms such as face-to-face interactions, geographic proximity,

repeated social exchange, and institutional interventions (Levi 1996; Brehm and Rahn 1997; Hall 1999; Maloney et al. 2000; Onyx and Bullen 2000; Schmid 2000; Woolcock and Narayan 2000; Rothstein 2001; Uslaner 2001; Lorensen 2002; Petersen 2002; Preece 2002; Soubeyran and Weber 2002). Social capital studies on involuntary resettlement tend to adopt the latter position, because their aim is to identify factors that enhance the building of social capital in resettlement sites. While some of these studies present evidence on the factors that were responsible for rebuilding social capital after several years of resettlement, none has investigated yet which of these two competing views accounts most satisfactorily for the social capital rebuilding process after the transfer of the households to the resettlement site.

In this section an attempt is made to assess the explanatory power of the views of Putnam and the World Bank. The following sub-questions were addressed in order to answer this question:

1. What is the state of the community before and after the resettlement in terms of:
   a. Community profile
   b. Household profile
   c. Social capital in terms of network size, social resources, trust and norms of reciprocity.
2. How do the qualities of the respondents, their household, and the resettlement community interact with the rebuilding of social capital in the new communities after one year?
3. What is the relative influence of the resettled households' civic engagement history and the institutional context on the households' social capital in resettlement sites within a year after the forced transfer.
4. What are the factors that affect differing social capital outcomes in the two sites?

3.2.2 Methodological Design

The sampling and survey procedures were already discussed in Chapter 2 and in Section 3.1.2, so we will proceed to the measurement of social capital and to the analysis of the quantitative and qualitative data.

Measuring social capital

Social capital in this study was measured using proxies which are divided between structural indicators and cognitive indicators (Stone 2001) as presented below.

Structural Indicators	Cognitive Indicators
1. Size of network: number of acquaintances, friends, people frequently met, people who would help them 2. Social resources (bonds, bridges, linkages)	1. Norms of trust 2. Norms of reciprocity

Structural Indicators
The size of networks at individual level for each year was determined by counting the total number of people the respondents reported based on the following instruments that were integrated in the calendar tool (see Chapter 2):

1. *Number generator*. Asking for the actual number of acquaintances and friends respondents made in (a) particular public places and (b) community activities.
2. *Name generator*. Asking for names that were summed into numbers for: (a) names of organisations that respondents were members of, (b) names of individuals they had frequent face-to-face interaction with, and (c) names of individuals known from government, NGOs, and church/mosque.
3. *Combined name and resource generator*. Asking the name of individuals they frequently relied on for particular needs.

The prestige scores of the wife and the husband were based on Treiman's Standard International Occupational Prestige Scales (SIOPS) (Ganzeboom and Treiman 1996). The ties were grouped according to the descriptions of bonds, bridges, and linkages (Woolcock 2001) as another perspective in analysing social capital as a resource.

Cognitive Indicators
All the data regarding the cognitive indicators of the households and community before and after resettlement were elicited by asking the respondents about their behaviour and attitudes on relevant issues. The profile of the communities in both research sites were based on the reports of the respondents.

Analysis of quantitative and qualitative data

The quantitative data were entered into Excel and analysed using SPSS version 19. The t-test was performed on before-and-after resettlement continuous variables and the non-parametric Wilcoxon test was applied to categorical variables. Regression analysis was conducted on identified dependent and independent variables (see Table 3.5). The dependent variables reflect the different dimensions of social capital – ties, bonds, bridges, linkages, trust and reciprocity. The independent variables differ between the two angles analysed here: the first argument is about the effects of after resettlement profiles to the new social capital and the second angle about the effects of the history and institutional factors to the new social capital. Three regression models were employed for the first angle analysis: the first model is composed of individual qualities as independent variables, the second model has household qualities as the independent variables, and in the third community qualities are the independent variables.

For the second stage of investigation, the regression model comprised some control variables and variables representing the civic engagement history of the households and institutional interventions in the community after the resettlement. These institutional variables are the number of public places constructed, support score or the number of entities who would support the community during crises, and activities of the resettlers that were enhanced by the institutions like visits to public places and participation in community activities. Qualitative data were recorded, transcribed, and translated into English (for the Indonesian data), and content analysis was applied.

Table 3.5 Dependent and Independent Variables for Regression Analysis

Dependent Variables	Explanation
Public Places Ties	Sum of no. of friends and acquaintances made in public places
Comm. Activities Ties	Sum of no. of friends and acquaintances made during community activities
Close Individuals	No. of individuals whom the respondent would meet regularly in the site
Support Ties	No. of individuals whom they rely on for support (e.g. financial, emergency, childcare)
Bonds	Sum of no. of friends, close individuals, and family members, neighbours, and friends whom they rely on for support after resettlement
Bridges	Sum of no. of acquaintances, ties from church, individuals who are not family or friends whom they rely on for support after resettlement
Linkages	Sum of ties with government (local, national, central level) and NGOs
Trust	Sum of all 1= yes answers to the following (in resettlement site) Dummy var. 1= trust the community in terms of lending & borrowing Dummy var. 1=entrust the house to other people when leaving the house Dummy var. 1=entrust the house to neighbour when leaving the house Dummy var. 1=entrust the house to family when leaving the house Dummy var. 1=entrust the child to other people when needed Dummy var. 1=entrust the child to neighbour when needed Dummy var. 1=entrust the child to family when needed
Reciprocity	Sum of all 1= yes answers to the following (in resettlement site) Dummy var. 1= give time to project not benefitting their own block Dummy var. 1= give money to project not benefitting their own block Dummy var. 1= give time & money for community development projects Also added the answer on the question "people here in the community only look after for themselves?" – Don't agree=1; Strongly disagree=2
Independent Variables	
After Resettlement Profile Analysis	
Individual Attributes	
Place of origin	Cities of origin were ranked based on distance from site
Came from Bantarmangu (Indonesia)	Dummy variable, where Bantarmangu=1
Year resettled	Entry year in the community
Gender	Dummy variable, where Male=1
Age	
Level of civicness	Sum of scores on civicness indicators (e.g. participated in elections)
Religion (Philippines)	Dummy var. Catholic=1; where Iglesia ni Cristo=1
Living in Plains or Suburba	Dummy var.Suburban=1
Living in RT1/RT2	Dummy var. RT1=1; where RT2=1
Educational level	
Household Attributes (after resettlement)	
Household income	
Household size	Number of family members in the household
Total no. of kids in school	
Wife employment status	Dummy variable, where Employed=1
Husband employment status	Dummy variable, where Employed =1
Wife occupation	Assigned a score based on occupation level
Husband occupation	Assigned a score based on occupation level
Wife prestige	Values were given based on SIOPS (Treiman's Standard
Husband prestige	Int'l. Occupational Prestige Scales)
House floor size in square metres	
Number of bedrooms	

Table 3.5 continued

Percentage of household income spent on food	
Number of sick child in the household	
Community Attributes (after resettlement)	
Number of basic services in the community	
Number of public places in the community	
Number of factors that divided community	
Number of denied social services	
Number of reasons for denied services	
Peaceful or conflictive	Dummy variable, where Peaceful=1
Harmonious of in disagreement	Dummy variable, where Harmonious=1
Whole community decides on the project	Dummy variable, where Whole community decides=1
Rate of participation in the community.	For the following variables: Dummy var.: Very low=1; Low=2; Moderate=3; High=4; Very High=5
Relationship of community & local gov't.	
Relationship of community & central gov't.	
Relationship of community & church/mosque	
Relationship of community & NGO (Phil.)	
Relationship of community & int'l. org. (Phil.)	
History-Institutions Debate Analysis	
Demographic	
Age	
Gender	Dummy variable, where Male=1
Educational level	
Socio-Economic	
Household income after resettlement	
Civic Engagement History (before resettlement)	
Rate of Participation in Previous Community	Dummy var.: Very low=1; Low=2; Moderate=3; High=4; Very High=5
Relationship Community & Local Govt.	Dummy var.: Very low=1; Low=2; Moderate=3; High=4; Very High=5
No. of Participations in Community Activities	
Institutional Factors (after resettlement)	
No. of Visits to Public Places within community	
No. of Public Places in the community	
Support Score in BT During Crisis	No. of individuals/entities who would help the community during crises
No. of Participations in Community Activities	

3.2.3 Results

Community profile before and after the resettlement

The profiles of the households' previous communities and the resettlement community in their first year were compared in terms of basic services, available public places, division and exclusion issues, and relationship with different societal entities. In the Philippine setting (Table 3.6a), the communities of origin seemed better equipped with basic services such as water and electricity connections and paved streets (mean score 20.44) than KV1 (mean score 17.13). This was confirmed in an interview with a community leader who was one of the first resettlers. She revealed that the earliest resettlers (1999) came from communities that had electricity, water, and a health centre. They were shocked to see that their new place did not have the facilities they were accustomed to previously and had to do a lot of adjustment in the site. Similarly, there were more public places in their previous community than in the resettlement site during the first year. Respondents reported less dividing factors in the new site. The households appeared to be marginally better off in their previous communities in terms of access to social services. The number of individuals or entities that were expected to support the community during crises (school related, violence, unfortunate events) also increased (mean difference 1.09). Households visited public places much more often than in their previous residences (101.78 mean increase) and were also more participative in community activities in KV1 (9.16 mean increase). The level of contacts of the community with entities such as the local government, central government, church, NGOs, and international organisations did not improve much after resettlement.

Since most of the resettlers in Indonesia came from the mountains, the increase in the number of basic services and public places when they transferred to the site in the more densely populated flat land could be expected. However, the increase in the number of available basic services (0.99) and public places (0.61) is not so dramatic as the basic services (e.g. piped water, electricity and health services) were provided gradually to the households and public places were built when there was a budget. FGD participants cited the communal toilets in the site as a setback after the transfer. As previously mentioned, the houses in BT were built without toilets. The households had to use the six communal toilets, which was inconvenient. People now had to keep the toilets clean and wait in line, while in the mountains they had utilized streams or rivers that required no cleaning and queuing. They were a little more active in community activities as evidenced by the 0.13 increase of the rate of participation. Nonetheless, the state of the community whether residents were harmoniously living together changed from a previous 100 to 94.7 percent. Community support when there were urgent issues improved in the site (1.32 mean difference), which can be attributed to being a government project. No significant difference in the relationship between the communities and the local government before and after the resettlement was evident. Slight increases are seen in the rate of the community's relationship with different entities from the government, mosque, and NGO (see Table 3.6b). Overall, with respect to differences between the before and after resettlement condition, improvements are more pronounced in the Indonesian case.

Table 3.6a Philippine Community Profile Before and After the Resettlement

N=150

	Before	After	Diff.	T	P-Value
1. No. of Basic Services				7.557	0.000***
Mean	20.44	17.13	-3.31		
Std. Dev.	4.402	3.159			
2. No. of Public Places				0.84	0.402
Mean	9.69	9.47	-0.22		
Std. Dev.	2.859	2.385			
3.No. of Dividing Factors				2.408	0.017**
Mean	6.61	6.3	-0.31		
Std. Dev.	3.089	3.13			
5. No. of Denied Social Services				-1.247	0.214
Mean	2.3	2.53	0.23		
Std. Dev.	2.498	2.689			
6. Reasons for Denied Services				-4.04	0.000**
Mean	1.77	2.28	0.51		
Std. Dev.	2.297	2.453			
7. Participation Rate in Community				(a)	0.082*
Mean	2.57	2.73	0.16		
Std. Dev.	1.113	0.996			
8. Peaceful or Conflictive				(a)	0.071*
Peaceful(percentage)	67.3	74.7	7.4		
Conflictive (percentage)	32.7	25.3	-7.4		
Std. Dev.	0.221	0.19			
9. Harmonious or in Disagreement				(a)	0.590
Harmonious (percentage)	76	24	-52		
Disagreement (percentage)	78	22	-56		
Std. Dev.	0.184	0.173			
10. Civicness Score				-2.406	0.017***
Mean	22.33	28.26	5.93		
Std. Dev.	27.098	29.30			
11. No. of Support in Community During Crisis				-4.212	0.000***
Mean	17.1	18.19	1.09		
Std. Dev.	6.076	6.258			
12. No. of Visits to Public Places				-2.844	0.005***
Mean	777.64	879.4	101.7		
Std. Dev.	811.005	898.0			
13. No. of Participation/ Attendance in Community Activities				-1.918	0.057*
Mean	9.25	13.83	4.58		
Std. Dev.	23.616	27.99			
14. Relationship of Community & Local Govt .				(a)	0.158
Mean	2.49	2.61	0.12		
Std. Dev.	1.097	0.977			
15. Relationship of Community & Central Govt.				(a)	0.161
Mean	2.22	2.32	0.1		
Std. Dev.	1.099	1.038			
16. Relationship of Community & Church				(a)	0.086*
Mean	2.93	3.07	0.14		
Std. Dev.	1.512	1.19			
17. Relationship of Community & NGO				(a)	0.811
Mean	1.86	1.87	0.01		
Std. Dev.	1.061	1.011			

Table 3.6a continued

18. Relationship of Community & International Org.				[a]	0.009**
Mean	1.36	1.51	0.15		
Std. Dev.	0.568	0.869			

significant at *p<0.10, **p<0.05, ***p<0.01
[a] Wilcoxon test instead of t-test.

Table 3.6b Indonesia Community Profile Before and After the Resettlement

N=76

	Before	After	Diff.	T	P-Value
1. Number of Basic Services				-5.600	0.000***
Mean	6.41	7.39	.99		
Standard Deviation	1.659	1.287			
2. Number of Public Places				-3.279	0.002***
Mean	5.78	6.38	.61		
Standard Deviation	1.528	1.166			
3.No of Dividing Factors				-2.767	0.007***
Mean	.42	.76	.34		
Standard Deviation	.942	1.450			
5. No. of Denied Social Services				2.360	0.021**
Mean	2.37	2.04	-.33		
Standard Deviation	2.405	2.029			
6. Reasons for Denied Services				.341	.734
Mean	1.00	.97	-.03		
Standard Deviation	1.720	1.673			
7. Rate of Participation in Community				[a]	.168
Mean	3.16	3.29	.13		
Standard Deviation	.880	.763			
8. Peaceful or Conflictive				[a]	.317
Peaceful(percentage)	100.0	98.7	-1.32		
Conflictive (percentage)	0	1.3	1.32		
Standard Deviation	.000	.115			
9. Harmonious or in Disagreement				[a]	0.046**
Harmonius (percentage)	100.0	94.7	-5.26		
Disagreement (percentage)	.00	5.3	5.26		
Standard Deviation	.000	.225			
10. Civicness Score				-0.238	0.812
Mean	95.61	96.78	1.17		
Standard Deviation	83.146	81.602			
11. No. of Support in Community During Crisis				-6.488	0.000***
Mean	19.14	20.46	1.32		
Standard Deviation	4.841	4.829			
12. No. of Visits to Public Places				-0.801	0.425
Mean	902.92	973.87	70.95		
Standard Deviation	1034.768	925.52			
13. No. of Participation/ Attendance in Community Activities				0.058	0.954
Mean	82.08	81.8	-.28		
Standard Deviation	82.95	81.237			

Table 3.6b continued

14. Relationship of Community & Local Govt .				[a]	.527
Mean	2.47	2.50	.03		
Standard Deviation	1.013	1.000			
15. Relationship of Community & Central Govt.				[a]	.157
Mean	1.41	1.43	.03		
Standard Deviation	.677	.680			
16. Relationship of Community & Mosque				[a]	.346
Mean	3.04	3.11	.07		
Standard Deviation	.871	.741			
17. Relationship of Community & NGO				[a]	.157
Mean	1.09	1.12	.03		
Standard Deviation	.291	.325			
18. Relationship of Community & International Org.				[a]	1.000
Mean	1.08[b]	1.08[b]			
Standard Deviation	.271	.271			

significant at *p<0.10, **p<0.05, ***p<0.01
[a] Wilcoxon test instead of t-test.
[b] The correlation and t cannot be computed because the standard error of the difference is 0.

Household profile before and after

As shown in Table 3.7a, after the transfer there was a 0.1 drop in mean employment status of men in the Philippine setting, because some were not able to retain their jobs or they lost their source of livelihood. This could explain the decrease of the household income a year after their transfer from an average yearly household income of Php 84479.03 (1,903.97 USD) to Php 81213.90 (1,830.38 USD). The percentage of household income spent on food before and after resettlement differed significantly, with an increase in the mean food expense percentage to 68.77. More significant differences are evident regarding the number of bedrooms and the kind of housing material a year before and a year later after resettlement. The average number of bedrooms is less in the new community but the house is made of better materials.

In Indonesia (Table 3.7b), after relocation to BT, the number of employed wives decreased by 3.95 percent and the number of unemployed wives increased (1.74 %). Contrastingly, the number of employed husbands increased and the number of unemployed ones decreased. This might explain the 27 percent increase in household income after relocation. The housing situation changed for the worse for most respondents. Housing materials changed from their previous concrete structure to a wooden one and the number of bedrooms as well as house floor size decreased.

Table 3.7a Philippine Household Profile Before and After

N=150	Before	After	Diff.	T	P-Value
1. Kids in School				3.55	0.000***
Mean	0.63	0.85	0.22		
Std Dev	1.27	1.37			
2. Kids who stopped schooling				-1.16	0.250
Mean	0.03	0.06	0.03		
Std Dev	0.24	0.35			
3. Number of Adults In Household				1.15	0.250
Mean	2.47	2.43	-0.04		
Std Dev	1.1	1.01			

Table 3.7a continued

4. Number of Kids in Household				3.35	0.001***
Mean	2.11	2.22	0.11		
Std Dev	3.21	3.02			
5. Wife Employment Status				[a]	0.763
Employed (%)	26.00	25.33	-0.67		
Unemployed (%)	68.00	68.67	0.67		
Std Dev	0.45	0.45			
6. Husband Employment Status				[a]	0.763
Employed (%)	72.00	71.33	-0.67		
Unemployed (%)	21.33	22.00	0.67		
Std Dev	0.42	0.43			
7. Household Income				1.04	0.300
Mean	84479.03	81213.90	-3265.13		
Std Dev	73262.60	72007.46			
8. Floor Size				-1.17	0.243
Mean	26.93	28.83	1.89		
Std Dev	18.30	7.01			
9. Number of Bedroom				2.35	0.020**
Mean	0.46	0.31	-0.15		
Std Dev	0.73	0.55			
10. Kind of House Material				[a]	0.000***
light materials	6.70	0.00	-6.70		
Wood	29.30	0.70	-28.60		
mixed materials	48.00	20.70	-27.30		
Concrete	16.00	78.70	62.70		
Std Dev	0.81	0.43			
11. Percentage of Income Spent on Food				-2.28	0.024**
Mean	65.66	68.77	3.11		
Std Dev	25.56	25.26			
12. No of Sick Adult				0.96	0.338
Mean	0.20	0.15	-0.05		
Std Dev	0.51	0.43			
13. No of Sick Child				-1.47	0.144
Mean	0.20	0.29	0.09		
Std Dev	0.48	0.79			

significant at *p<0.10, **p<0.05, ***p<0.01
[a] Wilcoxon test instead of t-test.

Table 3.7b Indonesian Household Profile Before and After

N=76

	Before	After	Diff.	T	P-Value
1. Kids in School				-1.409	0.163
Mean	0.71	0.80	0.09		
Std Dev	0.83	0.92			
2. Kids who stopped schooling				-2.30	0.024**
Mean	0.24	0.30	0.07		
Std Dev	0.69	0.73			
3. Number of Adults In Household				2.72	0.008***
Mean	2.76	2.36	-0.41		
Std Dev	1.31	0.65			
4. Number of Kids in Household				1.04	0.300
Mean	1.70	1.63	-0.07		
Std Dev	1.20	1.22			

Table 3.7b continued

5. Wife Employment Status				[a]	0.180
Employed (%)	32.89	28.95	-3.95		
Unemployed (%)	68.00	69.74	1.74		
Std Dev	0.47	0.46			
6. Husband Employment Status				[a]	0.157
Employed (%)	93.42	96.05	2.63		
Unemployed (%)	6.58	3.95	-2.63		
Std Dev	0.25	0.20			
7. Household Income				1.76	0.08*
Mean	9427794.74	12009768.42	2581973.68		
Std Dev	8742316.69	16059504.26			
8. Floor Size				3.27	0.002***
Mean	48.54	35.99	-12.55		
Std Dev	33.91	11.38			
9. Number of Bedroom				6.72	0.000***
Mean	2.28	1.45	-0.83		
Std Dev	0.84	0.53			
10. Kind of House Material				[a]	0.006***
Grass/palm leaves	14.47	5.26	-9.21		
Wood	23.68	72.37	48.68		
mixed materials	19.74	13.16	-6.58		
Concrete	35.53	7.89	-27.63		
Std Dev	1.28	0.72			
11. Percentage of Income Spent on Food				-0.56	0.577
Mean	60.25	61.14	0.89		
Std Dev	23.92	22.44			
12. No of Sick Adult				3.90	0.000***
Mean	0.28	0.07	-0.21		
Std Dev	0.51	0.25			
13. No of Sick Child				-0.63	0.531
Mean	0.13	0.16	0.03		
Std Dev	0.41	0.57			

significant at *p<0.10, **p<0.05, ***p<0.01

Social capital profile before and after

Table 3.8a shows that there was a 23 percent reduction in the total network size of the Philippine households. This is due to the significant reduction in the numbers of new acquaintances made in public places and support ties in the new community. But after resettling the KV1 households were able to make significantly more friends in public places, such as around the deep well, on sidewalks, and at the public market (mean increase of 35.81). Community activities like meetings and parties likewise played a big role in acquiring acquaintances (13.96 mean increase) and friends (9.23 mean increase) among the resettlers. However, both before and after resettlement households made more friends in public places than in community activities. It was learned from the respondents that only rarely community and government-sponsored meetings, parties or festivities were organised. A project manager in charge of community organising confirmed that there was no budget for such activities.

While they made new close friends and new contacts with individuals from potentially helpful entities, the number of individuals the respondents would rely on for support did not increase dramatically. Philippine residents gained more close friends whom they met regularly, from every day to once a week (0.54 increase). These new "close

friends", as called by the respondents, were usually their new neighbours or church mates. Their bonds almost doubled after relocating (from an average yearly rate of 43.37 to 73.85) and the mean number of bridges increased from 146.45 to 205.65. Respondents made more bridges than bonds during their first year. One mother said: "It was impossible not to make friends and acquaintances in Kasiglahan, because everybody is a newcomer, a stranger, and there are always newcomers every day." No difference was found in the number of linkages, ranging from government clerks and NGO staff to mayors, project managers and NGO officers, before and after transfer. These entities were tapped by the community leaders for the building of the church, public market, day care centres, school and the provision of water and electricity.

The level of trust, which combines generalized trust and trust towards familiar persons (family members, neighbours, other people in community), increased a little in KV1 after the transfer, from a mean of 2.71 to 2.73. Generalized trust or trust towards the community in general as regards money lending and borrowing dipped a little in the new site. When it comes to entrusting their house or child in the event of going away for a family holiday or for other reasons, the respondents would trust their neighbour rather than other family members or other persons for that purpose. However, considering that the scale for the level of trust is from one to seven, the 2.73 level of trust is still quite low. The level of reciprocity before and after the relocation process yields a significant difference along with the features of this reciprocity, like concern for others, contribute money to the project of others, and contribute time and money for development projects in the community. The level of reciprocity increased by half in the new community (from an average of 1.93 to 2.86). Based on the reciprocity rating scale of one to four, the reciprocity level in the Philippines can be considered good.

In Indonesia (Table 3.8b), the households' number of ties in different contexts increased from 50 to almost 100 percent. Compared to the number of acquaintances made in their previous communities, the respondents made more acquaintances in public places (21.54 increase in mean) and during community activities (23.63 increase). The same applies to making new friends in public places (increase of 8.75) and in community activities (12.70 increase). One responded cited her attendance at parties as instrumental in establishing new ties with the residents. In Indonesian cultures, such parties involve eating together and are generally referred to as *slametan. Slametan* are organized at life cycle events (birth, circumcision, marriage, moving house, death) and at important community occasions. Their purpose is to ascertain the wellbeing (*slamet*) of the host family and to promote social harmony (*rukun*) in the community (Guinness 1986). The respondent added that people not only like these parties because they provide the opportunity to make new friends and acquaintances, but that participating in and donating to these occasions is also a social obligation.

When a father was asked which persons he would frequently engage with, he said that they were his next-door neighbours and co-workers in the rice field who also lived in the site. The importance of such ties after resettlement is reflected in the doubling of their number (from a mean of 7.97 to 14.49). The ties are with individuals on whom one could rely for different needs, like borrowing money, childcare and emergencies, hence can be called support ties. A farm labourer mentioned access to credit as a benefit of such ties in the new community. She could now easily borrow money from friends, which was not possible before.

While significant mean differences are seen in the Indonesian households' bonds (29.09) and bridges (46.39) their linkages before and after resettlement remained low (0.41 mean increase). The level of trust decreased a little in their first year in the site (from 2.84 mean to 2.76). However, the decrease of trust towards family members or relatives to look after the child(ren) and the house when they needed to go away, is compensated by the development of trust towards their new neighbours. The level of reciprocity among the new resettlers declined a little (0.34. mean difference) after relocation. Nonetheless, the reciprocity scores before and after (means of 5.37 and 5.03 respectively) can be considered high on a one to seven scale.

Table 3.8a Philippine Social Capital Profile Before and After

N=150

	Before	After	Diff	T	P-Value
Acquaintances Made in Public Places				0.62	.533
Mean	365.24	198.48	-166.76		
Std Deviation	3587.31	707.24			
Friends Made in Public Places				-1.95	0.053**
Mean	23.48	59.28	35.81		
Std Deviation	71.74	248.47			
Acquaintances Made in Community Activities				-1.80	0.074*
Mean	45.30	59.26	13.96		
Std Deviation	200.40	185.30			
Friends Made in Community Activities				-2.55	0.012**
Mean	8.94	18.17	9.23		
Std Deviation	26.46	46.70			
Individuals Frequently Met				-3.04	0.003***
Mean	5.11	5.65	0.54		
Std Deviation	3.34	3.17			
Support Ties				0.63	.529
Mean	11.37	10.91	-0.45		
Std Deviation	10.38	7.50			
Total Network Size				0.39	.696
Mean	457.63	351.28	-106.35		
Std Deviation	3640.79	998.30			
Bonds				-2.39	0.018**
Mean	43.37	73.85	30.48		
Std Deviation	80.22	180.98			
Bridges				-2.05	0.042**
Mean	146.45	205.65	59.20		
Std Deviation	469.32	557.02			
Linkages				-1.52	.131
Mean	0.79	0.96	0.17		
Std Deviation	1.43	1.45			
Total Level of Trust				-0.52	.603
Mean	2.71	2.73	0.02		
Std Deviation	0.83	0.77			
Total Level of Reciprocity				-15.67	0.000***
Mean	1.93	2.86	0.93		
Std Deviation	0.91	0.77			

significant at *p<0.10, **p<0.05, ***p<0.01

Table 3.8b Indonesian Social Capital Profile Before and After

N=76

	Before	After	Diff	T	P-Value
Acquaintances Made in Public Places				-1.876	0.065*
Mean	29.64	51.18	21.54		
Std Deviation	62.843	83.886			
Friends Made in Public Places				-2.975	0.004***
Mean	10.91	19.66	8.75		
Std Deviation	16.540	22.235			
Table 3.10b continued					
Acquaintances Made in Community Activities				-3.921	0.000***
Mean	41.83	65.46	23.63		
Std Deviation	46.004	58.780			
Friends Made in Community Activities				-2.609	0.011**
Mean	18.93	31.63	12.70		
Std Deviation	29.025	42.650			
Individuals Frequently Met				-6.295	0.000***
Mean	3.25	4.82	1.57		
Std Deviation	1.729	2.393			
Support Ties				-11.167	0.000***
Mean	7.97	14.49	6.51		
Std Deviation	5.448	5.992			
Total Network Size				-3.866	0.000***
Mean	113.88	189.78	75.89		
Std Deviation	116.408	170.498			
Bonds				-4.090	0.000***
Mean	39.01	68.11	29.09		
Std Deviation	43.848	61.848			
Bridges				-3.215	0.002***
Mean	74.28	120.67	46.39		
Std Deviation	86.653	123.245			
Linkages				-4.429	0.000***
Mean	.59	1.00	.41		
Std Deviation	.912	1.033			
Total Level of Trust				1.931	0.057*
Mean	2.84	2.76	-.08		
Std Deviation	.367	.486			
Total Level of Reciprocity				2.904	0.005***
Mean	5.37	5.03	-.34		
Std Deviation	.964	1.243			

significant at *p<0.10, **p<0.05, ***p<0.01

The role of individual, household and community characteristics

The three levels of individual, household, and community characteristics were grouped into independent variables and the different dimensions of social capital organized as dependent variables. Multiple linear regression (pairwise deletion of missing values) was done for three groups of potential predictors: individual qualities, household qualities, and community qualities on the different dimensions of social capital. The variable household income was transformed into its log form to make the distribution more normal. The results for the Philippine case can be found in the Tables A3.1a and A3.1b in the Appendices section and those for the Indonesian case in the Tables A3.2a and A3.2b in the same section.

Public places and community activities ties, close individuals, support ties

As can be seen in Table A3.1a among the three models, it is the community qualities model that produced the highest R^2=22% followed by the individual qualities model (R^2=20%) and the household qualities with an R^2=16%.

In the first model, the variables total civicness and being male entered the regression model. This indicates that those who are more civic-minded, who like volunteering in community activities, joining community organisations, joining petitions for common causes and so on, can gain more ties in public places such as sidewalks and stores. Men are also expected to gain more ties in public places than women. As observed during the fieldwork, people who are active in the community are always seen outside of their homes, engaging in informal talks in the market, stores, and on sidewalks and streets. Fathers and young male adults in the site could be observed to have their weekly gathering with friends, neighbours, and new acquaintances on sidewalks (just in front of their houses), indulging in conversations, cracking jokes, drinking and karaoke.

Only the number of bedrooms came out as significant in the household model. When the households transferred to KV1 they were given a standard housing unit, which had no bedroom partitions. Within the year, some made some partitioning (from wood, a thick curtain, or from concrete) for one or two bedrooms. It was observed that households who did this did not seem to be better-off or larger, but they would often entertain friends and visitors on the sidewalk in front of their house. Hence, for them having a bedroom was important in order to maintain some sort of privacy.

The third model tells us that the number of public places in a community matters greatly in establishing ties with new people; the more public places, the more opportunities for making friends and acquaintances in the site. Public places in the community are not just a venue for parties, meetings or religious services (like the multi-purpose hall and the church), these are also places where people gather and talk about their lives and urgent social issues that affect the community as a whole. The more urgent such issues are, the more time they will spend on such conversations. However, a good relationship with an NGO discourages the production of more ties among the households in public places.

The community characteristics model also accounts best for the public places ties in the Indonesian case, with an R^2=27.1% and with the number of dividing factors as the best predictor followed by the variable "the whole community decides on the community activities and projects" (Table A3.2a). Issues for divisions are a reason for people to gather and talk in public places. Households in BT would prefer their RT leaders to decide on their behalf about community activities and projects, which seemed to have been the practice in their previous communities as well. Although the RT leaders were not better-off than ordinary residents in the site, they were treated with respect and their leadership was recognized. One leader said:

> *I have been the RT leader since the start of this community. So I have been wanting to be replaced. But nobody wants to take the responsibility. Everybody knows that being an RT leader takes so much of your time and even your personal resources.*
>
> (In-depth interview with an RT leader, BT Indonesia, June 2012)

In terms of the ties made during participation in community activities such as meetings and parties in the Philippines, it is age and civicness in the individual characteristics (R^2=26%) that have a significant regression weight. Young household heads tended to be enthusiastic about participating in community activities, but the older men would

prefer to stay at home and just watch television or listen to the radio. The more civic an individual is in a community the more likely (s)he will attend community activities and make new contacts. Four variables in the household qualities model yielded significant effects on the establishment of ties in community activities. The strongest predictors are the husband's occupation and prestige. A man who has a simple job is more likely to make friends in community activities. For a man having a high-prestige job will result in gaining more acquaintances and friends. Compared to women in the community, men attend more meetings in the community. In the FGD, a wife said on this issue:

> *I always want my husband to attend such meetings because he can decide on behalf of the family. I only attend meetings when he cannot make it.*
>
> (FGD, woman participant, KV1 Philippines, December 2011)

The number of kids in the households also has an effect in the model. Having kids in the household would entail going to community activities such as the feeding program, the dental mission or the regular vaccination at the health centre, and as they go to these activities they unavoidably meet new people.

Contrastingly in Indonesia, only Model 3 (R^2=40.9%) reflected significant variables among the models, with number of public places as the best predictor. Community activities like the dental mission, meetings and feasts in BT are usually held in public places such as the mosque (that functions as a multi-purpose venue), the day care centre, and the streets. Without these public places it would have been hard to organise the various events where the households could gather every now and then. A good relationship between the community and the local government could result in more projects and activities in which people can come together and connect with each other. Another facilitating variable is harmony in the community. It stimulates the conduct of community activities and the desire to participate in these. Surprisingly, negative features of the community such as poor basic services and number of dividing factors spurred the creation of the same type of connections, probably because they were urgent issues that necessitated discussions in community meetings.

When it comes to the ties the households cultivated with individuals who they would meet almost daily and who became their "close friends", those with low education seem to create more ties with ordinary individuals (Model 1 R^2=7.6%). The majority in the community either just reached or finished secondary education. Thus, it is not difficult to create bonds with strangers who in a lot of ways are like them and who live close by. It is the opposite with those who were higher educated. Since they are a minority in the site, the pool of individuals who are like them is much smaller and creating more bonds is a challenge. In the second model (R^2=14.2%) only the frequency of sick children has a positive regression weight. Having a sick child in the household requires much attention from the adults and the need for their neighbours to help them in looking after the sick child when they need to leave to buy medicine or go to work. This dependency nurtures a close and reciprocal relationship. The third and best model (R^2=14.6%) shows three variables as good predictors: relationship of the community with the central government, rate of participation in community activities, and dividing factors in the community. It is surprising that creation of close ties with individuals thrives in a situation of conflicts in the community.

Women household heads in Indonesia, both those with poorly paid work and those with prestigious jobs, could nurture more close connections with individuals than male household heads (Model 1 R^2=18.8%). This could be attributed to the social situation created by their jobs. Again, the community variable number of public places and less

basic services turned out to induce making more close ties, most likely for the same reasons as already mentioned above (Model 3 R^2=26.6%).

Table A3.1a shows that in the first model (R^2=10.4%) in the KV1 case only age has effected some change in cultivating connections with particular individuals who can be source of support in varying needs (financial, child care, emotional). A younger person, like in the age bracket of 20-40, is expected to gain more ties who can serve as a social resource to him or her and the household. Compared to older persons, persons in this age range are more active in the workforce, more sociable and therefore have more opportunities to meet people with diverse resources to offer. The second model (R^2=23.3%) yields the number of bedrooms and number of sick children as having a significant influence on the number of support ties. But between the two variables, the number of sick children has the strongest effect. The same explanation would apply as in the Indonesian case. The number of bedrooms recurs as a variable with positive effect on such ties. In the third model (R^2=13.4%), the rate of participation in the community spells a positive influence on social support ties. High participation rates imply that residents gather more to discuss common causes. This could have spill-over effects at household level by breeding a "culture of help" among the residents. The more they gather, the more they get aware of each other's needs and can identify people who could help them in particular situations.

In the Indonesian site, only the number of public places in Model 3 (R^2=29.8%) had an effect on the number of support ties. None of the variables in Models 1 and 2 were significant.

Bonds, bridges, and linkages

Model 1 (R^2=23.9%) provides the best explanation for the variation in bonding social capital in KV1. Specifically, the respondent's rate of civicness came out as the variable with the strongest effect on creating ties with similar persons. The number of bonding ties in BT can be attributed to community qualities (R^2=41%), with number of public places as the best predictor. When it comes to building bridges the individual qualities model, particularly the civicness level of the respondents generated the strongest effects (R^2=25.1%). In Indonesia, bridging ties were induced by a situation where the leaders would decide on projects for the community (Model 3, R^2=38.2%). In KV1, linkages with the government and NGOs were facilitated by the relationship between the KV1 community and the local government (Model 3, R^2=15.8%). In the Indonesian case, the linkages established by the residents are related to their level of civicness found in the individual qualities model (R^2=24.2%). Men in the community are generally civic-minded, would attend meetings, wrote project proposals to the village leader for rice subsidy and for granting the Translok residents ownership rights to their house and lot.

Trust, and norms of reciprocity

The level of trust during the first year in KV1 was influenced by year of resettlement, number of dividing factors in the community, and the number of present basic services (Model 3 R^2=19.9%). It seems that those who resettled later had a higher level of generalized trust than those who resettled earlier, probably because when they arrived the site was already in a physically better shape and people already knew each other. Most of the basic services in KV1 were initiated by the community leaders and the project leaders during the first year. In Indonesia, it is the rate of participation in the

community (Model 3, R^2=32.4%) that reinforced the level of trust. Norms of reciprocity in Philippine case were facilitated by participation in the community (Model 3, R^2=20%) and the number of social services denied or having limited access to in the Indonesia case (Model 3, R^2=29%).

Civic engagement history and institutional factors effects on social capital

Gender (male), employment status of the household head and household income together with proxy indicators for the households' civic engagement history and institutional factors were the independent variables, while the different dimensions of social capital were the dependent variables. Multiple linear regression was done for each dimension of social capital. The results are presented in Table A3.3a and A3.3b for the Philippines and Table A3.4a and A3.4b for Indonesia.

Public places and community activities ties, close individuals, support ties
Table A3.3a shows the multiple regression model for the public places ties in the Philippines (R^2 = 44.1%). One civic engagement history variable ("number of participations in community activities previously") turned out significant. Two institutional variables, i.e. number of visits to public places and participations in community activities, emerged as predictors. This implies that more than the number of public places available, it is the number of times that people actually go to these places and the number of times they participate in activities in the community that really matter in forging new ties in public places. The positive significant results of the frequency of community participation both before and after resettlement indicate that being active in community activities leads to gaining more connections in public places. In Indonesia, a much lower R^2(11.8%) was generated by the same model for public places ties (Table A3.4a). There, however, the significant effect of participation in previous community activities indicates the positive influence of tradition as exemplified by the *slametan* (Guinness 1986).

When it comes to forging new ties in community activities in KV1 the model (R^2=30.9%) only yielded two variables (institutional factors) with significant positive regression weights; presence of more individuals or entities that provide support to the community during crisis and more frequent attendance of community events resulted in more ties forged in community activities. In Indonesia (R^2=40.2%), the number of visits to public places, higher support score in the community, and frequency of participation in community activities in the new site are positively associated with the number of ties made during community events. The BT residents are all Muslims and visit a mosque daily. During these visits they exchange information about upcoming events or plan community activities. They are motivated to attend regular community activities like Quran reading or ward meetings where they can make new contacts.

The number of visits to public places in the Philippine case (R^2=20.9%) is a predictor for cultivating support ties. This indicates an indirect benefit of frequenting public places: apart from having an opportunity to indulge in chatting with friends or acquaintances, one can actually meet individuals who can help in difficult times. In the Indonesian case, a higher community support score would benefit a resident with more support ties (R^2=12.4%). The positive link between these two variables connotes two things. One is the usability of this community support network for the households' personal support ties, the other is the possibility that the availability of community

support encourages or motivates households to help one another to meet their different needs.

Bonds, bridges, and linkages

In the Philippine regression model, households bonds, household income and all the institutional variables came out as significant (R^2=36.7%). The institutional factors, except for the number of public places present in the site, all have positive regression weights. The significant results regarding all institutional factors underscore the role of institutional interventions in the formation of bonds or close ties among the households during the first year of residency. In Indonesia, the model (R^2=50.9%) on the formation of bonds yields different outcomes. The rate of participation in the previous communities and good relationship with the former local governments emerged as responsible for establishing close relationships among the residents. Likewise more public places in the Indonesian site have a positive effect on the formation of bonds. Perhaps living in a community with a good history of participation and relations with local officials facilitates cultivating bonds or strong ties with the other residents during the first year in the new location. Additionally, the vicinity of public places and living closer together in comparison to the dispersed living pattern in the mountains would create more opportunities for people to meet, chat, and bond with others.

Three out of the four institutional factors variables were found essential in forming bridges in KV1: number of visits to public places, community support during crisis, and participation in community activities. Like the forging of bonds, establishing bridging ties in the Philippines site could also be traced back to institutional factors. In Indonesia, only the rate of participation in the previous community facilitated the creation of bridges (R^2=14.4%).

Among the three forms of ties, linkages can pose a challenge to poor households (cf. Woolcock and Narayan (2000). This is shown in the minimal increase of the households' ties with government representatives and NGO people after the transfer. In KV1, of all the variables in the regression model (R^2=12.9%) only the frequency of participation in previous community activities has a positive weight. During the fieldwork it could be observed that particularly persons who were leaders and active members in their communities of origin were the ones with good ties with the projects managers, NGOs, and government authorities. Apparently, previous experience with authorities helps in forging new linkages in a new setting. It can also be assumed that those who already had linking ties maintained the upper hand in creating new ones after the transfer.

In Indonesia, linking ties were negatively associated with the quality of the relationship between the community and local government where they came from, and positively related to the number of visits to public places and the frequency of participation in community activities (R^2=54.2%). More linkages are made when a household head frequents public places in the community. Contrastingly, a better relationship with the local leaders like the *kepala desa* (village head), *kepala RT* (block leader) and *kepala RW* (ward leader) in the previous community had a negative influence on forming linkages in the new site. Perhaps the households' trust in their former local leaders induced a critical attitude towards the new local leaders, who like them (except for the village head), were also resettlers.

Trust and reciprocity

In the Philippine case (R^2=12.4%), an increase in expressions of community support during crises negatively affects the households' level of trust (Table A3.3b). Conversations with some residents revealed feelings of doubt and jealousy towards certain individuals and entities that helped them during such episodes. They suspected the assistance to be politically or religiously motivated, and thought it would not last long and would require them to repay in the form of political support or certain religious practices. The model for the Indonesian trust case did not generate any meaningful results (Table A3.4b). No variables in the regression model for norms of reciprocity in both Philippines and Indonesian case turned out to be predictors.

3.2.3 Discussion and Conclusions on the Rebuilding of Social Capital

Overall, the involuntary resettlement episode in both settings did not significantly harm the households' structural and cognitive social capital. It provided opportunities to improve it in terms of numbers and composition of ties. In the course of one year, the households were able to create new ties and somehow duplicate the levels of trust and reciprocity they had in their previous communities. The significant improvement of social capital, particularly bonding ties, after a year in the respective sites confirms that social capital is necessary in a resettlement transition. In both sites, the resettlers were also capable of expanding their bridging ties in the first year, but the increase in their linking ties is in both cases only marginal.

Regarding cognitive social capital, in both contexts there is not a high level of trust in the community in terms of lending and borrowing money but there is a high level of trust in familiar persons (neighbours) for house sitting and childcare. Differences between the two locations are also evident. While the number of acquaintances made in public places decreased in KV1 in the first year, the opposite happened in BT. If the Philippine households would reciprocate resources more in the new site, the Indonesian households reciprocated a little less after the relocation. But overall, in Indonesia the level of reciprocity is much higher than the Philippines.

The urban setting in the Philippines reflects the male gender advantage in making ties along with the civicness rate. In the Indonesian (rural) setting, the individual characteristics of the households heads in aggregate did not impact greatly on the forging of ties. The prominent link between the KV1 households' negative features (sick children and simple work of husbands) and structural social capital may imply that vulnerabilities in a household are somehow inducive to creating ties with individuals who can be source of help. In the Indonesian case vulnerable households (regarding wife's occupation and house size) also reciprocate more in the community. Positive and negative community characteristics in both sites influenced cultivating structural as well as cognitive social capital. Findings on the positive relationship of number of public places with the social capital level in KV1 and BT emphasizes their vital role in community building, which deserves attention from resettlement planners. Unexpectedly, the significant relationship of number of dividing factors in the community and number of denied services with the number of ties in both cases suggest that such negative features positively affects the households' social capital during the first year. Apparently, adverse circumstances may draw the resettlers together and encourage engagement among them.

The lens of the history-institutions debate makes visible how history and culture on the one hand and institutional factors on the other influenced the process of social

building. It provides evidence on the relevance and applicability of both the historical view and the institutional view. The Philippine case provides support for the institutional approach to social capital formation, while the Indonesian case testifies to the validity of Putnam's theoretical perspective. In Indonesia, the significant effects of the households' previous participation level in community activities on their new social capital connote a culture that continues to have an influence in the new location. This can also be seen in the before and after resettlement scores of civic engagement, which are much higher than in the Philippines. In the Philippine site, it is apparent that community support for various issues played an important role in the formation of trust and most dimensions of structural social capital among the households.

The results suggest that civic engagement history can only be influential in social capital building in a new community when the households in the new context share cultural traditions of which the ensuing social practices are regularly observed. In the absence of such social practices, it is the interventions of the institutions in the resettlement community that will stimulate social capital formation. For resettlement project stakeholders this study points to the importance of the resettlers' socio-demographic characteristics, their history of civic engagement and cultural back-ground, and their interface with the rebuilding of social capital after involuntary resettlement. These insights should stimulate resettlement planners to marry a soft component (community-related activities) with a hard component (basic facilities and public places) in their programmes in order to enhance welfare outcomes.

3.3 Conclusion: Resettlement Risks and Social Capital Building in Year One

The results of the examination of the resettlement risks experience of the KV1 and BT households convey new perspectives on vulnerability in a forced resettlement context. Unlike the usual finding that education shields a resettler from risk, this study yielded a contradictory result. This may be due to the fact that more educated household heads tend to lose more during displacement and that resettlement in an impoverished community actually misplaces them in an employment pool, thereby eventually aggravating the risk level in other areas.

Another surprising finding was, in the Philippine case, the negative effect on risks mitigation of having a good relationship with the church and NGOs. We can infer from this that in an urban resettlement context like the Philippines, where there is a national policy on resettlement and community leaders are aware of their rights, the intervention of NGOs and perhaps the church may result in delays in service delivery and trigger disagreements among the project stakeholders. What should be nurtured first is the community relationship with the host local government (negative regression weight) who is in the best position to deliver the social services and interventions needed by the households and the project managers. In sum, this study demonstrates that features of the resettlement program, the institutional context, and individuals and households together cause and mitigate risk during the first year of resettlement. Taking these factors together proved to add substantially to the strength of the IRR model, even when applied to two quite divergent resettlement populations.

Examining the new social capital in relation to the after resettlement profile highlighted the interfacing of individual, households and community conditions after resettlement with the amount and nature of the households' social capital a year after the transfer. At the same time, the two cases also show that these three sets of characteristics interact differently with structural and cognitive social capital and with the different dimensions of these two types of social capital.

Both cases reveal the importance of building public places in a resettlement site for fostering structural social capital. However, these public places will only spur the creation of more ties among the resettlers if they are frequented or visited regularly by the households because of interesting activities. The participation of household heads in community activities in both communities also underscores the importance of efforts of the project stakeholders to encourage household participation in community activities. As in previous studies that positively associated public places with the number of individual ties, this study also shows the positive link between the number of public places in the community and the levels of trust and reciprocity.

Factors of cultural continuity and institutional features of the resettlement programme explain the differing social capital outcomes in the two communities during first year. The Philippine resettlers were not keen on making new connections and attending meetings or other community-related activities that they thought would not bring them immediate benefits, but they had some experienced and well-connected community leaders who lobbied for causes that benefitted the entire community. The resettlement plan for Kasiglahan might not have been perfect but it had components that most likely strengthened the institutional factors that spurred the rebuilding of social capital after resettlement, of which dedicated staff in charge of implementing and monitoring the resettlement programme was an important one.

In the Indonesian setting, the rural resettlers had distinct activities they would do together, as they did before the transfer, like partying (*slametan*), praying in the mosque, and observing Ramadan. Unlike the Philippine case, there was no comprehensive resettlement plan for the Indonesian resettlement site. Only the construction of the houses, toilets and streets was planned. Subsequently, other facilities would be built depending on the availability of funds from the provincial level. The community leaders were not experienced leaders and did not have plenty of linking connections. Nonetheless, the RT leaders convened regular meetings with their residents to discuss urgent community issues, such as conflicts between neighbours.

In aggregate, explanatory factors regarding the risks experience and social capital building in each country during first year in the sites have been clearly identified. It would be interesting to see in upcoming chapters how much of these factors could account for social capital building and wellbeing of the households in later years.

Chapter 4

Social Capital Creation Across Time: A Longitudinal Perspective on Social Capital Building in an Involuntary Resettlement Context in the Philippines and Indonesia

The story of social capital building in KV1 and BT that started in Chapter 3 continues in this chapter. However, unlike the previous chapter, this chapter only covers structural social capital building. From the year the site started welcoming resettlers until the year of field study, we get to learn about the trajectory of ties creation in each site, changes in ties composition, and resources that can be drawn from them. The discussion in the light of the institutional and historical views brings out the similarities and differences between the two settings. The relevant tables are presented at the end of the chapter

A version of this chapter is under revision for resubmission as:
Quetulio-Navarra, M., Niehof, A., Moerbeek, H. A Longitudinal Perspective on Social Capital Building in an Involuntary Resettlement Context in the Philippines and Indonesia. *Social Networks*, submitted in February 2014 and revision advice issued on 6th July 2014.

4.1 Introduction

Social capital is considered to compensate for lack of other types of capital among poor people and aid them to 'get by' or 'get ahead' in life (Briggs 1998). Social capital is embodied by an individual's social ties or networks through which actual or virtual resources can be derived (Bourdieu and Wacquant 1992). Similar with economic and physical capital, it is not shock proof and can also vanish or dwindle. Cernea and Mc Dowell (2000: 30) have observed that among other risks that involuntary displacement brings with it is the destruction of social capital: "Forced displacement tears apart the existing social fabric. It disperses and fragments communities, dismantles patterns of social organisation and interpersonal ties; kinship groups become scattered as well. Life-sustaining informal networks of reciprocal help, local voluntary associations and self-organized mutual service are disrupted. This is a net loss of valuable social capital, that compounds the loss of natural, physical, and human capital."

Research on how social capital is rebuilt after involuntary displacement has been conducted for three types of context. The first one is conflict-induced displacement of refugees and asylum seekers (Bertrand 2000; Bun and Christie 1995; Elliott 1997; Lamba and Krahn 2003; Madjar and Humpage 2000; McMichael and Manderson 2004; Potocky-Tripodi 2004; Ramsden and Taket 2013; Robinson 1993; Smith 2013; Suzuki 2004; Valenta 2008; Wahlbeck 1998; Willems 2003). The second is development-induced displacement of households (Baker and Arthurson 2012; Clampet-Lundquist 2010; Curley 2008, 2009, 2010; Kleit 2010; Wellman and Frank 2001). Less studies have been done on the third type, disaster-induced displacement. This study applies a longitudinal perspective to development and disaster-induced displacement in the Philippines and Indonesia. Its overall aim is to gain insight into the process of social capital building over time. For heuristic purposes, the process of social capital building was compared in two institutionally and culturally different resettlement settings, one in the Philippines and the other in Indonesia.

4.2 Theoretical Discussion and Research Questions

The study follows two definitions of social capital. One is by Bourdieu and Wacquant (1992: 119) who refer to it as the "sum of resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition." The other is by Putnam (2000), who considers social capital as connections among individuals, social networks and the norms of reciprocity and trustworthiness that emerge from these. One can draw tangible resources, such as a car, money or a house, from one's social connections, and intangible ones, like education, reputation, and security (Lin 2001). Social capital is multi-dimensional (Stone 2001). Ties and networks are structural social capital, while trust and norms of reciprocity comprise cognitive social capital. This chapter focuses on structural social capital. Ties can be classified into strong or weak ties. The former can be characterized by intensity, intimacy, frequency of contact, acknowledged obligations and provision of reciprocal services, while the latter have those characteristics to a far lesser degree and the resources involved are more dissimilar (Granovetter 1973). Strong ties are the ties with people in one's immediate social network, like family, friends, and kin. Weak ties are those with people outside this network, such as acquaintances and co-workers. The two types of

ties represent different access points to an individual's social resources (Enns et al. 2008).

Different determinants have been found to play a role in the building of social capital stocks at the individual, household, and community level. In this study, these have been grouped as: individual and household characteristics and, at community level, institutional interventions and history. At the individual and household level characteristics such as age, gender, ethnicity, employment status, and household size have figured as positively affecting one's social capital. Lamba and Khran (2003) found that the refugees in Canada aged 50 years old and above already had pre-existing ties in Canada. In Dar es Salaam, Congolese, Rwandese, and Burundese refugees younger than 26 years old had more ties with older people than with individuals of the same age group. Moreover, compared with the pre-resettlement period, after resettlement Dar es Salaam male refugees forged more ties with women than men (Willems 2003). Ethnicity was a major factor in the density and size of social networks among refugees in Norway (Valenta 2008) and a catalyst for social engagement among Somalian refugees in Australia (McMichael and Manderson 2004). The refugees in Norway easily rebuilt their social capital with workmates, relatives, friends, neighbours, refugee-guides and teachers of the same ethnic group. In Australia, the continuation of cultural practices of the Somalis such as cooking and eating together encouraged building connections.

According to the World Bank (2010a), institutional interventions through policies, programs, and projects strengthen the social capital of the individuals, households, and communities concerned (Brehm and Rahn 1997; Hall 1999; Halpern 2005; Krishna 2007; Levi 1996; Lorensen 2002; Maloney et al. 2000; Onyx and Bullen 2000; Petersen 2002; Preece 2002; Rothstein 2001; Schmid 2000; Soubeyran and Weber 2002; Uslaner 2001; Woolcock and Narayan 2000). This is illustrated by a case of involuntary displaced households in the United States where social capital turned out to be positively related with the quality of institutions, social services, and facilities in the neighbourhood (Curley 2010). Public benches and the community centre also had a positive effect in another government resettlement project in the United States, but the lack of provisions for peace and order did so as well. It spurred the forging of relations among the residents to protect themselves against the violence in their community (Clampet-Lundquist 2010).

Putnam et al. (1993: 179) are adamant that social capital is path dependent and that "historical turning points […] can have extremely long-lived consequences." They attributed the success of the northern Italian regions and the lack of it in the southern regions to their social capital history that dates back 1,000 years ago. It is argued that historical factors such as civic engagement of individuals determine social capital accumulation and, therefore, cannot be enhanced in the short term. For Putnam civic engagement involved just about everything from reading newspapers, political participation, social networks and interpersonal trust to involvement in associations. In the research by Guiso et al. (2004) on the role of social capital (in the form of trust) in financial development in different regions in Italy, the similarity of social capital in the place of origin and in the place of residence proved to shape people's financial transactions in the new place of residence. In another study on the role of culture in the economic development in 69 regions in eight European countries, historical variables such as the level of generalized trust, correlated with the present regional trust (Tabellini 2010).

We already reported on the role of individual and household characteristics, institutional factors, and that of the cultural and historical background of the households in the two resettlement communities for the period of one year before until one year after resettlement in Chapter 3. In this chapter we continue to investigate the explanatory power of these three types of variables for the process of social capital building in the two different settings, but now over a longer period of time. The period studied in the Philippines spans 12 years, that in Indonesia 11 years. In doing so, we shall focus on structural social capital, more specifically on the formation of weak and strong social ties. Hence, the questions addressed in this chapter can be formulated as follows:

1. How do weak and strong ties develop over time?
2. How do personal and household characteristics affect the development of such ties?
3. What does the comparison between the two settings tell us about the impact of institutional factors on structural capital formation?
4. What does the comparison between the two settings tell us about the impact of cultural and historical factors on structural capital formation?

4.3 Data Collection & Analysis of Quantitative and Qualitative Data

Chapter 2 already discussed in detail the research sites and methodology in this study and Chapter 3 mentioned how I measured the structural social capital. I now proceed to how the data in this particular chapter were analysed.

Unlike the rest of the empirical chapters that utilized the data collected from all survey respondents, this chapter only utilized the data of the 145 Philippine households who arrived in the site between 1999 and 2005 and the 70 households in Indonesia who resettled in the area between 2001 and 2005. The quantitative data were entered into Excel and analysed using STATA 9. Indicators for the yearly civic engagement profile, institution-related profile, and social capital profile were reported in numbers, frequencies, means, and percentages. These data on different profiles were analysed for patterns regarding their trajectory over time.

Following this, regression analysis was conducted to determine the effects of the three types of variables on the level of structural capital during the last full year. The dependent variables are the strong and weak ties during the last full year. The independent variables in the regression model comprised some control variables and variables representing individual and household attributes (including the household head's civic engagement data), institutional factors, and the stock of social capital or social capital history after the resettlement. The institutional factors are those pertaining to activities of the resettlers mediated by institutions, like visits to public places, attendance in government meetings, membership in government supervised organisations, among others. The social capital history is an accumulation of strong and weak ties during the first five years, while the data on individual and household attributes and institutional factors were based on the reports during the last full year (see Table 4.1 for an overview of the variables).

Qualitative data were recorded, transcribed and translated into English (in the Indonesia case), and content analysis was applied. The analysis was directed at evaluations of social relations as well as the process of social capital development, which was triangulated with the quantitative data.

4.4 Results

4.4.1 The Philippine case

As shown in Table 4.2, there were 97 female and 48 male respondents. Most respondents are in the age bracket of 31 to 60. Most household heads are married (75.2%) and most of them have either reached or finished high school education (64.1%). Almost 32 percent are housewives, 22.8 percent are labourers, followed by government/private employees and entrepreneurs (both 13.8%). The majority (73.1%) is Catholic. The dominant household size is four to six. Average household income is Php 86,464.49 (1994.99 USD). Eighty-three respondents resettled in the community (KV1) during 1999-2002 and 62 during 2003-2005.

The resettlement program is the responsibility of the National Housing Authority, a government agency. The resettlement package includes a house and lot in a community that is supposed to be equipped with basic services and primary public facilities as stipulated in the Urban Development Housing Act (UDHA). The Act sets forth a systematic program for the allocation of land for social housing for the underprivileged and homeless city dwellers and covers a wide range of provisions for urban development and housing for resettlers. The local government unit is tasked to implement this act.

Civic engagement profile

The civic engagement profile of the respondents is based on their reports on the frequency of participation in community activities, types of community activities participated in, and number of voluntary organisation memberships. As reflected in Table 4.3, the number of participations in community activities that were arranged by either community leaders or households peaked during 1999-2001, averaging five to eight participations each year. After that the averages decline. For 2011 the lowest mean frequency (3.55) is registered. Among the community activities, participation was highest in community meetings followed by different kinds of parties in KV1. Most of the respondents would only participate or attend at least once in religion-related activities such as the holy week or feasts of the saints, elections, sports league, or a wake.

Interviews with community leaders revealed that, indeed, community meetings were frequent during the first three years in the site due to the urgency of the issues relating to basic services and the election of new officers in the community. When demands for the provision of basic services were gradually met, the frequency of meetings decreased. Among the seven types of community activities respondents could participate in every year, they would only participate in one to two types and this remained almost the same from 1999 until 2011. Contrastingly, Table 4.3 shows a pattern of increasing membership of voluntary organisations. This can be explained by the gradual emergence of different types of organisations through the years (e.g. associations that are household-based, church-based, political-based, etc.)

Institution-related profile

Table 4.4 tells us clearly that the provision of both basic services (water, electricity) and public places (school, day care centre, market) were inadequate, which was not in accordance with the law (UDHA). Between 1999 and 2002, households had to contend with insufficient water supply from a tank and from public wells for which they had to queue. There was no individual electrical connection until 2002 and the households had to rely on a generator that did not have enough capacity for all their basic appliances. One community leader told us that she had to go house by house to remind the households not to switch on other appliances besides their light bulbs to prevent the generator from breaking down. The individual water and electric connections were only provided in 2006 after former President Gloria Arroyo made a grant available to fund the expenses. The first public places that were provided were the wells, followed by classrooms in 2001, only after much complaints and controversy.

Most of the public places like day care centres, sidewalks, streets, market, and the multi-purpose hall were constructed in 2005 after the persistent demand of the KV1 community leaders. Some households built stores and small churches were erected through the help of different foundations. The NHA project managers cited insufficient funds and their release in tranches as causing the issues on basic services and public places provision. The number of public places frequented by the households remained almost the same from 1999 until 2011. Among the top four public places frequently visited were the deep well during the first few years, stores for buying daily necessities (and chatting with friends), churches, and the sidewalks which were frequented daily for meeting with friends and for small karaoke parties. The mean number of yearly visits did not differ much over the years, ranged from 382 to 424. A decrease of zero attendance to government-organised meetings is visible over the years (from 82% in 1999 to 63% 2011). However, over 50 percent of the household heads did not attend even one meeting. Membership status of household heads in government-initiated organisations such as the block-wise organised Homeowner's Associations (HOA), tells the same story. Despite the increase of membership from 23 percent in 1999 to 47 percent in 2011, over half of the household heads were not interested in membership of any of the government-led organisations. The stories of the respondents about poor performance of the project managers in community organisation were reflected in statements by the project managers themselves. According to them they were being constrained in spending more time on organising community activities in KV1 by the lack of a budget and insufficient manpower to cover the entire area.

Social capital profile

The structural social capital was measured on a yearly basis. Table 4.5 shows the trajectory of structural social capital across the period studied. The mean number of acquaintances seemed to grow between year one (1999) and year 13 (2011). These acquaintances were met in public places like the sidewalks and stores and during community activities such as meetings and parties. The number of friends also increased across time. When asked about the continued increase of acquaintances and friends, some respondents attributed it to the yearly influx of new resettlers, others to their jobs (e.g. food vendors, school guard), and to being new residents and strangers in the community. Respondents were also asked to name the persons in the community that they would regularly (daily to once a week) engage with. With regard to these ties, the increase over the years is marginal (around 1-2 per year) compared to that of acquaintances and friends. The persons concerned are mostly the next-door neighbours

and such contacts would only be added if new households moved into their block. It could be observed that despite reports on increasing numbers of friends in the site over time, nurturing through constant communication only happened with individuals labelled as close friends. It is typical among housewives to be engrossed with friends in conversations the entire day, only interrupted by preparing lunch or fetching the children from school. Conversations could be about community issues, but most of the time concerned personal matters. Despite the presence of the NHA project office within the community, ties with government people who supposedly could provide access to government and services, remained few for 13 years.

Interviews with the leaders and project managers revealed that while most of the residents are loosely connected with the project managers, the community leaders, particularly the members of the Action Group (an issue-based organisation in the site), have a close working relationship with them. They are also able to forge ties with the local government and NGOs to assist them in their quest for basic services provision in the community. It is through these Action Group leaders that the monthly amortization rate was lowered and that the households now have access to the free services of the local government of Montalban, such as education and burial assistance.

In a focus group discussion (FGD), the participants expressed their desire to expand their ties with people in the government since they recognize their value. They also said that the government people should initiate meetings with them. Except for the community leaders, household heads in aggregate have even fewer connections with people from non-government organisations (NGOs) than with government people. Considering the area size, population density, dismal facilities, and the area's proneness to flooding, KV1 had caught the attention of NGOs who would help in times of need. But NGOs just come and go and always work through the community leaders and the project managers. Ties with representatives of the church were also scant, with very minimal increases in successive years.

When asked to identify persons whom respondents consider important for their households, the mean number of important ordinary individuals (around 2-3 per year) is higher than that of persons from their pool of government, NGO, and church contacts (mean of one per year). They were also asked to name up to eight individuals who would help them in each of the identified 12 areas of needs like emotional, financial, food security, employment, child care, emergencies, etcetera. Table 4.5 shows that the total sources of support numbered eight to ten persons. It was also revealed that these support ties were the same set of people throughout the entire period. When the ties were disentangled into strong ties (family, relatives, friends) and weak ties (neighbour, boss, co-worker, etc.), strong ties outweigh the weak ties in providing support. Even for finding a job, household heads would seek assistance from their strong ties. Family members and relatives are a natural source of support by virtue of ascribed family obligations and friends due to an emotional bond. The respondents might have many friends and acquaintances and know people whom they talk to almost every single day, and they have some ties with government, NGO, and church people, but all these contacts were rarely mentioned as support tie. The question why they would not ask for help or support from people they regularly meet was raised in the FGD. One mother shared that she did not have the courage to ask her close friend for financial help because she would not be able to reciprocate. Another mother explained that she did not see the need to ask help from these people because the assistance given by her family and relatives was already enough. Few of them would only make it to the

throng of ties for 'emotional support', when in fact they interact with these people regularly.

When all ties are regrouped into strong and weak ties, trends are visible with regard to both types. Although the increase in strong ties remained gradual over time, the rise in the number of weak ties spiked from 2005 onwards, which could be attributed to the construction of additional public places. The lesser number of strong ties compared to weak ties connotes that weak ties are easier to forge than strong ties, in which one has to invest. On another note, the number of strong ties affirms the 'homophily' thesis that strong ties occur among people with similar demographical and socio-economic characteristics (Lin 2001). However, our evidence contradicts the argument of Granovetter (1982) that weak ties are more beneficial than strong ties because they provide access to information and resources beyond the own social circle. In KV1, even if there are weak ties in the network of household heads, they are not mobilized for the interests of their households. In our case, strong ties are not just invaluable to the poor households because of the direct support or resources people can claim through them (e.g. money, child care, job information), they are also extended to the ties of their strong ties, as in the case of community leaders who are well connected to politicians and NGOs. By virtue of their strong ties with these leaders, people can access resources such as burial assistance, educational assistance, or even business capital.

In a situation where resources are very few while the demand is very high, being directly or indirectly connected to sources is very important. One community leader told us that when choosing beneficiaries for projects like those on livelihood training or business capital, he would favour active community members over the not so active ones. By 'active' he meant good attendance at meetings and active participation in organizing activities, which can be a manifestation of friendship with the leaders. The case of the community leaders, however, highlights the value of weak ties. Their connections with politicians, government officials, project managers and NGOs stimulated the construction of basic services and public places and setting up projects in the community. All KV1 households benefitted from this, while the 'chosen few' could access the rest of the resources.

4.4.2 The Indonesian case

Table 4.6 reveals that the majority of the Indonesian respondents is male (94.3%). Most of them (68.6%) belong to the age bracket of 41-60. Almost all respondents are married (97.1%). The majority (74.3%) only has elementary education. High school is the highest education level attained (5.7%). Over 50 percent of the respondents are either doing elementary jobs (31.4%) or farming (25.7%). All are Muslims, the majority (68.6%) affiliated with Nahdatul Ulama, the other are Muhammadiyah. All are ethnic Sundanese. The average household size was 3.96 and the average household income was IDR 10,975,006.58 (915.773 USD)). The community is divided into three blocks called RT1, RT2, and RT3, where 67 households reside. Three households live in RT5, a block that belongs to another community but is adjacent to RT3. These families were living in RT2 but opted to transfer to RT5 for personal reasons. The landslide happened in 2000 but only in 2001 the resettlement site became minimally habitable for the victims of the landslides. Sixty-four households resettled in BT during 2001-2003, while six transferred in 2004 and 2005.

The Bantarpanjang resettlement project is managed by the Cilacap Provincial Government and the Cilacap Department of Transmigration. An interview with the officer in Cilacap who was directly involved in the supervision of the project, revealed that there was actually no budget earmarked for the families affected by the landslides. However, given the urgency of the case, the Department reallocated some of their funds for the regular transmigration activities to the development of the Bantarpanjang Translok site. To acquire the land for the resettlement project, the Cilacap Provincial Government entered into a land exchange with the forestry agency Perhutani in which the Cilacap Provincial Government compensated Perhutani for its land with a property twice the size of the target land.

The provincial government still owns the land and the houses and there is no option for the resettlers to acquire it. Up until now, the Indonesian government still has no national policy for resettlement. The Transmigration Ministry follows the presidential decree Keppres 55/1993 on the transmigration of families but that only covers the aspect of land acquisition, not the provision of basic services and public facilities (Zaman 2002).

Civic engagement profile

The household heads have been consistently active in community activities in BT, with participation means ranging from 44.38 to 66.89 (Table 4.7). The decline during the last year (2012) can be explained by the fact that reporting did not cover the whole year since the survey was done during April-June. It is noteworthy that even during the early years in the site, when people did not know each other, they were already actively attending different community activities. The activities comprise community meetings, parties, burials, and celebrations of Idul Fitri, Idul Adha and Maulid Nabi. Table 4.7 shows that almost everybody would participate in these activities (participation means ranging from 3.83 up to 5.46). However, although everybody would attend almost all kinds of activities, frequency of attendance would vary per type of activity. A closer look into the data revealed that the high frequency of participation was due to participating in community parties (35 to 54 times a year). This is followed by attending community meetings arranged by mothers or fathers in the site for occasions like *pengajian* (Qur'an study), *arisan* (rotating savings and credit association) or *dasa wisma* (housewives group). Then follows participation in burial rites and observance of the yearly religious events. For Indonesians, attending parties along with giving a contribution (monetary or in kind like providing help in preparing food) is a social obligation. These parties, called *slametan*, are organized at life cycle events (birth, circumcision, marriage, moving house, death) and at important community occasions (like harvest, but also in case of a crisis). According to Guinness (1986) the aim of the *slametan* is to ensure the wellbeing of the host family and to promote social harmony in the community.

The majority of the household heads is active in voluntary organisations in the community. Over the 12-year period they were most active during the first year when everybody belonged to a voluntary organisation. In the successive 11 years, 58 to 76 percent of the household heads belonged to one or more organisations in the site. The voluntary organisations were a cooperative, a religious group, a parent-teacher association, a youth group, *arisan*, a sports group, and a farmers' group. Among these, the households were most active in *arisan* and religious groups. There are several types of *arisan* in the site (of which the contributions and savings can take the form of money or rice) and two religious groups, for Nahdatul Ulama (NU) and Muhammadiyah followers. All RT3 households are Muhammadiyah, while those from RT1, RT2, and

RT5 are NU. Both wives and husbands claimed that they were more active in these voluntary associations than in the RT and RW groups where membership is automatic. They recognize the economic value of membership in *arisan* and the spiritual value of religious group. While women in BT are in charge of the management of *arisan*, men lead the religious groups. A woman leader said that it is women's responsibility as housewives to manage the household's finances well and through an *arisan* they could save and borrow money.

Institution-related profile

The households were resettled before most of the basic services and public places had been constructed. The transmigration official in charge of the project explained in an interview that the construction of basic services and public places was delayed due to lack of budget, despite the emergency situation. The first two basic facilities in BT in 2000 were mountain water collected through a water box and eight public toilets. The first public infrastructures were public wells and a day care centre. Group electricity (one source for 10-11 households) was installed in 2003 and piped water connections were installed in 2005. Sidewalks and streets were built in 2005, mainly privately funded by the households with a little support from the government. One respondent said that you could tell which among the RTs is the richest just by looking at their streets and sidewalks. The mosque in the community is located in RT3 and was built by a Muhammadiyah foundation in 2005. It caters only for the RT3 households since the other RTs are NU. Other facilities, like the health centre, NU mosque, market and schools, are easily accessible outside the community.

The mean number of public places frequented by the households does not vary much, even with the advent of public facilities in the later years (Table 4.8). They would still frequent three to four places: the public wells, markets, stores, and mosques. These places dominate the number of visits by the respondents, with visiting the wells scoring highest (mean numbers of 284 to 316 visits from 2001 to 2004) and visits to school lowest (one to twice a year). Overall the high number of visits to public places through the years (means of 406 to 799) reflects the value of these public places for the daily life of the households. One mother shared that when they were still living in the mountains, she and her husband only went to markets or food stores once a week and generally relied on their garden for their daily supply of vegetables. But since living in BT they could frequently visit food stores and the market for their food supply.

Attending government meetings is consistently infrequent over the whole 12-year period, with 50 to 66 percent of the household heads failing to attend any meeting called by their RT and RW leaders or the village head. It could be observed that only the RT leaders themselves and elder men would attend the few meetings that they themselves organized. Husbands in BT mentioned that they did not go to RT meetings because they were already tired from work and would rather stay at home to rest than go to the meeting. Residents claimed that during 12 years in BT, their RW leader only organized two meetings. RT and RW leaders and the elders would attend the meetings organized by the village head. The most pressing issue in these meetings was how to legally acquire the lots the resettlers are occupying to avoid another displacement in the future. Membership in RT and RW groups is automatic because it is based on residence, which explains their almost 100 percent membership (Table 4.8).

Social capital profile

Table 4.9 shows a steady increase of acquaintances and friends between 2001 and 2012. Yearly increase is greater for the number of acquaintances that noticeably surged from 2004 onwards (mean yearly addition of around 30 individuals), probably due to the arrival of a large number of resettlers, an increase of public places, and participation in community activities. The increase in the number of friends also spiked during the influx of new resettlers in BT in 2003, particularly as a result of participation in community activities. This transpired during separate FGDs with men and women in the community. Women explained that even if they would go to the well more than three times a day to fetch water, they had limited time to connect with other people due to the long queue. At parties, however, they feel relaxed and have time to talk with other people while cooking, eating, or watching entertainment. Also the men considered attending community activities, particularly the informal ones, as a better way of making new friends and acquaintances than going to public places where they would just say hello and go. In the last two years, household heads made few new acquaintances and friends in the site since they already knew almost everybody. Overall, the respondents were happier in BT than in their previous places of residence because of the opportunities to make new friends.

The number of the individuals the respondents would engage with daily or frequently averaged from four to five persons over the 12 years, with little change over the years. Usually these individuals were neighbours for women and co-workers in the farm for the men. Out of these individuals, they identified two to three persons as important to their household because they would provide immediate help when they were in need of salt or cooking oil or needed somebody to share their problems with.

The households did not forge government ties apart from those with their RT and RW leaders (also resettlers) after their move to BT. The government officials in charge who could have been potential ties for the resettlers, only visit the community when they need to roll out a program or a project, which rarely happens. The site's project manager from the Translokasi Agency revealed that he visits the site twice a year, but during the first year of resettlement twice a week. The government connections of RT and RW leaders are limited to the village head, staff in Perhutani, and the people who were working in government facilities like the health center. Between the RT and the RW leaders, the resettlers consider their RT leader as the only government tie valuable for their household. The RT and RW leaders consider the village head most important because he has power and money. They cannot access any program or project without his signature nor entertain an NGO in their community without his endorsement. In addition, they need his approval and funding to start an activity or project, e.g. rice assistance, deep well construction, burial assistance. More or less each respondent had ties with persons attached to the mosque, the *imam* (priest) or the *ustadz* (chaplain). Of these the *imam* is deemed more important because he is viewed as a spiritual guide as well as instrumental in keeping the peace and order in the community. Sometimes, his intervention is requested in resolving community issues.

The number of support ties remained stable throughout the observed period (means of 11 to 14 individuals), with few additions in 2001 and 2002. The respondents had on average around two persons who could assist them emotionally, financially, in employment, and during emergencies, while on average they rely on one individual for help regarding food, health, childcare, water, and electricity. One mother shared that she was happier in BT because she now had a bigger support group than in her

previous residence where she could only rely on a few neighbour-relatives and friends. Another one added that moving to BT gave her access to credit that she did not have in her previous place in the mountains. She could now buy items from sellers in the community and pay later. These individuals who would readily provide them assistance, were mostly the same people in their first year in the site until the last year, as in the case of their ties with the government and mosque people.

When these support ties were divided into strong and weak ties, the result was surprising. Weak ties (mean of 7-9 ties) dominate the support network over the entire period of 12 years. These weak ties were neighbours and co-workers in the farm, while the strong ties were immediate relatives, family members, and friends. Widowers in the community articulated that they heavily depended on their neighbours for food and for information on farm labour jobs. During the FGD, women said that it was hard to contact their relatives who now live far away. Hence, they would rely on their neighbours who would take care of them when they are sick, give them emotional support, and even lend them money without interest. One mother said that the friends and relatives lost during the displacement were replaced with a lot more friends and neighbours after the resettlement.

The reported dependence of the households on their neighbours and co-workers is an affirmation of Granovetter's (1982) 'Strength of Weak Ties'. For these poor, lowly-educated households neighbours and co-workers matter more than relatives and friends. Nonetheless, it is interesting to know that despite the frequent contacts with and assistance they get from their neighbours, they still label them 'neighbours' and not friends. Table 4.9 shows that the aggregated strong and weak ties grow every year, especially from 2003 onwards when more households started relocating to the area. As demonstrated by the data on acquaintances and friends, they make more weak ties than strong ties every year.

4.4.3 Predictors of Social Capital: Both Cases

Both countries demonstrate a continued increase of social capital from the first year of the resettlement until 11 to 12 years later. In order to uncover the determinants of the growth of social capital in the Philippines and Indonesia, the strong- and weak ties during the year before the last year were regressed on a group of variables representing different theoretical arguments (see Table 4.1) on social capital creation. The year before the last year (2010 in the Philippines and 2011 in Indonesia) was chosen because it is a full year.

Strong ties (bonds)

The results of the regression model for the strong ties, for the Philippines with an R^2 =75.5 percent and for Indonesia with an R^2= 81.0 percent, are shown in Table 4.10.

Individual and Household Attributes. In the Philippines, among the 11 variables that were tested only the variables 'year resettled', 'number of community activity participations', 'types of community activities participated', and 'number of voluntary organisations', turned out as significant predictors of strong ties among the household heads in KV1. This suggests that the later resettlers are likelier to forge more strong ties than the early resettlers, most probably due to increased population and improved physical status and order in the site. More than the frequency of participation in community activities, the

variety of community activities attended seems to make a difference. Membership in more than one voluntary organisation also precipitates into more strong ties. This suggests that attending the same activity, no matter how frequent, can limit one in meeting persons who can be a source of support later on, while participating in different types of community activities and voluntary organisations expands one's opportunities to meet individuals who are potential strong ties. In Indonesia, only the 'year resettled' is significant. Perhaps resettling later in BT resulted into more strong ties due to the same reasons as cited above.

In both resettlement communities other individual and household attributes do not seem to facilitate the creation of more strong ties during the last year. This is different from the findings reported in Chapter 3 in which the households' social capital level in the same resettlement for only the first year was investigated. Chapter 3 revealed a significant relationship between the number of strong ties (or bonds) during their first year of residency in both sites with the respondent's age, gender, and location in the site. Apparently, these attributes do not play a role later on. The similar results on the positive link with 'year resettled' with the number of strong ties formed in this study suggests that an increase of the population in the settlement and the improvement of the settlement's infrastructure and provision of services are the important factors for forming more ties at a later stage.

Institution-related Factors. Only the variable 'number of government meetings attended' turned out as a facilitator in creating more strong ties among the KV1 households, while other institutions-related factors such as frequency of visits to public places and membership in HOA did not yield any significant effects. While the primary goal of government meetings is to disseminate information related to the resettlement community, upcoming projects and services, the results show that such meetings are a good venue for nurturing strong ties. It could be that the discussion of common poverty or welfare-related issues at these meetings triggers social exchange among those attending. As mentioned earlier, government meetings were only frequent during the early years of KV1 and dwindled subsequently because of lack of manpower and budget. In the Indonesian case, none of the institution-related variables is significant. Also in this case the results differ from those in Chapter 3, where the number of public places and the frequency of visiting these public places were predictors for the formation of strong ties during the first year in the sites.

Social Capital History. In both countries the total number of strong ties from 1999 until 2005 (Philippines) and from 2001 till 2006 (Indonesia) generated a positive effect on the number of strong ties created in the last full year. This connotes that the number of strong ties in later years is dependent on the number of strong ties in earlier years, affirming the path dependent nature of social capital formation (Putnam et al. 1993). However, since other factors also turned out to be significant predictors of strong ties, Putnam's theory can only provide a partial explanation. In the Indonesian case, social capital history as represented by the continuity of the households' rate of participation in voluntary associations in their places of origin and during the first year of resettlement as well as in their relations with the community leaders were found to strongly influence the strong ties during the first year in the location. These ties are maintained during the later years, because the cultural framework in which the activities and relationships are embedded remains the same, which affirms the importance of cultural continuity for social capital history (Putnam et al. 1993).

Weak ties (bridges)

Table 4.10 shows that the results of regression analysis for weak ties in the Philippines setting generates an R^2 of 68.9 percent while for the Indonesian case weak ties yield an R^2 of 74.0 percent.

Individual and Household Attributes. In the Philippine case, only the variables 'year resettled' and 'number of community activities participated' could account for the number of weak ties forged in the last year. The same explanation applies as for the results on 'strong ties'. Households who transferred much later had more possibilities of creating weak ties than those who moved in during the early years when facilities and services were inadequate and dismal and the number of resettlers was still low. In Indonesia, as with the outcome for 'strong ties', the creation of more weak ties could also hinge on transferring to the site at a later year. In the Philippine case, during the first year weak ties were positively associated with being male.

Institution-related Factors. None of the variables have a significant effect on the formation of weak ties made during the last year. During the first year, in both locations the number of visits to public places accounted for the forging of weak ties, as did the number of public places available, and, in KV1, the relationship with the local government and issues relating to the inadequacy of social services.

Social Capital History. The accumulated stock of social capital clearly matters for the formation of strong ties during the later period in the resettlement site and it influences the number of weak ties one can make several years later. As with strong ties, the Indonesian case shows the importance of culturally embedded social capital history.

4.5 Conclusions and discussion

The study yields interesting and enlightening results as regards the yearly creation of social capital among poor households who were involuntarily resettled in the Philippines and Indonesia. The two locations clearly show how the forging of ties among the household grows every year and how this process can be explained by the three perspectives represented by the variables relating to individual and household attributes, institution-related factors, and social capital history.

Regarding the development of weak and strong ties, both cases illustrate the gradual growing of weak and strong ties in the communities, with a growth spurt during the year when the number of resettlers increased and basic services and public places were in place. This suggests that the structural social capital trajectory in a resettlement community is dependent on or proportionate with the household population (explaining the disparity between the mean number of ties in the two settings) and the condition of the site in terms of basic services and number of public places. The cases also show that after the period of upsurge, social capital attains a level of steady growth, implying that the stability of social capital is intertwined with the stabilization of the resettlement site in terms of physical infrastructures, social services, and perhaps with residents having achieved a sense of 'getting settled' in the site.

When the weak and strong ties are disaggregated, differences emerge as well. In both cases, acquaintances were easier to make than friends. KV1 households tend to forge more ties at public places, while the BT households created more ties in community

activities. While the number of acquaintances and friends (horizontal ties) of the household heads increased every year, the number of their ties with the government, church/mosque, and NGO people (vertical ties), as well as their support ties remained almost the same from the first year in the site until the last year. Structural and logistical (budget, manpower) constraints were cited as the reason why only a handful of household heads had ties with individuals from the government and NGOs. The community leaders, through their own vertical ties (with the village head, mayor, program managers, NGO workers, etc.), provided the link for accessing resources for the households. In the Philippine case this was starting to appear like a breeding ground for a 'patron-client' relationship at two levels: the vertical ties of the community leaders on the one level and relationships between the leaders and the households on the other. This was not so evident in the Indonesian case where equality and social harmony (*rukun*) are highly valued (cf. Guinness, 1986).

Overall, the reality of social capital creation in communities composed of dis-advantaged households and community leaders does neither corroborate Granovetter's (1982) theory on the 'strength of weak ties' nor the claim of Woolcock and Narayan (2000) that while horizontal ties help marginalized individuals to get by, linking or vertical ties aid them in getting ahead in life. The households concerned are apparently more inclined to nurture homophilous relationships within the community than to forge vertical ties. The cultivation of vertical ties takes place at the level of community leaders, who thereby demonstrate their leadership. Therefore, community development stakeholders should capitalize on the vertical ties of the connecting community leaders and – at the same time – support the leaders to become the effective link of the residents for accessing resources to help them 'get ahead'.

The type of individuals who represent support ties also did not evolve much over the years. The Philippine households relied heavily on their strong ties, while the Indonesian households would usually count on their weak ties for different kinds of assistance due to their physical proximity and reliability. However, the Indonesian case also blurs the line between the definition of a 'friend' and a 'neighbour'. A neighbour is still labelled a 'neighbour', defined as a weak tie in this study, despite reflecting the special qualities of a friend (a strong tie). Perhaps the cultural emphasis on maintaining harmony in the neighbourhood in the Indonesian context renders the delineation between the two terms irrelevant. Whereas Pahl (2000) already asserted that the notion of friendship is ill defined and can vary from one individual to another, our results show that it also varies from one context to another.[6]

Previous research already asserted that building social capital in a community takes a long time without referring to the actual time period. The present study fills this void and provides evidence at an individual level of the evolution of social networks per year. The two cases show that the creation of new social capital immediately starts during the first year of resettlement, continues to grow during the following years, can display a growth spurt when induced by specific circumstances, and stabilizes thereafter.

The impact of institutional factors on structural social capital formation is particularly visible in the Philippine case. While Indonesia does not have a national resettlement policy, the Philippines has relevant legislation. Because of this, there is a project

[6] The Indonesian case actually perfectly illustrates a Dutch proverb which says that having a good neighbour is better than a faraway friend ("*Een goede buur is beter dan een verre vriend*").

management office in KV1 that has to engage with the residents and community leaders by conducting government meetings. Officials from the project management office thus provide the community leaders and other stakeholders with a 'space' for participation in program implementation. This results in more empowered community leaders and the creation of vertical ties at both the level of households and community leaders. The explanatory power of the institutional view on social capital building in KV1 was for the first year already noted in Chapter 3. Hence, factors relating to institutions do not only shape social capital building during the first year but continue to do so in the years that follow. This finding underlines the relevance of the timely provision of good-quality basic services and public places as well as explicitly integrating community organisation and supporting social networks in resettlement policies and programs. Development institutions led by the World Bank (2012b) require the formulation of a Resettlement Action Plan (RAP) when a bank project entails involuntary resettlement of households. The RAP serves as a guideline for just and humane resettlement activities. However, it lacks a component that zeroes in on the creation of social capital in the community, which Cernea and McDowell (2000) identified as one of the eight impoverishment risks during forced resettlement.

The importance of previously accumulated stocks of social capital for the Philippine and Indonesian households' social capital during the last year affirms the theory of Putnam et al. (1993) on social capital path dependence. But, at first glance, the finding refutes the theory's notion that social capital history spells impact because it is rooted deeply in time. This study demonstrates that the social capital history of a community can also be recreated out of the individuals' social capital stocks that were only accrued in a period of six to seven years, which is a significantly shorter time frame than that of the case on which Putnam founded his theory. In the Indonesian case, however, we see that the long and short term are bridged by cultural continuity. Cultural practices such as the *slametan* and the strong emphasis on social harmony (*rukun*) date far back in history and – at the same time – prove to enhance the accumulation of social capital, also on the short term.

The comparative approach used in this study brings out the similarities and differences between the two settings. While the institutional view makes sense in the Philippine setting, the historical perspective of Putnam better explains some of the patterns found in the Indonesian setting, albeit mediated by cultural continuity and homogeneity there. In the Philippine case, the much larger and heterogeneous community of resettled households seems to lack a common cultural history, apart from the popularity of videoke or singing parties that are instrumental in social capital formation as well.

The conclusion is that social capital building in a resettlement community is influenced by a number of factors, some being more context specific than others. While the availability of public places, the provision of basic services and strong community leadership will boost the forging of social ties in probably any resettlement community, the importance of institutions or the impact of cultural history seem to be more dependent on context.

Table 4.1: Dependent and Independent Variables

Dependent Variable	Explanation
Strong ties during last year (2010 in the Philippines and 2011 in Indonesia)	Sum of friends, individuals frequently engaged with, friends and relatives who are support ties (Last year refers to the last one-full year the household survey was conducted in the two countries)
Weak ties during last year (2010 in the Philippines and 2011 in Indonesia)	Sum of acquaintances, government ties, NGO ties, church/mosque ties, support ties who were not identified as friends and relatives (e.g. neighbour)
Independent Variable	
Individual & Household Attributes	
Gender	Dummy variable, where Male=1
Educational level	
Religion (Philippines)	Dummy variable, where Catholic=1
Household size	
Number of employed household members	
Year resettled	
Present address	Dummy variable, where Plains=1 (Philippines) Dummy variable, where Rt2=1 (Indonesia) Dummy variable, where Rt3=1 (Indonesia)
*Number of participations in community activities	
*Number of types of community activities participated	
*Number of memberships in voluntary organisations	
Institutional Factors	
*Number of public places visited	
*Number of visits to public places	
*Number of government meetings attended	
*Membership in government-led organisation	Dummy variable, where Yes=1
Social Capital History	
Sum of strong ties until 2005 (Philippines)	
Sum of strong ties until 2006 (Indonesia)	
Sum of weak ties until 2005 (Philippines)	
Sum of weak ties until 2006 (Indonesia)	

*based on the last year data

Table 4.2 Descriptive Statistics of Philippine Respondents

N=145

Variables		Percentage	Frequency
Gender			
	Male	33.1	48
	Female	66.90	97
Age			
	27-30	6.21	9
	31-40	28.28	41
	41-50	32.41	47
	51-60	21.38	31
	61 or more	11.72	17
Civil Status			
	Single	5.52	8
	Married	75.17	109
	Separated	3.45	5
	Widowed	6.90	10
	Co-habiting	8.97	13
Education			
	Elementary school or less	9.66	14
	High school	64.14	93
	More than high school	26.21	38
Occupation			
	Unemployed	15.86	23
	Housewife	31.72	46
	Retired	2.07	3
	Labourer	22.76	33
	Govt/ private employee	13.79	20
	Entrepreneur	13.79	20
Religion			
	Catholic	73.10	106
	Non-Catholic	26.90	39
Household Size			
	1-3	18.62	27
	4-6	54.48	79
	7-9	21.38	31
	10	5.52	8
Household Income (Php)			
	<48,000	29.66	43
	>=48,000 and <90,000	21.38	31
	>=90,000 and <135,656	33.10	48
	>=135,657	15.86	23
Year Resettled			
	1999	15.17	22
	2000	21.38	31
	2001	6.21	9
	2002	14.48	21
	2003	22.07	32
	2004	15.17	22
	2005	5.52	8
Present Address			
	Plains	61.38	89
	Suburban	38.62	56

Table 4.3 Philippines Civic Engagement Profile

N	Year	Participations in Community Activities		Types of Community Activities Participated		Memberships in Voluntary Organisations (%)				Frequency	
		Mean	StError	Mean	StError	0	1	2	3	4	5
22	1999	8.34	2.84	1.41	0.31	19 (86%)	2(9%)	1(5%)	0	0	0
53	2000	5.91	1.17	1.45	0.19	42(79%)	7 (13%)	4(7.6%)	0	0	0
62	2001	5.69	1.08	1.58	0.18	46(74%)	12(19%)	4(7%)	0	0	0
83	2002	4.86	0.80	1.40	0.14	59(71%)	17(21%)	7(8%)	0	0	0
115	2003	4.51	0.65	1.30	0.12	79(69%)	28(24%)	7(6%)	1(1%)	0	0
137	2004	4.52	0.54	1.74	0.12	94(69%)	34(25%)	6(4%)	2(2%)	1(1%)	0
145	2005	4.14	0.52	1.33	0.10	98(68%)	35(24%)	7(5%)	3(2%)	2(1%)	0
145	2006	3.95	0.51	1.28	0.10	97(67%)	36(25%)	6(4%)	4(3%)	2(1%)	0
145	2007	4.49	0.54	1.63	0.11	92(64%)	40(28%)	6(4%)	4(3%)	3(2%)	0
145	2008	3.93	0.49	1.39	0.11	90(62%)	43(30%)	5(4%)	5(4%)	2(1%)	0
145	2009	3.92	0.48	1.41	0.11	91(63%)	42(29%)	6(4%)	3(2%)	3(2%)	0
145	2010	4.47	0.48	2.12	0.13	84(58%)	45(31%)	9(6%)	4(3%)	2(1%)	1(1%)
145	2011	3.55	0.45	1.44	0.12	86(59%)	39(27%)	13(9%)	4(3%)	2(1%)	1(1%)

Table 4.4 Philippines Institution-Related Profile

N	Year	Basic Services	Public Places	Public Places Visited		Visits to Public Places		Government Meetings Attended Frequency (%)				Membership in Government Org. Frequency (%)	
		No.	No.	Mean	StError	Mean	StError	0	1-3	4-8	9 or more	0	1
22	1999	0	4	4.09	0.38	423.43	59.35	18(82%)	4(18%)	0	0	17(77%)	5(23%)
53	2000	1	4	4.34	0.25	387.92	35.94	38(72%)	9(17%)	1(2%)	5(9%)	37(70%)	16(30%)
62	2001	1	5	4.39	0.23	382.17	33.11	48(77%)	8(13%)	3(5%)	3(5%)	42(68%)	20(32%)
83	2002	1	5	4.37	0.18	392.86	28.46	54(65%)	17(21%)	8(10%)	4(5%)	50(60%)	33(40%)
115	2003	3	7	4.48	0.14	394.35	23.70	73(64%)	21(18%)	1(1%)	20(17%)	66(57%)	49(43%)
137	2004	3	8	4.53	0.14	395.09	21.30	84(61%)	25(18%)	2(2%)	26(19%)	82(60%)	55(40%)
145	2005	3	14	4.52	0.13	401.79	20.94	91(63%)	25(17%)	2(1%)	27(19%)	84(58%)	61(42%)
145	2006	4	14	4.59	0.13	406.01	20.76	91(63%)	24(17%)	2(1%)	28(19%)	82(57%)	63(43%)
145	2007	4	14	4.62	0.13	411.81	20.59	88(61%)	26(18%)	2(2%)	29(20%)	82(57%)	63(43%)
145	2008	4	14	4.57	0.13	417.94	20.69	90(62%)	25(17%)	2(1%)	28(19%)	78(54%)	67(46%)
145	2009	4	14	4.61	0.13	421.56	20.62	87(60%)	28(19%)	2(1%)	28(19%)	78(54%)	67(46%)
145	2010	4	14	4.63	0.13	424.48	20.74	90(62%)	26(18%)	1(1%)	28(19%)	78(54%)	67(46%)
145	2011	4	14	4.55	0.13	424.22	20.51	91(63%)	25(17%)	1(1%)	28(19%)	77(53%)	68(47%)

Table 4.5 Philippines Social Capital Profile

N	Year	Acquaintances		Friends		Ind. Frequently		Government Ties		NGO Ties		Church Ties		Support Ties		Strong Ties		Weak Ties	
		Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std Error
22	1999	83.12	18.24	31.21	7.15	5.59	0.70	0.64	0.23	0.18	0.11	0.32	0.14	9.82	1.11	44.99	7.54	85.85	18.56
53	2000	107.87	18.44	38.64	6.76	5.74	0.42	0.49	0.13	0.13	0.05	0.32	0.10	8.67	0.66	58.64	7.50	112.04	18.74
62	2001	160.50	24.12	56.24	8.96	5.52	0.39	0.47	0.12	0.11	0.05	0.32	0.09	8.64	0.59	87.11	10.02	167.05	24.51
83	2002	200.98	25.45	66.56	9.07	5.69	0.33	0.47	0.11	0.08	0.04	0.45	0.09	8.79	0.53	103.45	10.48	208.93	25.88
115	2003	223.07	25.72	72.83	8.68	6.03	0.29	0.48	0.08	0.08	0.03	0.67	0.11	8.95	0.48	113.30	10.30	232.32	26.17
137	2004	275.45	28.23	86.25	9.16	5.88	0.27	0.55	0.08	0.07	0.03	0.74	0.10	9.25	0.43	134.11	10.88	286.68	28.72
145	2005	346.89	33.04	106.40	10.43	6.00	0.26	0.56	0.09	0.08	0.03	0.74	0.10	9.41	0.42	165.58	12.22	360.93	33.57
145	2006	438.07	39.57	131.32	12.14	6.13	0.26	0.54	0.08	0.08	0.03	0.79	0.10	9.35	0.42	204.52	13.98	455.56	40.14
145	2007	532.88	46.34	157.27	13.82	6.23	0.26	0.56	0.08	0.09	0.03	0.80	0.10	9.29	0.41	244.62	15.76	553.87	46.96
145	2008	627.97	53.73	182.96	15.49	6.39	0.26	0.54	0.08	0.09	0.03	0.88	0.10	9.33	0.41	284.65	17.56	652.52	54.42
145	2009	724.93	61.32	209.50	17.33	6.50	0.25	0.53	0.08	0.10	0.03	0.95	0.11	9.36	0.41	325.65	19.53	753.14	62.07
145	2010	826.95	68.96	236.99	19.22	6.51	0.26	0.63	0.08	0.11	0.04	1.05	0.11	9.35	0.41	367.54	21.58	859.06	69.77
145	2011	921.88	76.33	263.42	21.16	6.61	0.25	0.66	0.09	0.11	0.04	1.07	0.11	9.40	0.42	408.53	23.66	957.98	77.23

Table 4.6 Descriptive Statistics of Indonesian Respondents

N=70

Variables		Percentage	Frequency
Gender			
	Male	94.29	66
	Female	5.71	4
Age			
	20-30	2.86	2
	31-40	20	14
	41-50	37.14	26
	51-60	31.43	22
	61 or more	8.57	6
Civil Status			
	Married	97.14	68
	Widowed	2.86	2
Education			
	Never been to school	2.86	2
	Elementary school or less	74.29	52
	Junior high school	17.14	12
	High School	5.71	4
Occupation			
	Farmer	25.71	18
	Entrepreneur	11.43	8
	Elementary occupation	31.43	22
	Govt/ private employee	8.57	6
	Housewife	4.29	3
	Others	18.57	13
Islam Practice			
	Nahdlatul Ulama	68.57	48
	Muhammadiyah	31.43	22
Household Size			
	1-3	31.43	22
	4-6	65.71	46
	7-9	2.86	2
Household Income (IDR)			
	<4,000,000	57.14	40
	>=4,000,000 and<10,000,000	30.00	21
	>=10,000,000 and <13,200,000	10.00	7
	>=13,200,000 and <18,000,000	2.86	2
Year Resettled			
	2001	11.43	8
	2002	42.86	30
	2003	37.14	26
	2004	4.29	3
	2005	4.29	3
Present Address			
	Rt1	25.71	18
	Rt2	38.57	27
	Rt3	31.43	22
	Rt5	4.29	3

Table 4.7 Indonesia Civic Engagement Profile

N	Year	Participations in Community Activities		Types of Community Activities Participated		Memberships in Voluntary Organisations				Frequency (%)	
		Mean	Std.Error	Mean	Std.Error	0	1	2	3	4	5
8	2001	60.91	14.41	5.00	0.53	0	5(62%)	2(25%)	1(13%)	0	0
38	2002	58.62	6.58	5.34	0.22	9(24%)	16(42%)	8(21%)	5(13%)	0	0
64	2003	65.92	5.41	5.02	0.16	19(30%)	20(31%)	17(27%)	7(11%)	1(2%)	0
67	2004	66.64	4.93	5.25	0.15	21(31%)	23(34%)	13(19%)	8(12%)	2(3%)	0
70	2005	66.15	4.71	5.27	0.15	19(27%)	31(44%)	12(17%)	4(6%)	3(4%)	1(1%)
70	2006	66.53	4.73	5.33	0.13	21(30%)	28(40%)	13(19%)	5(7%)	3(4%)	0
70	2007	66.89	4.65	5.10	0.15	20(29%)	25(36%)	18(26%)	4(6%)	3(4%)	0
70	2008	66.31	4.68	5.10	0.15	20(29%)	23(33%)	20(29%)	3(4%)	4(6%)	0
70	2009	66.36	4.63	5.27	0.14	18(26%)	25(36%)	20(29%)	5(7%)	2(3%)	0
70	2010	64.17	4.53	5.43	0.15	18(26%)	23(33%)	22(31%)	4(6%)	3(4%)	0
70	2011	69.50	4.77	5.46	0.14	17(24%)	24(34%)	23(33%)	3(4%)	3(4%)	0
70	2012	44.38	4.67	3.83	0.21	19(27%)	26(37%)	19(27%)	3(4%)	3(4%)	0

Table 4.8 Indonesia Institution-Related Profile

N	Year	Basic Services	Public Places	Public Places Visited		Visits to Public Places		Government Meetings Attended Frequency (%)				Membership in Government Org. Frequency (%)	
		No.	No.	Mean	Std.Error	Mean	Std.Error	0	1-3	4-8	9 or more	1	2
8	2001	2	2	3.25	0.59	798.66	151.55	4(50%)	2(25%)	0	2(25%)	0	8(100%)
38	2002	2	2	3.71	0.24	619.02	66.75	20(53%)	7(18%)	4(11%)	7(18%)	1(3%)	37(97%)
64	2003	3	2	3.92	0.16	657.66	48.52	37(58%)	14(22%)	4(6%)	9(14%)	1(2%)	63(98%)
67	2004	3	2	3.97	0.16	676.53	49.08	40(60%)	14(21%)	3(4%)	10(15%)	1(2%)	66(98%)
70	2005	4	5	3.91	0.14	657.94	45.08	41(59%)	16(23%)	3(4%)	10(14%)	1(1%)	69(99%)
70	2006	4	5	3.79	0.14	655.69	46.64	44(63%)	14(20%)	3(4%)	9(13%)	1(1%)	69(99%)
70	2007	4	5	3.83	0.14	647.35	46.82	45(64%)	14(20%)	3(4%)	8(11%)	1(1%)	69(99%)
70	2008	4	5	3.84	0.15	633.59	47.33	45(64%)	14(20%)	3(4%)	8(11%)	1(1%)	69(99%)
70	2009	4	5	3.86	0.14	602.72	45.38	43(61%)	16(23%)	3(4%)	8(11%)	1(1%)	69(99%)
70	2010	4	6	3.99	0.14	588.30	45.30	43(61%)	16(23%)	3(4%)	8(11%)	1(1%)	69(99%)
70	2011	4	6	4.07	0.15	553.39	47.13	43(61%)	16(23%)	2(3%)	9(13%)	1(1%)	69(99%)
70	2012	4	6	3.70	0.15	405.94	45.87	46(66%)	15(21%)	5(7%)	4(6%)	1(1%)	69(99%)

Table 4.9 Indonesia Social Capital Profile

N	Year	Acquaintances		Friends		Individuals Frequently		Government Ties		Mosque Ties		Support Ties		Strong Ties		Weak Ties	
		Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error
8	2001	64.42	9.56	16.65	4.16	4.00	0.78	1.63	0.38	1.75	0.45	10.75	2.30	23.77	5.02	75.42	9.82
38	2002	60.63	6.21	18.13	2.59	5.16	0.37	1.11	0.17	1.53	0.22	12.76	0.86	29.50	3.38	73.63	6.81
64	2003	77.67	7.26	23.38	2.70	4.89	0.29	1.06	0.13	1.52	0.16	13.44	0.78	40.19	3.76	96.23	7.94
67	2004	112.71	9.91	32.70	3.72	4.87	0.28	1.10	0.13	1.63	0.15	13.43	0.73	58.68	5.18	141.55	10.57
70	2005	143.83	12.38	41.98	4.88	4.81	0.27	1.14	0.13	1.71	0.15	13.27	0.74	76.49	6.79	182.73	13.14
70	2006	177.10	15.04	51.39	6.02	4.81	0.27	1.07	0.13	1.71	0.15	13.33	0.73	95.57	8.32	227.26	15.82
70	2007	208.82	17.81	60.19	7.13	4.81	0.27	1.06	0.13	1.71	0.15	13.34	0.73	114.07	9.88	270.20	18.64
70	2008	239.37	20.37	68.24	8.12	4.86	0.26	1.10	0.12	1.74	0.15	13.41	0.73	131.90	11.32	312.10	21.33
70	2009	266.01	22.98	74.85	9.03	4.86	0.26	1.07	0.12	1.73	0.14	13.54	0.73	148.35	12.69	350.09	24.04
70	2010	289.59	25.09	80.67	9.88	4.86	0.26	1.07	0.13	1.73	0.14	13.71	0.73	164.10	14.05	385.11	26.24
70	2011	311.63	27.36	86.49	10.63	4.86	0.26	1.10	0.13	1.73	0.14	13.73	0.73	179.88	15.28	419.04	28.55
70	2012	325.01	28.52	89.54	11.00	4.83	0.26	1.01	0.12	1.71	0.14	13.66	0.73	192.82	16.19	443.74	29.84

Table 4.10 Effects of Individual and Household Attributes, Civic Engagement, Institutional Factors and Social Capital History on Social Capital Creation

N=140 (PHILIPPINES)

	Strong Ties		Weak Ties	
	Coeff.	**StError**	**Coeff.**	**StError**
Gender (male)	-0.274	2.865	-6.364	11.650
No. of Employed Household Members	0.436	1.949	4.040	7.912
Household Income	0.000	0.000	0.000	0.000
Education Level	-2.313	2.404	1.544	9.771
Household Members	0.112	0.664	-1.236	2.743
Year Resettled	5.084**	0.891	16.426**	3.176
Present Address (Plains)	-5.065	3.122	5.748	12.818
Religion (Catholic)	-0.598	3.426	-6.132	14.006
No. of Participations in Comm. Activity	-0.651*	0.288	-1.652	1.159
No. of Types of Comm. Activities Participated	4.502**	1.182	9.833*	4.597
No.of Memberships in Voluntary Organisations	3.436*	1.519	7.014	6.228
No. of Public Places Visited	0.312	0.900	6.057	3.695
No. of Visits to Public Places	0.004	0.006	0.010	0.025
No. of Government Meetings Attended	1.169**	0.399	1.858	1.579
Membership in Government-led Organisations	2.751	2.789	14.190	11.453
Social Capital History	0.141**	0.013	0.188**	0.016
$\mathbf{R^2}$	75.5%		68.9%	

N=70 (INDONESIA)

	Strong Ties		Weak Ties	
	Coeff.	**StError**	**Coeff.**	**StError**
Gender (male)	-1.408	3.374	-0.969	7.859
No. of Employed of Household Members	0.359	1.148	-2.612	2.661
Household Income	0.000	0.000	0.000	0.000
Education Level	2.693	1.426	5.220	3.284
Household Members	-1.524	1.489	-3.194	3.446
Year Resettled	4.28**	0.888	8.554**	2.143
Present Address (RT2)	-3.926	2.121	-8.330	4.824
Present Address (RT3)	-1.679	2.133	2.103	4.806
No. of Participations in Community Activity	0.042	0.021	0.082	0.050
No. of Types of Community Activities Participated	0.526	0.894	3.648	2.059
No.of Memberships in Voluntary Organisations	-0.271	0.905	-2.635	2.088
No. of Public Places Visited	0.223	0.738	0.831	1.680
No. of Visits to Public Places	-0.004	0.002	-0.009	0.005
No. of Government Meetings Attended	-0.151	0.227	-0.468	0.524
Membership in Government-led Organisation	2.104	6.902	2.627	16.013
Social Capital History	0.156**	0.013	0.153**	0.017
$\mathbf{R^2}$	81.0%		74.0%	

significant at *p<0.05, **p<0.01

Chapter 5

The Resettlement-Social Capital Nexus: Role of Resettlement Inputs and Social Capital in Getting By and Getting Ahead

The present chapter addresses the compelling question about the role of social capital in the process of getting by and getting ahead of the resettled households in the Philippines and Indonesia. This study goes beyond the conventional evaluative measurement of involuntary resettlement impacts by applying social capital theory as a more sophisticated and informative tool by which to understand the extent to which resettled populations in the Philippines and Indonesia are able to restore their socio-economic wellbeing several years after the displacement. The relevant tables are presented at the end of the chapter.

A version of this chapter is under review as:
Quetulio-Navarra, M., Zetter, R., Niehof, A, Zhao, F. Getting by or Getting Ahead: Resettlement Inputs and Social Capital in an Involuntary Resettlement in the Philippines and Indonesia. *Asian Studies*, submitted in August. 2014.

5.1 Introduction

Involuntary resettlement of households and communities due to forced displacement is brought about by conflict, natural and man-made disasters, and development projects (Guggenheim 1992; Cernea 2000; Picciotto and Van Wicklin 2001; De Wet 2006; McDowell and Morell 2007). Approximately 10 million people per year are involuntary resettled because of dam and transportation-related development programs alone (Cernea and McDowell 2000). World Bank development projects entailing population movement spanning 10 years, resulted in the forced resettlement of 90-100 million individuals (McDowell 1996). The resettled households' increased vulnerability to impoverishment seems an inevitable consequence. Since the 1990s safety nets from the international community have been in place to mitigate or avoid the negative socio-economic, environmental, and health impacts of involuntary resettlement to the forcibly displaced households (WB 1990; ADB 1991; OECD 1991; Cernea 1996, 1997, 2000). Among the well-known and widely-used approaches are the Four Stages of Involuntary Resettlement of Scudder (1993) and the Impoverishment, Risks and Reconstruction model of Cernea (1997). The World Bank's standard in handling involuntary resettlement aims at improving (get ahead) or at least restoring (get by) the economic and social base of the displaced (WB 2001).

This chapter goes beyond the conventional evaluative measurement of resettlement impacts by applying social capital theory as a more sophisticated and informative tool by which to understand the extent to which resettled populations are able to restore their socio-economic wellbeing. Utilizing quantitative and qualitative methods, the chapter unfolds how the interplay between the resettlement inputs and social capital takes place from the first year in the relocation site to several years later and how this provides evidence of the evolving economic, physical, and social wellbeing of the households. By identifying which among the interventions and social capital elements are most significant, the chapter yields insights into the households' state of 'getting by' and 'getting ahead'. In turn, these findings can feed into the better and more appropriate designs for involuntary resettlement programs and policies.

5.2 Resettlement Inputs and Social Capital in Involuntary Resettlement

Meanwhile, the application of social capital theory in development studies has been gaining ground. Coleman (1988) argues that social capital like any other form of capital, although less tangible, contains an asset that people can utilize for their own interest or advantage. It is the 'missing link' that can explain the disparities found in development experiences from national down to community and household level (Putnam et al. 1993) and is often viewed as a substitute for lack of other types of capital among poor people. Woolcock and Narayan (2000) point to the potential of ties and networks and the resources attached to them in development processes. Involuntary resettlement episodes both in the urban and rural setting are now being examined from the perspective of the families' disrupted social relations. These studies describe the experiences of refugees (Robinson 1993; Bun and Christie 1995; Smith 1997; Wahlbeck 1998; Bertrand 2000; Madjar and Humpage 2000; Lamba and Krahn 2003; Willems 2003; McMichael and Manderson 2004; Potocky-Tripodi 2004; Suzuki 2004; Valenta 2008) and families affected by development projects in first world countries (Wellman

and Frank 2001; Curley 2008; Curley 2009; Clampet-Lundquist 2010; Curley 2010; Kleit 2010) and present the individual's or family networks, ties, trust and norms as indispensable mechanisms for wellbeing recovery as well as for the adaptation and the integration of involuntarily displaced individuals into their new community. Nonetheless, studies linking social capital and the wellbeing of the forcibly displaced poor households in Southeast Asia are as yet scant and limited in scope.

Parasuraman and Cernea (1999) stress that resettlement outcomes are significantly influenced by the institutions' approach to the displacement and resettlement activity through their resettlement policies and programs. These institutional approaches have mostly used the widely applied models developed by Scudder and Colson (1982) and Cernea (1997). Scudder and Colson (1982) identified four stages of a successful resettlement, while Cernea (1996, 1997, 2000) introduced the impoverishment risks and livelihood reconstruction model that highlights the intrinsic risks of impoverishment after displacement as well as the ways to mitigate the risks through strategic action. The models yield indicators for resettlement inputs that are used in this study, which are grouped into "hard" and "soft" inputs. The first include physical structures constructed within the resettlement site in the form of public places (e.g. streets, sidewalks, markets) and basic services such as electricity, water, day care centres. The "soft" inputs pertain to the attendance turn-out of the resettled households in government meetings and their membership in civic-related organisations within the location.

Bourdieu and Wacquant (1992: 119) define social capital as the "sum of resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition". Putnam (2000) refers to social capital as connections among individuals, social networks and the norms of reciprocity and trustworthiness that emerge from these. Woolcock and Narayan (2000) stress the importance of both vertical and horizontal ties, associations and relations between people, within and among other entities such as community groups, non-government organisations, government agencies, and firms. Social ties can be classified according to three dimensions of social capital. First, the strong ties between members of a household, kinship network or community, referred to as "bonding social capital." Second, the weaker extra-community networks, called "bridging social capital", which make it possible to cross social divides such as religion, class, ethnicity, socio-economic status. Third, "linking social capital", which is the vertical dimension that "reaches out" or "scales up" poor people's ties to resources, ideas, and information offered by institutions beyond their own community. If poor families leverage their strong bonding ties to "get by" or survive, their bridging and linking social capital is crucial in "getting ahead" or in attaining development and growth (Briggs 1998). Stone (2001) refers to the structural social capital as the network size (ties, acquaintances, friends, etc.). In this study, the indicators for the structural social capital of the households are the number acquaintances, number of friends, number of close individuals, number of government ties, and number of ties with church or mosque.

The households' wellbeing is investigated in terms of economic, physical, and social wellbeing. Economic wellbeing was measured using the data on: the household income, percentage of household income spent on food, and employment status of the household head. Physical wellbeing was measured by utilizing morbidity data. Social wellbeing of the households was gauged based on reports on the household heads' participation in various community activities in the site.

5.3 Analysis of Quantitative and Qualitative Data

In order to avoid duplication of Chapter 2, the general discussion on the research sites and methodology has been skipped here and we tackle the analysis of quantitative and qualitative data right away. In this chapter, only the data of the first and last years in the resettlement site will be examined, last year meaning the time when the survey was conducted. In the Philippines this was in 2011, in Indonesia in 2012.

The quantitative data were entered into Excel and analysed using STATA version 11. Statistical analysis was conducted on the identified dependent and independent variables. The dependent variables are the three types of wellbeing and the independent variables are the hard and soft resettlement inputs, social capital, together with some control variables. Three statistical models were applied in the analysis. The first type of statistical model is the multiple regression model, whose dependent variable is 'household income' that is a continuous interval variable. Second, is the ordered logit model which was used to analyse the dependent variables 'percentage of income spent on food', 'employment status of the household heads' and 'social wellbeing', which were all recoded as ordinal variables. Lastly, is the Poisson regression model which was used to analyse the dependent variables 'number of adults who got sick' and 'number of children who got sick', which are count data and it is assumed that these variables follow the Poisson distribution. Content analysis was applied on the qualitative data that were already recorded and transcribed. These data are used to validate and complement the quantitative data. All results tables are found at the end of the chapter.

5.4 Field results

5.4.1 Philippine case

Displaced households and the resettlement profile

Sixty-eight percent of the respondents were female and 32 percent male. More than half of the respondents were within the age bracket of 25-45, the ages ranging between 20 and 85. Only 27 percent of the respondents reached college or studied in technical school after high school, 47 percent finished or reached high school, and 25 percent only studied until elementary level. The average household size was 5.58 and the average yearly household income is Php 88,103.00 (2,065.72 USD). Thirty three percent were housewives or husbands staying at home, 22 percent were labourers, 16 percent had a business in the community, while another 16 percent said to be unemployed. The resettlers were victims of development projects, natural disasters (like flooding along Pasig river), man-made disaster (garbage slide in Payatas) and wide-scale fire. The resettlement started in 1999.

The resettlement programme was administered by the National Housing Authority (NHA), a government agency tasked to implement socialized housing programs in the Philippines. Usually NHA constructs the resettlement site, but Kasiglahan Village was different. It was the first time that NHA bought a resettlement site with 9,000 housing units already built by a private developer. The resettlement package includes a house and lot. The house and lot are payable in 20 years at Php 250 (5.9 USD) per month. The package was supposed to be prepared in accordance with the Urban Development

Housing Act. The Act sets forth a systematic program for land use planning towards the allocation of lands for social housing for the underprivileged and homeless city dwellers and covers a wide range of provisions for the comprehensive and continuing urban development and housing program for the resettlers.

First Year and 2011 Resettlement Inputs and Social Capital Profile

Table 5.1 shows the amount of resettlement inputs delivered into the community as well as the size and composition of the households' structural social capital during their first year and 13 years later in the location when the survey was conducted. Both an increase of the mean number of public places and of basic services installed in KV1 after several years is evident, although more increase is seen in the number of basic services. These public places or communal facilities are, for example, the deep well, sidewalks, churches, market, the health centre and the day care centre. Between the two hard components of resettlement inputs, it is the provision of basic services that is mandated by Philippine law (Section 21, R.A. 7279).

However, the provision of these basic services was gradual because of unavailability of budget, which put much stress on the displaced households and exacerbated their precarious situation. There was no improvement from the first year in the site to 2011 in the number of household heads who would attend meetings called by the government (NHA or local government). Two-thirds "never attended" government meetings. It was learned from the respondents that the NHA or local government only rarely called a meeting. This was corroborated by an interview with a project manager in charge of community organising:

> *"But there is actually no budget for community organising activities such as community-wide parties or sports activities. We can only afford to conduct few community meetings with the community leaders and with some residents and right now because of the expansion of the project and the manpower staying the same we have less time for these activities."*
>
> (In-depth interview with an NHA project manager, KV1, 2012)

Positive change is shown in the KV1 residents' membership of different civic organisations in the community. This can be attributed to the increase in the number of entities (church, local government) that set up organisations in the site, which the NHA encouraged.

Both minimal increase and decrease in the households' social capital is shown in Table 5.1. A negligible difference is seen between new acquaintances made during the observed time periods and the new friends made. These acquaintances and friends were made during their visits to public places (store, sidewalks) and in community activities (meetings, parties). A mother in the survey said that it was *"impossible not to make friends [in KV1] because almost everybody is a stranger to each other and everyday there are newcomers."*

The number of individuals with whom the respondents engaged with frequently, ranging from every day to weekly, decreased a little in 2011. These close individuals are usually their neighbours who live close by. It was observed during the fieldwork that housewives in the location regularly gather in a common space near their houses and would converse the whole day with in-between breaks for some household chores like cooking and feeding the child(ren). Husbands would come home every Saturday from their jobs and meet their friends at a 'videoke' party set up on the sidewalk. In the

same vein, government and church ties which both registered very small numbers in the first year, further decreased in 2011. This implies that presence of government and church representatives in the site does not automatically translate to creation of ties among the households. When asked during a focus group discussion why people have so few ties in the government, a participant answered:

> *"Although, we know the value of knowing someone in the government, it's difficult to establish ties with them because there are no opportunities to meet them. But if there are opportunities, of course we want to meet them."*
>
> (Focus group discussion, female participant, KV1, 2011)

It is a different story when it comes to support ties. These more than doubled by 2011. These support ties are the individuals whom the respondents relied on for support (such as emotional and financial support, help in emergencies, finding employment). As shown in Table 5.1, they only have around two people on average who would help them in different needs, which is less than half compared to the number of friends and close individuals during their first year in the community. This can mean that either compared to other types of ties, the number of support ties improved with time, or the households' situation in KV1 worsened and therefore they worked on establishing more support ties to cushion them from hardship.

First Year and Last Year Wellbeing of the Households

As can be gleaned from Table 5.2 the average annual household income did not improve much after several years in the community (Php 21,302.4 increase). If evaluated in the light of the annual poverty threshold for a family of five in the Philippines which is Php 93, 852 or USD 2,162 (NSCB 2013) vis-à-vis the 2011 average household size of 5.4, the average household income (PhP 102,120.3 or USD 2,358) could barely fight poverty.

During their first year in the site, the majority of the households were spending 40 to 100 percent of their income just on food. In 2011, this situation worsened, as an increase (0.67) in the number of households spending the same percentage of income on food was reported. The employment situation of household heads also did not improve significantly by 2011. Twenty-three percent of both wife and husband were still jobless and the number of unemployed husbands and wives further dipped by two percent. After the resettlement, some could not retain their jobs because they could not afford the cost of renting a room in the big city or they lost their source of livelihood like in the case of the families who resettled due to garbage slide in their previous community in Payatas. Previously they were living in a community that also served as a "garbage dump site" for nearby cities. In this community they had a junk shop business or they were doing "collect and sell" of junk items such as bottles, papers, metal scraps, etc. They lost all of these jobs and businesses when the massive mountain of garbage slid and buried their houses, some family members, and their junk shops. NHA tried to tackle this high unemployment rate among the heads of the households by integrating in their social program some skills training for the resettlers like security guard training, reflexology, electronics repair, and candle making. But after the training only few could find a job and there was no market for their products like the candles.

Between the first year in the community and 2011, sickness in the households did not worsen. The number of adults and children who got sick is negligible. Common

illnesses were colds, flu, diarrhoea, and asthma. One respondent who was suffering from severe asthma thought this was due to the quarrying activities near KV1.

The social wellbeing of the household heads in terms of participation in various community activities only improved slightly by 2011. More than 50 percent of the household heads would still not join or attend any community activity (such as meetings, parties, wake), even after residing in the community for several years. However, some improvement in the participation of those who were a little active (with participations in one to two activities) is visible as they participated in more than three kinds of activities in 2011. When asked why she would not participate in any of the activities in the community, a mother responded:

> *"I'm not really a social person, I prefer to stay at home, plus I have lots of kids to look after and my husband is out all the time looking for metal scraps, bottles, papers that he can sell to the junk shop. So even if I have free time, I would rather spend it doing household chores."*
>
> (Survey interview with a mother of four, KV1, 2011)

However, during the period of fieldwork it could be observed that if the activity would involve free goods or services, like free porridge for the children, free rice, or free dental care, many mothers – some even carrying their babies – would line up and endure waiting for their turn.

Effects of resettlement inputs and social capital on the households' wellbeing

This section links the resettlement inputs by the government in Kasiglahan as well as the social capital of the households with the detailed information on the wellbeing of both the households in their first year and in their last year in the resettlement sites. The regression results for the Philippine resettlers are shown in Tables 5.3a, 5.3b, 5.3c, and 5.3d.

Economic Wellbeing

As reflected by the three models, it is only the variable 'number of close individuals' that influences the increase in the household income of the Philippine resettlers during their first year of stay in KV1. This connotes the value of the households' establishing and nurturing homophilous relationships right after their transfer to the site (see Lin 2001) and shows that investing in bonding social capital pays off. For the housewives these close individuals are the next-door neighbours, for the husbands these are the men they would also enjoy drinking and having videoke sessions with in the weekend. Although these might not directly provide financial assistance, the emotional support generated by these relationships probably gives the people a sense of belonging and peace of mind that they will be fine and life should go on. One housewife whose husband would only come home every three days from work said:

> *"During my first year here, my husband could only come home every three days so we could save on transportation fare. But I didn't get lonely because in my first year here I immediately made friends with Rita, Shiela, and Rose [not their real names]".*
>
> (Survey interview with a housewife, KV1, May 2011)

For the last year, the 'number of basic services' and the 'number of church ties' entered the third model. As the data show, more basic services were built in later years and more basic services means more bills to pay, particularly electricity and water bills. These financial obligations probably motivated household heads to earn more and avoid the shame when their water or electric connection would be disconnected due to

non-payment. People working for the churches in the site that were constructed later (such as Catholic, Church for Christ, Pentecostal) were active in recruiting new church members. Active church members would be offered voluntary jobs like cleaning the church or assisting at church activities at a minimal fee. Sometimes they would also get hired as household helpers of these church people.

While the 'number of acquaintances' has a negative regression weight for the variable 'expenses on food' the 'number of support ties' yields a positive relationship during the first year. As observed during the fieldwork, household heads who would report more acquaintances made in public places and community activities were usually individuals who were unemployed and had more time to frequent public places and attend community activities. They had very low income and could hardly secure food. On another note, more 'number of support ties' (individuals they rely on for different needs) decreases the odds of food insecurity in the household in their first year in the site. This result affirms the cushioning effect of support ties, relatives, close friends or a boss, against some 'shocks' of forced resettlement. These ties do not just benefit the household head but the entire household. One mother who was working as a helper in a canteen and who identified her boss as somebody who would help her in terms of food for the family mentioned:

> *"My salary as a helper in the canteen is low, but it is okay. Because whenever I would go home, my boss would let me bring home all the leftovers in the canteen. The leftovers will be our dinner and even my children's lunch in school. This helps me a lot because I could spend my salary on other important matters."*
>
> (Survey interview with a mother, KV1, May 2011)

During the last year the number of support ties again turned out significant (Model 2 and 3). Apart from this, 'membership in civic organisations in KV1' turned out as predictor of household food security. The nature of community organisations in Kasiglahan differs between the first and the last year. There were only few organisations (like household association or HOA, Action Group) during the early years and they were focused more on the urgent provision of basic services in Kasiglahan. But later on NHA encouraged the setting up of more organisations in the area like women's organisations, church organisations, transport organisations that would introduce some anti-poverty projects or programs to their members and the community and provide personal assistance to their members.

When it comes to getting employed right after resettlement, the 'number of basic services' again and the number of support ties of a household head turned out as predictors for getting employed, as reflected in all models. Perhaps the payments associated with some basic services (e.g. electricity, water) or the peace of mind when all or almost basic services are available like in their previous communities, strengthen the motivation of a resettler to get employed. Alternatively, having most if not all of the basic services present in the community could spare resettlers from the woes of demanding these basic services from the government. 'Support ties' again figure as a facilitator to get a job during first year in Kasiglahan. Despite the fact that the respondents forged new ties in their first year, it is still their support ties that would matter in finding employment. Most of these support ties had been around to help them even before the resettlement. This suggests that the resettlers continued to cultivate the relationship because of its value to the family. Also during the last year, their support ties that could help them find a job, remained important for the respondents.

Physical Wellbeing

Having less 'basic services' in the resettlement community increases the likelihood of adults getting sick. This result underscores the interconnectedness of the health value of these basic services as well as the health implications of their absence or insufficiency among the resettlers. Along with this variable, the 'number of support ties' generated positive regression weight during the first year. In the last year 'number of support ties' still turns out significant as well as the number of church ties. This connotes that those households with more adults who get sick in both periods have more support ties and church ties as well. It could be that because they recognize their vulnerability to sickness, they actively seek more the support of those ties.

In terms of sickness among children in the households during first year, the resettlement inputs indicators 'number of public places' and 'number of basic services' entered the regression model 1. While the rationale behind the 'number of basic services' and its relationship with number of sick child in the family might be the same as with sick adults (see above), the significant results of the variable 'number of public places' warrants an explanation. Public places in Kasiglahan are, among others, the sidewalks, deep well, multi-purpose hall, and the basketball court. There are no parks and public benches where children can interact and play. Nonetheless, as it was observed during the fieldwork, parents would often let their children as young as two years old play outside unsupervised. Children would be playing with their friends on the sidewalks, the basketball courts, or in the streets, even during the rainy season. When they get hungry, they would go home ask some money to buy possibly unsafe food from the sidewalk vendors or from stores around. These children are likely to catch viruses and bacteria from these places and from the food they buy. These households who have children that frequently get sick during the first and the last year seem to rely for help on close individuals, government ties (only first year), church ties and support ties.

Social Wellbeing

The likelihood of an individual to participate more in community activities in his or her first year of residency in Kasiglahan can be predicted by two resettlement inputs, 'participation in government meetings' and 'number of public places', and three social capital indicators, 'number of acquaintances', 'number of friends', and 'number of close individuals'. The social effect of participation in government meetings seems to extend even beyond non-government ones, such as community meetings, community seasonal parties, sport events, etc. A higher number of public places in the site does not translate into higher rate of household heads' participation in different activities, which accentuates the lasting effect of frequent meetings organised by the government. More acquaintances, friends, and close individuals likewise increase the probability of participation in community activities. Apparently, they are more motivated to participate in a community activity when they do it with friends and acquaintances.

During the last year in KV1, 'participation in government meetings' and 'membership in civic organisations in KV1' account for the increased participation rate of the resettlers in different community activities. Hence, apart from the multiplier effect of government meetings, being a member of a civic organisation also increases participation in community activities. Unlike the results for the first year, only the 'number of acquaintances' has an impact on the participation rate of a household head in community activities in Kasiglahan during the last year.

5.4.2 The Indonesia Case

Displaced households and the resettlement profile

The majority of the respondents in Indonesia was male (92.1%) and 7.1 percent female. Most respondents (64.6%) belonged to the age bracket of 41-60. High school was the highest education level reported by the respondents, while 71.1 percent of the respondents had only elementary-level education. More than half of the respondents were either doing elementary jobs (31.6 percent) or were farmers (23.7 percent). The average household size was 3.96 and the average household income was IDR 10,975,006.58 (1,141.45 USD). All were Muslims and were ethnic Sundanese. The community is divided into three blocks called RT1, RT2, and RT3. Although the landslides occurred in 2000, it took a year before the housing structures were in place. All households were victims of landslides. Their occupancy in the BT resettlement site is a lease-like agreement.

The Cilacap Provincial Government and the Department of Transmigration of Cilacap in particular are the agencies primarily involved in the Bantarpanjang resettlement project. An in-depth interview with a Transmigration officer in Cilacap who was directly involved in the supervision of the project, revealed that there was actually no budget earmarked for the BT families affected by the 2000 landslides. However, given the urgency of the case, the Department reallocated some of their funds for the regular transmigration activities to the development of the Bantarpanjang Translok community. In order to acquire the land for the resettlement project, the Cilacap Provincial Government and the forestry agency Perhutani agreed on a land switching contract in which the Cilacap Provincial Government compensated Perhutani for the land with a property twice the size of the target land. The land and the houses are still owned by the provincial government and there is no option for the resettlers to acquire it. Up until now, the Indonesian government still has no national policy for resettlement. The Transmigration Ministry follows the Keppres 55/1993 in the transmigration of families but the law only covers the aspect of land acquisition, not the provision of basic services and public facilities (Zaman 2002). Hence, resettlement projects in Indonesia have been handled on an "ad hoc" basis.

First Year and 2011 Resettlement Inputs and Social Capital Profile

Table 5.1 shows an improvement in the 'number of public places' years after the resettlement episode. This also applies to the provision of 'basic services'. Based on an in-depth interview with the official who was in charge of the project, because of lack of budget basic services and public places came much later than the houses. Thus, before pipe-borne water was installed, households had to fetch water from wells, of which the water according to them were murky and unsuitable for drinking. They had to spend much money on buying drinking water from private providers. Notwithstanding the increased number of basic services and public places at the time of the survey period, households would still complain about the dismal facilities in Bantarpanjang Translok.

The number of persons who would attend government meetings decreased during the last year. This can be attributed to the fact that meetings called by transmigration officials were associated with the urgent needs of the households. When the needs were gradually addressed, the meetings tapered off.

When it comes to social capital, decreases during the last year are visible for both new acquaintances and friends made in public places and community activities. These can be attributed to the decreasing number of households who resettled in BT in the later years. Also, it was observed during the fieldwork that wives would limit their friends to women within their block (RT), while the men's friendship circle with other men from BT included men working in the same farm. On the other hand, the respondents were able to make more new close ties or individuals they frequently engaged with during the last year than in their first year in the location. The frequency of this engagement with these ties range from every day to four times a week. This attests to the openness and ability of the household heads in creating and nurturing new close bonds with individuals in the community. One father shared with us the value of these close individuals:

> *"I only have four individuals who are very close to me here in Translok. I share with them everything, all my pains and my joys. Some of them I don't even share with my wife. They always understand me and help me. Life here in Translok would be very difficult without them".*
>
> (Survey interview with a father, BT, June 2012)

Similarly, ties with government representatives improved a little and this is due to the fact that government people would rarely visit them and their only constant connection with the government are the leaders of their block (RT) leaders and the leader of the BT community (RW). Only their RT and RW leaders have a direct connection with the village head. Ties with people who work for the mosque also increased and more were added to their support ties in the last year. These support ties were a combination of new and old ones whose assistance they still needed. A wife who relocated from the nearby mountain said:

> *"I still rely on my relatives on the mountains for help in keeping our farm up there. I walk for one and a half hour to visit them once a week. I also check on my farm. When it is harvest time they also help and I give them some of my harvest as a way of thanking them."*
>
> (In-depth interview with a woman, BT, July 2012)

First Year and Last Year Wellbeing of the Households

Table 5.2 tells us that annual household income only improved a little by 2012 (546,053 IDR mean difference or around 12% increase). Basing on the 2012 annual poverty threshold for a family of four which is IDR 11, 698,992 or 1,176.87 USD (Handayani 2012) vis-à-vis the average household size in 2012 which is 3.9, the annual household income of IDR 4,840,085 or USD 486.886 is way below the poverty line. This seems to have been the situation also during their first year in the site.

Although the household income during the first and the last year were both below the poverty standard, only 18.42 percent of the households would spend more than 80 percent of it on food alone. The majority (59.21%) would spend 40 to 80 percent on food during their first year in BT. In the last year, the situation of some of the households seemed to have worsened. While spending 40 to 80 percent on food during their first year, there was a marginal increase (9.21%) of households spending a larger share of their income on food. People in BT would depend more on their personal farms for their daily food need. Some still could keep their farms in the mountains with the assistance of their relatives, while some of those who lost their gardens to the landslides, after transferring to BT were able to arrange (with Perhutani or friends and

relatives) a new garden lot where they again could plant crops, such as cassava, peanut, and eggplant.

Most of the household heads were able to keep their job as farm labourers right after the displacement and they even got nearer to the farms. This situation improved over the years. Also, being close to the rice fields now allowed the wives in their free time to join their husbands there as part-time farm labourers. There was some increment in the numbers of sick adults and children during the last year, but the numbers are negligible.

Only few BT household heads did not participate in any community activity during their first year and in the last year. However, looking closely into the participation rate in more than three kinds of activities of the BT household heads, a big reduction is evident during the last year and an increase is seen for participation in less than three kinds of activities. In their first few years they had introduction parties sponsored by the local politicians, but later on these stopped because everybody knew everybody already. What remained were *slametan* (dinner parties) organised by different households and *pengajian* or Quran reading organised by men in BT. In Indonesian cultures, *slametan* are organized at life cycle events (birth, circumcision, marriage, moving house, death) and at important community occasions (harvest, but also in case of a crisis). Their purpose is to ascertain the wellbeing (*slamet*) of the host family and to promote social harmony (*rukun*) in the community. Participation in and donating to these occasions are seen as a social obligation. Not doing so would make one the subject of community gossip (Guinness 1986).

Effects of resettlement inputs and social capital on the households' wellbeing

Results of regression tests done on the Indonesia case are presented in Tables 5.4a, 5.4b, 5.4c, and 5.4d.

Economic Wellbeing

Data yield that an increase in the 'number of basic services' negatively impacted the increase of household income of BT residents during their first year of stay in the site, while their 'membership in civic organisations' does the opposite. Based on ethnographic data, majority of the households came from nearby mountains where they had free access to drinking water and did not seem to need electricity. After their transfer to BT, a densely populated area, basic services such as electricity and water were installed gradually and had to be paid for. Contrarily, membership of civic organisations like *arisan* and belonging to a RT and RW seemed to have brought some economic benefits to their households, as they got access to local anti-poverty programs, the rice assistance program Raskin, and the cooperative project. Belonging to such organisations also gave them the opportunity to enter into an agreement with the Perhutani regarding the use Perhutani land for personal farming needs. The indicator 'number of acquaintances' is positively associated with income, while the 'number of government ties' and the 'number of support ties' both yielded negative regression weight. Two interpretations can be deduced from these results. Either those households who had more income during the first year did not need to invest in more ties with the government and individuals who could support them, or the knowledge of having few government and support ties motivates a household to work hard and earn more to sustain their living.

In the last year, no resettlement inputs turned out as predictors for the household income, but the 'number of government ties' (negative regression weight) and the 'number of mosque ties' (positive regression weight) turned out significant. During the survey period it was observed that those with more government ties are the community (RT) leaders and active organisation members in BT. They had direct connections with the village head and some low-ranking officers in Perhutani and the Transmigration Department. The BT residents were aware of this and they would often interpret this as a kind of 'power'. Hence, when there was an emergency like death or sickness in a household, people would immediately approach these leaders and active members of organisations for help and would subsequently be given assistance (financially or otherwise).

On the other hand, 'mosque ties' (priest, mosque manager, secretary) can contribute to the improvement of the household income probably because of the information on social services they have, while others can tap on the resources of the mosque. Two parents from separate households who were both friends with people working for the mosque shared with the researcher that they regularly got their water from the mosque.

No resettlement inputs and social capital indicators appeared as facilitators in making the households more food secure during their first year in the site. In the last year, the decrease in 'number of public places' and the increase in the number of 'close individuals' and 'government ties' are positively associated with more food secure households. The negative association of household's food security with the number of public places can be explained by the fact that these public places such as the sidewalks and streets were not built using government funds but through the personal contributions of the households either in the form of cash or crops. Nonetheless, among their different ties, they seem to rely on the individuals they frequently engage with when it comes to securing food for their household. Considering that most of the BT resettlers are farm labourers and some even maintain their own farm, food exchange and food assistance among the neighbours is a usual practice. While these close individuals can directly provide food to a household in need, government ties (with Perhutani, RT or RW leaders) can provide access to farm lots (lease arrangement) and other social projects for the poor (e.g. business capital, livelihood training).

The likelihood of getting employed right after the transfer to Translok is only positively related with two social capital indicators: the number of close individuals and the number of government ties. This results highlight the immediate value of establishing new intimate relationships with the other resettlers and government people. Some of the resettlers who had skills in collecting sap from a gum tree and who knew somebody in the Perhutani office were subsequently hired by Perhutani to work in one of their forests. Moreover, the fact that it is only the 'number of close individuals' that emerges as significant implies that access on employment information or job opportunities requires investment in the form of frequent face-to-face interaction, a woman farm labourer told us:

> *"I work as a farm labourer but I don't get to work every day. My work depends on Bu Pasha [pseudonym] a close friend and my neighbour, because she tells me if they need an extra hand in the farm where she works. I get paid IDR 20,000 per day."*
> (Survey interview, woman-farm labourer, BT, June 2012)

For the last year in the site, no indicators from both resettlement inputs and social capital entered the regression model.

Physical Wellbeing

During the first year, in BT the number of sick adults in the households was only significantly associated with 'number of basic services'. As mentioned earlier, perhaps this may be due to the presence of substandard basic services provided in the site and the payments that the household heads had to contend that resulted in physical and psychological stress. In the last year, an increase in the 'number of public places' lowers the chances of having sick adults in the family. As observed during the fieldwork, the BT households are generally sociable. People are friendly and often gather for chats, prayer, parties or meetings in places like the mosque or kiosks and on the sidewalks. Thus, such public places seem to be important, not only for the social lives of these households but also for promoting good health.

The number of children in the household during the resettlers' first year in the site is also related with fewer public places in the site. The area size of the community is only 1.3 hectares and only few public places could be constructed gradually. A house in BT is made of slabs of wood, has neither ceiling nor flooring, and has no toilet. Staying outside is better than staying inside because of the unbearable heat. One father mentioned that his son would often suffer from fever because of the heat inside their house, but when he started allowing his son to go out and play with his friends on a nearby sidewalk he stopped getting sick. Later on, he was able to earn more money and put some ceiling under their roof, changed the wooden walls into cement, and cemented the floor as well. In addition, household heads whose children get sick more often have more acquaintances and few mosque ties. For the last year, only a positive association between higher morbidity and 'number of close individuals' could be found. Hence, those parents whose child(ren) usually get sick rely much on their close friends for assistance.

Social Wellbeing

The participation rate of the BT households in community activities in the first year of their stay in the site can be predicted by their 'attendance in government meetings' and the 'number of their government ties'. This suggests that in order to activate and stimulate the social process among the households in the new community, the concerned government representatives (from the Transmigration Department and the office of the village head, among others) should conduct more activities for the resettlers where they meet each other and, at the same time, can establish links with the government people themselves.

During the last year, 'participation to government meetings' still positively affects the participation rate of a household head in community-based activities. Apart from this, a higher 'number of friends' is a predictor. Surprisingly, less '[number of] basic services' in BT proved an inducement to active participation of the households in community activities. The community in general shares the same sentiment regarding the persistent problem of the dismal quality and insufficiency of basic services. These issues apparently bond the households and make them meet more often to discuss possible solutions, such as raising funds for the paving of their streets and the construction of another mosque in the site.

5.5 Conclusions and discussion

The research provides strong evidence on the applicability of the social capital theory in the examination of the resettlers' wellbeing after their involuntary resettlement. Likewise, it demonstrates the value of breaking down the resettlement program into components and the social capital into different types of ties when investigating their impacts on the multi-faceted wellbeing of the involuntary resettled households. The research yields insights on the effects of resettlement program and social capital on how these households 'get by' or 'get'ahead' and how the outcomes differ according to resettlement policies, culture, location, and the phase of resettlement (first year and last year).

The cases reveal that resettlement inputs can both facilitate and hamper households to get by and get ahead. More public places in the Philippines increase the morbidity of children as the parents allow them to roam around and play without adult supervision. In Indonesia, the public places are an escape for the children from the sweltering heat inside the wooden houses, and for the BT adults they serve as venues for meeting and nurturing relationships through different activities. These contradicting results can be attributed to the location and size of the resettlement sites. KV1 is located in an urban area, is much larger than BT, and has a population that is 81 times that of BT. Children can go distances as they play with their friends and can be exposed to people who might be carrying diseases and to food stalls that sell cheap and unhygienic snacks. Thus, resettlement project managers in coordination with the community should likewise integrate the utilization of the public places in the site into their monitoring activity, to contribute to the improvement of the wellbeing of the residents.

Similarly, basic services and the financial obligations that these entail, seem to be embraced by the urban resettlers in KV1, particularly during their first year while they were still struggling to get by, while the rural BT resettlers view them as an additional burden and therefore as a barrier in getting by at the initial stage in the site. The majority of the KV1 households came from urban centres where they were accustomed to using and paying for electricity and water, would walk on paved streets, had access to day care centres, health centres, etc. Hence, they wanted the same kind of basic services in the resettlement site. The people were also aware that their right to these basic services is laid down in the resettlement policies of the government.

Contrastingly, most of the BT resettlers came from the nearby mountains. They were not used to electricity and piped water. They also had never used communal toilets, since in the mountains they were using the 'open toilet' of small rivers and streams. These did not require them to line up and wait for their turn. But the new conditions were brought upon them and they were not prepared for them, psychologically neither financially. Still, they had to struggle with the new situation and the unexpected expenses. The stress could have been avoided if orientation meetings with the households had been conducted before the resettlement. Such meetings would have prepared the households for the upcoming changes in their living conditions and would perhaps have resulted in practical solutions that could have mitigated the social and other costs of the involuntary resettlement.

Overall, the 'soft' resettlement inputs are found indispensable in both locations for the households' capacity to get by and get ahead. Government meetings and membership in civic organisations within the location contributed positively to food security (last

year) and social wellbeing (both years) of the KV1 resettlers, and for the Indonesians to their household income (first year) and social wellbeing (both periods). This highlights the overarching value of the government's engagement with the resettlers of the effort to create a positive environment for civic organisations in the site. Facilitating community organisation should therefore be an integral part of resettlement projects.

All the forms of structural social capital turned out meaningful for getting by and getting ahead. However, some types of ties would be more significant than others. In KV1 the number of support ties played a prominent role in the economic and physical wellbeing of the households, while in BT it is the number of close individuals and number of government ties that mattered most. It is interesting that despite the number of new friends, close individuals, and ties with other entities during the first and the last year, the support ties of the Philippine households would manifest dominantly on their state of wellbeing. This conveys that the KV1 households even in the turmoil brought about by the involuntary resettlement process still managed to maintain their ties with people whom they could rely on for support. They were aware of the value of these ties and would even add more individuals to their support network over time as evidenced by the increase of these ties during the last year. In a way, this supports the claim in the literature that social capital is a substitute for other capital that the poor lack. However, this may also partly explain why these Philippine households even after so many years in the resettlement site remain in the 'getting by' state. They would primarily rely on their old support ties and failed to branch out their support network. During the survey period it was apparent that the residents in the site have this general assumption that all of them are poor and therefore one cannot help another one in terms of money, food, or employment. This was corroborated by the results of an FGD done with the household heads. Most of the participants shared that they would not ask help from the new close individuals in their lives because like themselves these individuals are also poor and in need of assistance. Unfortunately, the few government meetings and absence of distinctive social activities reinforce their 'support-centric' ties as well as their sceptical attitude towards their close friends.

On the other hand, the support network of the BT resettlers is more diverse as it comprises close individuals and government ties. This diversity, which might have been the result of socio-cultural practices like *slametan* and *pengajian*, which possibly aided the households in 'getting ahead' in terms of food security, employment, and social wellbeing. The Indonesian culture of partying and meetings appears to be crucial in building reciprocity among the newly resettled neighbours (cf. Navarra et al. 2012). Moreover, this finding corroborates similar claims of Briggs (1998) and Woolcock and Narayan (2000) that linking or vertical ties (in this case government ties) can help the poor in getting ahead. Therefore, resettlement proponents or project managers should also know about the sociability pattern or culture of the resettlers for their 'community organising' program be effective. Equally important is the sustainability of the government engagement with the community leaders and residents, which can result into the creation of linking ties that poor households can explore for getting by and getting ahead.

The research also points out that the value and relevance of different social ties of the households is context specific. As illustrated by the case of improving household income of the KV1 resettlers, during the first year period close individuals were found important but in the last year the church ties would influence their income positively. In the same manner, while acquaintances were found useful in the improvement of the household income in BT during the first year, in the last year their mosque ties. Hence,

it is also imperative that resettlement programs recognize the potent role of religious institutions in the restoration or improvement of the resettlers' income by integrating these institutions in their programs and crafting novel activities or projects.

To conclude, while the Philippine case presents a static or 'getting by' picture of the households' wellbeing, the Indonesian case illustrates a combination of 'getting by' in terms of household income and food security and 'getting ahead' for the other indicators of well-being. The resettlement inputs and social capital seem to work hand in hand in fostering the improvement of the living conditions of the resettled households.

Table 5.1 First Year and Last Year Resettlement Inputs and Social Capital Profile

Resettlement Inputs	**N= 150 Philippines**			**N=76 Indonesia**		
	1st Year	**Last Year**	**Difference**	**1st Year**	**Last Year**	**Difference**
Hard Components						
• Mean No. of Public Places	8.00	8.9	0.9	5.59	7.03	1.44
• Mean No. of Basic Services	9.75	11.57	1.82	6.5	8	1.5
Soft Component						
• Attendance Turn-out in Government Meetings (%)						
Never attended	63.33	63.33	0	47.37	68.42	21.05
Attended	36.67	36.67	0	52.63	31.58	-21.05
• Membership turn-out in Community Organisations (%)						
No membership	72.00	58.67	-13.33	13.16	0	-13.16
With membership	28.00	41.33	13.33	86.84	100	13.16
Social Capital	**1st year**	**Last Year**	**Difference**	**1st Year**	**Last Year**	**Difference**
• Mean No. of Acq. Made	5.17	5.18	0.01	5.79	2.54	-3.25
• Mean No. of Friends Made	4.01	4.04	0.03	4.90	1.43	-3.47
• Mean No. of Close Ind.	6.52	5.67	-0.85	4.24	4.84	0.60
• Mean No. of Govt. Ties	.65	.51	-0.14	.83	.93	0.10
• Mean No. of Church/Mosque Ties	1.05	.63	-0.42	1.34	1.74	0.40
• Mean No. of Support Ties	2.30	5.67	3.37	1.26	1.58	0.32

Table 5.2 First Year and Last Year Wellbeing Profile of the Respondents

Wellbeing	N=150 Philippines			N=76 Indonesia		
	1st Year	Last Year	Difference	1st Year	Last Year	Difference
Economic						
• Mean Household Income	80817.9	102120.3	21302.4	4294032	4840085	546053
• % of Household Income Spent on Food (%)	38.67	38.67	0	18.42	27.63	9.21
Higher than 80%	47.33	48.00	0.67	59.21	51.32	-7.89
From 40% to 80%	14.00	13.33	-0.67	22.37	21.05	-1.32
Lower than 40%	22.67	23.33	0.66	13.16	2.63	-10.53
• Household Heads Employment Status (%)	58.67	56.67	-2	64.47	67.11	2.64
Neither husband nor wife has a job	18.67	20.00	1.33	22.37	30.26	7.89
Either husband or wife has a job						
Both husband and wife have jobs						
Physical						
• Mean no. of Ill Adults in the Household	00.16	00.14	-0.02	.07	.25	0.18
• Mean no. of Ill Children in the Household	00.29	00.29	0	.13	.20	0.07
Social						
• Community activities participations (%)		53.33	0	13.16	11.84	-1.32
No community activity participation	53.33	32.67	-3.33	14.47	44.74	30.27
Participated in less than 3 kinds of activities	36.00	14.00	3.33	72.37	43.42	-28.95
Participated in more than 3 kinds of activities	10.67					

Table 5.3a Effects of Resettlement Inputs and Social Capital on the Philippine Households' Wellbeing (Coefficient and Standard Error)

Variables	Household Income				Expenses on Food			
	1st Year		Last Year		1st Year		Last Year	
Model 1 (Resettlement Inputs)	**Coeff.**	**SE**	**Coeff.**	**SE**	**Coeff.**	**SE**	**Coeff.**	**SE**
Gender	23794.31*	12562.7	19302.95	15286.26	0.401	0.360	0.396	0.353
Age	-523.0871	517.9626	-741.232	631.6217	-0.016	0.015	-0.021	0.015
Household size	2904.003	3028.509	3666.591	3173.002	-0.214**	0.091	-0.087	0.075
Education level	3271.332	3556.321	7019.83	4409.577	0.187*	0.106	0.327***	0.111
Location	-26077.15**	13138.05	-22590.01	16338.31	-0.174	0.377	0.665*	0.390
No. of public places	4185.274	2834.962	-1446.108	5694.646	0.111	0.080	-0.081	0.130
No. of basic services	4730.887	3226.253	6471.215	5128.162	-0.050	0.095	-0.119	0.121
Gov't. meetings	7541.858	12290.54	21025.23	15395.31	0.080	0.352	0.112	0.365
Memb. in civic orgs. in KV1	-16953.43	13226.88	-10913.62	14961.65	0.036	0.374	0.643*	0.356
R^2/ Prob>chi2	16.1%		12.8%		0.031		0.003	
Model 2 (Social Capital)								
Gender	34822.18***	13236.07	25870.910	15760.710	0.519	0.377	0.467	0.376
Age	-397.5493	528.7914	-439.713	634.598	-0.016	0.015	-0.020	0.015
Household size	2237.315	3074.289	2858.700	3208.028	-0.201**	0.094	-0.099	0.077
Education level	3596.215	3759.344	8624.876*	4470.669	0.252**	0.111	0.357***	0.115
Location	-26151.19*	13799.12	-21428.65	15839.640	0.051	0.398	0.923**	0.390
No. of acq. made	-2148.402	4899.851	-3400.187	5920.329	-0.238*	0.143	-0.034	0.141
No. of friends made	2408.195	4936.403	5495.126	6083.105	0.206	0.142	0.041	0.145
No. of close indiv.	2567.756	1975.527	3487.583	2370.948	0.036	0.056	-0.085	0.057
No. of gov't. ties	1198.625	6461.924	-3106.571	7156.252	-0.307	0.189	-0.022	0.175
No. of church ties	6440.197	6242.061	9233.181	5818.054	0.219	0.178	0.175	0.141
No. of support ties	177.5648	2707.543	1839.613	3174.723	0.166**	0.079	0.256***	0.077
R^2/ Prob>chi2	14.5%		15.6%		0.002		0.000	
Model 3 (Resettle. Inputs & Social Capital)								
Gender	29801.14**	13251.69	26321.360	15891.72	0.498	0.381	0.464	0.383
Age	-324.9841	532.8047	-429.752	643.498	-0.012	0.015	-0.019	0.015
Household size	3856.55	3107.533	3600.404	3234.112	-0.199**	0.096	-0.117	0.079
Education level	4345.392	3733.425	9217.902**	4526.123	0.252**	0.112	0.368***	0.119
Location	-22877.28	14161.54	-11013.870	16863.93	-0.007	0.419	0.998**	0.424
No. of public places	4632.851	3047.518	-4771.586	5967.559	0.130	0.089	-0.205	0.141
No. of basic services	5463.882	3312.598	8901.850*	5182.449	-0.022	0.098	-0.044	0.126
Gov't. meetings	3008.172	13547.1	11271.450	16614.77	0.053	0.392	0.229	0.407
Memb. in civic orgs. in KV1	-20514.5	13597.98	-9746.819	15350.00	0.059	0.393	0.631*	0.375
No. of acq. made	-5585.165	5070.817	-3902.224	6091.907	-0.294*	0.152	-0.032	0.147
No. of friends made	5032.879	4981.322	5505.703	6119.068	0.216	0.146	0.024	0.147
No. of close indiv.	3357.518*	1984.055	3130.324	2480.611	0.044	0.057	-0.073	0.060
No. of gov't. ties	1837.711	6533.429	-2199.677	7307.272	-0.262	0.194	-0.003	0.177
No. of church ties	5436.038	6291.684	10087.070*	5866.177	0.191	0.182	0.158	0.143
No. of support ties	-721.8424	2698.418	2742.747	3249.314	0.168**	0.081	0.292***	0.081
R^2/ Prob>chi2	19.3%		17.9%		0.006		0.000	

significant at *p<0.10, **p<0.05, ***p<0.01

Table 5.3b Effects of Resettlement Inputs and Social Capital on the Philippine Households' Well-being - Continued (Coefficient and Standard Error)

Variables	Employment			
	1st Year		Last Year	
Model 1 (Resettlement Inputs)	**Coeff.**	**SE**	**Coeff.**	**SE**
Gender	-0.232	0.372	-0.302	0.360
Age	-0.013	0.014	-0.025*	0.014
Household size	0.112	0.089	0.052	0.071
Education level	-0.005	0.102	0.067	0.101
Location	0.175	0.379	0.128	0.374
No. of public places	-0.033	0.084	-0.003	0.141
No. of basic services	0.293***	0.099	0.083	0.118
Gov't. meetings	0.105	0.355	0.018	0.357
Memb. in civic orgs. in KV1	-0.201	0.392	0.149	0.348
R^2/ Prob>chi2	0.031		0.740	
Model 2 (Social Capital)				
Gender	-0.115	0.383	-0.345	0.379
Age	-0.004	0.014	-0.022	0.015
Household size	0.068	0.088	0.006*	0.074
Education level	-0.029	0.107	0.088	0.106
Location	0.070	0.391	0.182	0.377
No. of acq. made	0.166	0.137	0.118	0.137
No. of friends made	-0.183	0.138	-0.147	0.141
No. of close indiv.	-0.004	0.055	0.038	0.056
No. of gov't. ties	0.147	0.185	-0.096	0.166
No. of church ties	0.247	0.190	0.122	0.138
No. of support ties	0.122	0.078	0.232***	0.079
R^2/ Prob>chi2	0.570		0.059	
Model 3 (Resettlement Inputs &Social Capital)				
Gender	-0.247	0.390	-0.344	0.384
Age	-0.007	0.015	-0.019	0.015
Household size	0.096	0.091	0.013	0.075
Education level	0.008	0.108	0.112	0.108
Location	0.361	0.411	0.387	0.403
No. of public places	-0.057	0.090	-0.150	0.153
No. of basic services	0.274***	0.101	0.191	0.124
Gov't. meetings	-0.107	0.395	-0.230	0.395
Memb. in civic orgs.in KV1	-0.067	0.401	0.332	0.369
No. of acq.made	0.154	0.145	0.138	0.143
No. of friends made	-0.162	0.142	-0.174	0.144
No. of close indiv.	0.016	0.057	0.064	0.059
No. of gov't.ties	0.075	0.191	-0.107	0.171
No. of church ties	0.230	0.201	0.133	0.138
No. of support ties	0.108	0.079	0.253***	0.081
R^2/ Prob>chi2	0.059		0.097	

significant at *p<0.10, **p<0.05, ***p<0.01

Table 5.3c Effects of Resettlement Inputs and Social Capital on the Philippine Households' Well-being - Continued (Coefficient and Standard Error)

Variables	Sickness Among Adults				Sickness Among Children			
	1st Year		Last Year		1st Year		Last Year	
Model 1 (Resettlement Inputs)	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE
Gender	-0.207	0.467	-1.284***	0.470	-1.075***	0.359	-0.499	0.358
Age	0.014	0.018	-0.005	0.020	-0.060***	0.016	-0.047***	0.015
Household size	-0.281**	0.141	0.018	0.092	0.230***	0.086	0.171***	0.063
Education level	0.082	0.135	-0.064	0.164	0.087	0.101	0.053	0.103
Location	1.259**	0.623	-0.023	0.583	0.755*	0.403	0.822*	0.439
No. of public places	0.173	0.128	0.148	0.188	0.274***	0.104	-0.027	0.128
No. of basic services	-0.403***	0.144	-0.328**	0.140	-0.219**	0.097	-0.127	0.104
Gov't. meetings	0.816*	0.493	0.261	0.533	0.540	0.350	0.284	0.363
Memb. in civic orgs. in KV1	-0.149	0.533	-0.356	0.509	-0.566	0.406	0.002	0.337
(Prob>chi2)	0.016		0.083		0.000		0.000	
Model 2 (Social Capital)								
Gender	-0.173	0.479	-1.212**	0.487	-0.344	0.366	-0.319	0.362
Age	0.020	0.019	0.014	0.022	-0.057***	0.019	-0.041***	0.015
Household size	-0.160	0.134	0.059	0.091	0.270***	0.098	0.170***	0.062
Education level	0.217	0.158	0.022	0.168	0.196*	0.119	0.103	0.113
Location	1.644**	0.655	0.408	0.551	1.617	0.521	1.331***	0.440
No. of acq. made	0.039	0.196	-0.179	0.213	-0.161	0.157	-0.142	0.166
No. of friends made	-0.062	0.207	0.014	0.225	0.105	0.170	0.147	0.165
No. of close indiv.	0.098	0.075	0.148	0.091	0.124**	0.062	0.125**	0.063
No. of gov't. ties	-0.150	0.247	0.058	0.211	0.180	0.152	-0.035	0.145
No. of church ties	0.157	0.221	0.274*	0.158	0.342**	0.158	0.291**	0.119
No. of support ties	0.174*	0.096	0.184**	0.093	0.349***	0.079	0.109	0.072
(Prob>chi2)	0.042		0.011		0.000		0.000	
Model 3 (Resettlement Inputs and Social Capital)								
Gender	-0.091	0.507	-1.330***	0.503	-0.324	0.401	-0.245	0.382
Age	0.030	0.021	0.006	0.022	-0.059***	0.021	-0.041***	0.015
Household size	-0.241*	0.142	0.006	0.102	0.337***	0.112	0.143**	0.070
Education level	0.206	0.160	-0.001	0.180	0.158	0.122	0.109	0.115
Location	1.588**	0.696	0.154	0.605	1.414**	0.565	1.281***	0.473
No. of public places	0.223	0.140	-0.011	0.198	0.099	0.114	-0.145	0.156
No. of basic services	-0.367**	0.143	-0.225	0.151	-0.087	0.100	-0.051	0.112
Gov't. meetings	0.706	0.627	0.376	0.581	0.160	0.439	0.145	0.399
Memb. in civic orgs. in KV1	0.064	0.564	-0.067	0.551	-0.677	0.442	0.153	0.359
No. of acq. made	-0.007	0.220	-0.199	0.230	-0.224	0.173	-0.155	0.174
No. of friends made	-0.102	0.215	0.013	0.241	0.150	0.178	0.160	0.174
No. of close indiv.	0.081	0.078	0.109	0.093	0.110*	0.063	0.122*	0.065
No. of gov't. ties	-0.061	0.255	0.030	0.230	0.278*	0.161	-0.013	0.156
No. of church ties	0.170	0.226	0.271*	0.164	0.318*	0.179	0.288**	0.120
No. of support ties	0.163*	0.091	0.187*	0.105	0.328***	0.085	0.115	0.082
(Prob>chi2)	0.019		0.025		0.000		0.000	

significant at *p<0.10, **p<0.05, ***p<0.01

Table 5.3d Effects of Resettlement Inputs and Social Capital on the Philippine Households' Well-being - Continued (Coefficient and Standard Error)

Variables	Community Activity Participation			
	1st Year		Last Year	
Model 1 (Resettlement Inputs)	**Coeff**	**SE**	**Coeff.**	**SE**
Gender	-0.688*	0.392	-0.821**	0.375
Age	-0.017	0.016	-0.019	0.016
Household size	-0.073	0.098	0.058	0.076
Education level	-0.077	0.114	-0.027	0.109
Location	-0.110	0.410	0.225	0.406
No. of public places	0.019	0.095	0.134	0.142
No. of basic services	-0.133	0.106	-0.074	0.124
Gov't. meetings	2.364***	0.403	1.541***	0.374
Memb. in civic orgs. in KV1	0.518	0.394	0.633*	0.352
(Prob>chi2)	0.000		0.000	
Model 2 (Social Capital)				
Gender	0.072	0.432	-0.001	0.413
Age	0.025	0.017	0.003	0.017
Household size	-0.101	0.106	0.023	0.081
Education level	-0.029	0.130	0.067	0.123
Location	0.412	0.455	0.434	0.416
No. of acq. made	0.377**	0.158	0.343**	0.154
No. of friends made	0.365**	0.151	0.226	0.151
No. of close indiv.	0.201***	0.070	0.099	0.064
No. of gov't. ties	0.202	0.198	0.244	0.181
No. of church ties	0.255	0.194	0.234	0.147
No. of support ties	-0.045	0.096	-0.037	0.086
(Prob>chi2)	0.000		0.000	
Model 3 (Resettlement Inputs and Social Capital)				
Gender				
Age	0.074	0.466	-0.135	0.434
Household size	0.006	0.019	-0.001	0.018
Education level	-0.152	0.116	0.039	0.085
Location	-0.105	0.147	0.029	0.129
No. of public places	0.554	0.502	0.711	0.471
No. of basic services	-0.302**	0.118	-0.080	0.167
Gov't. meetings	-0.110	0.127	-0.049	0.139
Memb. in civic orgs. in KV1	1.869***	0.473	1.153***	0.427
No. of acq. made	0.395	0.457	0.571	0.412
No. of friends made	0.462**	0.190	0.274*	0.163
No. of close indiv.	0.351**	0.173	0.255	0.159
No. of gov't. ties	0.182**	0.077	0.088	0.070
No. of church ties	0.219	0.217	0.310	0.190
No. of support ties	0.134	0.201	0.222	0.152
	-0.010	0.104	-0.037	0.092
(Prob>chi2)	0.000		0.000	

significant at *p<0.10, **p<0.05, ***p<0.01

Table 5.4a Effects of Resettlement Inputs and Social Capital on the Indonesian Households' Wellbeing (Coefficient and Standard Error)

Variables	Household Income				Expenses on Food			
	1st Year		Last Year		1st Year		Last Year	
Model 1 (Resettlement Inputs)	**Coeff.**	**SE**	**Coeff.**	**SE**	**Coeff.**	**SE**	**Coeff.**	**SE**
Gender	-3235843.000	3193665.000	-1077783.000	2952200.000	1.935**	0.948	0.584	0.950
Age	83161.630	78240.420	41784.760	72273.080	-0.063**	0.024	-0.047**	0.023
Household size	1405908.000**	656871.300	-6582.104	594365.000	-0.261	0.195	0.049	0.180
Education level	1711303.000***	639246.400	32121.600	570488.200	0.217	0.190	0.185	0.173
Location RT 2	-568137.900	2145885.000	-1577080.000	1898179.000	0.213	0.439	-0.108	0.585
Location RT 3	142136.300	2058536.000	-2169653.000	1855267.000	0.439	-0.103	-0.027	0.557
No. of public places	324647.000	770005.800	979386.500	731136.200	-0.103	0.094	-0.255	0.220
No. of basic services	-1431560.000**	708972.400	245115.800	874159.800	0.094	0.953	0.213	0.267
Gov't. meetings	482556.300	1973270.000	-1752777.000	1685857.000	0.953	-0.694	0.196	0.519
Memb. in civic orgs.	12400000.000*	6956749.000	(omitted)	(omitted)	-0.694		(omitted)	(omitted)
in BT								
R^2/ Prob>chi2	24.8%		7.3%		0.018		0.330	
Model 2 (Social Capital)								
Gender	-1186211.000	3050702.000	-16289.510	2867075.000	1.987**	0.995	0.603	0.948
Age	-850.506	75386.710	-3185.997	68187.760	-0.044*	0.024	-0.033	0.023
Household size	615370.100	639495.500	-43662.210	546367.300	-0.220	0.206	0.035	0.175
Education level	1525058.000**	573644.100	-216512.500	522601.300	0.288	0.185	0.194	0.171
Location RT 2	220799.700	1991606.000	890864.500	1848970.000	0.263	0.641	-0.070	0.615
Location RT 3	1464149.000**	1970228.000	-1945089.000	1801937.000	0.566	0.629	0.181	0.590
No. of acq. made	-948039.500	634746.700	613403.200	445403.400	-0.255	0.201	-0.028	0.140
No. of friends made	327174.800	660720.800	-443320.800	635730.400	0.193	0.212	-0.167	0.213
No. of close indiv.	-2767383.000***	313319.200	286410.900	327400.800	0.105	0.103	0.269**	0.118
No. of gov't. ties	911573.200	951122.300	-1391487.000*	769949.100	0.231	0.322	0.503*	0.265
No. of mosque ties	-1081530.000*	772583.300	1452028.000**	677670.300	0.312	0.260	0.125	0.223
No. of support ties		590280.500	-308007.800	537588.000	-0.181	0.195	-0.040	0.183
	38.4%		21.1%		0.026		0.127	

R^2/ Prob>chi2								
Table 5.4 a Continued								
Model 3 (Resettlement Inputs and Social Capital)	-908582.700	3058701.000	942712.400	2892642.000	2.093**	1.033	0.855	0.999
Gender	1499.299		3479.434		-		-0.052**	0.025
Age	500291.600	78464.270	-378425.300	71342.210	0.060**	0.026	-0.016	0.190
Household size	1624138.000***	648004.700	120387.000	573232.000	-0.216		0.149	0.184
Education level	-236270.600	599371.300	972472.900	542933.300	0.165	0.216	0.465	0.678
Location RT 2	228868.100	2019734.000	-1411469.000	1992477.000	0.450		0.725	0.660
Location RT 3	-421060.900		772329.900		0.845	0.201	-0.682**	0.290
No. of public places	-1111661.000	2028035.000	492361.000	1935698.000	-0.459		0.325	0.288
No. of basic services	-320764.500		-3024577.000		0.244	0.673	-0.575	0.662
Gov't. meetings	942981.700	710971.700	(omitted)	847648.700	0.713		(omitted)	
Memb. in civic orgs. in BT	13900000.000*	1976848.000	606029.400	1890563.000	0.339	0.661		0.147
No. of acq. made			-278448.400				-0.103	0.254
No. of friends made	1088321.000	7833710.000	257128.900		-0.338	0.324	0.120	0.139
No. of close indiv.	-511933.900				0.339		0.408**	0.280
No. of gov't. ties	30301.400		-1341062.000*	451974.500	0.213	0.239	*	0.231
No. of mosque ties		689222.400		757611.200	0.226		0.662**	0.184
No. of support ties	-2928970.000***	765232.900	1641831.000**	366665.900	0.338	0.653	0.078	
	959932.300	387419.000		776276.900	-0.278		-0.049	
	-1243254.000*	972120.300	-416116.800	679858.200		2.538		
		774313.900		533093.600				
		684414.000				0.223		
						0.250		
						0.132		
						0.339		
						0.268		
						0.228		
R^2/ Prob>chi2	42.5%		26.9%		0.028		0.071	

significant at *p<0.10, **p<0.05, ***p<0.01

Table 5.4b Effects of Resettlement Inputs and Social Capital on the Indonesian Households' Well-being - Continued (Coefficient and Standard Error)

Variables	Employment			
	1st Year		Last Year	
Model 1 (Resettlement Inputs)	**Coeff.**	**SE**	**Coeff.**	**SE**
Gender	0.334	1.284	3.274**	1.389
Age	0.033	0.029	0.006	0.025
Household size	-0.028	0.225	-0.044	0.206
Education level	0.162	0.236	0.068	0.192
Location RT 2	-0.450	0.742	0.691	0.656
Location RT 3	-0.683	0.743	0.087	0.659
No. of public places	0.191	0.276	-0.056	0.253
No. of basic services	-0.080	0.246	0.372	0.313
Gov't. meetings	0.438	0.692	0.616	0.573
Memb. in civic orgs. in BT	38.721	7233.398	(omitted)	
R^2/ Prob>chi2	0.000		0.223	
Model 2 (Social Capital)				
Gender	-0.188	1.092	3.535**	1.426
Age	0.009	0.029	0.015	0.025
Household size	0.180	0.235	-0.061	0.198
Education level	0.141	0.210	0.109	0.189
Location RT 2	0.038	0.710	0.986	0.684
Location RT 3	0.115	0.708	0.251	0.681
No. of acq. made	0.013	0.226	-0.039	0.160
No. of friends made	-0.010	0.237	0.052	0.236
No. of close indiv.	0.630***	0.142	0.141	0.125
No. of gov't. ties	0.899**	0.399	0.155	0.280
No. of mosque ties	-0.160	0.275	0.082	0.258
No. of support ties	0.162	0.215	-0.089	0.198
R^2/ Prob>chi2	0.000		0.539	
Model 3 (Resettlement Inputs and Social Capital)				
Gender				
Age	0.032	1.811	3.482**	1.425
Household size	0.071*	0.040	0.005	0.027
Education level	0.254	0.262	-0.088	0.216
Location RT 2	0.195	0.290	0.045	0.200
Location RT 3	-0.049	0.883	0.997	0.770
No. of public places	-0.856	0.906	0.377	0.766
No. of basic services	0.261	0.409	-0.205	0.331
Gov't. meetings	0.059	0.301	0.430	0.349
Memb. in civic orgs. in BT	0.778	0.851	0.306	0.707
No. of acq. made	38.401	7671.501	(omitted)	
No. of friends made	-0.273	0.285	-0.037	0.165
No. of close indiv.	0.057	0.320	0.088	0.287
No. of gov't. ties	0.409**	0.180	0.131	0.143
No. of mosque ties	0.725	0.459	0.170	0.292
No. of support ties	-0.256	0.328	0.076	0.261
	0.094	0.268	-0.074	0.200
R^2/ Prob>chi2	0.000		0.595	

significant at *p<0.10, **p<0.05, ***p<0.01

Table 5.4c Effects of Resettlement Inputs and Social Capital on the Indonesian Households' Wellbeing
- Continued (Coefficient and Standard Error)

Variables	Sickness Among Adults				Sickness Among Children			
	1st Year		Last Year		1st Year		Last Year	
Model 1 (Resettlement	**Coeff.**	**SE**	**Coeff.**	**SE**	**Coeff.**	**SE**	**Coeff.**	**SE**
Inputs)	15.095	2178.055	-1.211	0.914	-1.044	1.432	-0.979	1.240
Gender	-0.038	0.054	-0.058**	0.024	0.020	0.037	-0.021	0.031
Age	0.032	0.448	-0.420*	0.250	-0.210	0.295	0.318*	0.190
Household size	0.103	0.397	-0.024	0.197	0.685**	0.282	-0.186	0.247
Education level	0.503	1.489	-1.682*	0.896	-0.148	1.182	-1.467	0.944
Location RT 2	0.401	1.560	-0.040	0.592	0.290	0.864	0.028	0.587
Location RT 3	0.020	0.394	-0.301*	0.182	-0.833**	0.420	-0.210	0.226
No. of public places	1.198*	0.685	0.449	0.281	0.222	0.291	-0.110	0.301
No. of basic services	1.083	1.376	-0.341	0.656	-0.585	1.055	-0.123	0.709
Gov't. meetings	5.079	3382.545	(omitted)		20.666	3485.631	(omitted)	
Memb. in civic orgs. in BT	0.465		0.033		0.079		0.447	
Prob>chi2								
Model 2 (Social Capital)								
Gender	14.376	2042.853	-1.078	0.952	-0.920	1.319	-0.730	1.329
Age	-0.066	0.052	-0.079**	0.032	-0.046	0.046	-0.030	0.036
Household size	-0.272	0.535	-0.520*	0.286	-0.208	0.358	0.267	0.166
Education level	0.130	0.406	-0.098	0.206	0.430*	0.257	-0.279	0.264
Location RT 2	0.474	1.520	-1.727*	0.912	-0.816	1.096	-1.163	1.060
Location RT 3	1.175	1.412	-0.431	0.568	0.241	0.909	0.016	0.650
No. of acq. made	0.471	0.349	0.304*	0.167	0.587**	0.269	0.177	0.216
No. of friends made	-0.312	0.374	-0.409*	0.229	-0.460	0.287	-0.472	0.311
No. of close indiv.	-0.127	0.243	-0.023	0.110	-0.039	0.178	0.221	0.141
No. of gov't. ties	0.178	0.599	-0.635*	0.332	-0.250	0.484	-0.132	0.375
No. of mosque ties	-0.876	0.593	0.265	0.260	-0.717*	0.416	0.348	0.257
No. of support ties	0.181	0.475	-0.281	0.234	0.297	0.385	0.300	0.272
Prob>chi2	0.857		0.037		0.085		0.049	
Model 3 (Resettlement Inputs &Social Capital)								
Gender	18.699	4736.368	-1.129	0.991	0.724	1.968	-0.719	1.355
Age	-0.110	0.103	-	0.033	-0.054	0.058	-0.034	0.040
Household size	-0.424	0.797	0.091***	0.310	-0.644	0.641	0.358*	0.210
Education level	0.421	0.634	-0.687**	0.232	0.602	0.368	-0.327	0.318
Location RT 2	0.060	3.211	-0.137	1.025	0.116	1.431	-0.962	1.128
Location RT 3	1.757	2.166	-1.742*	0.712	1.200	1.297	0.251	0.811
No. of public places	0.405	0.726	-0.313	0.256	-1.019	0.704	-0.257	0.410
No. of basic services	2.153	1.606	-0.058	0.309	-0.065	0.327	-0.251	0.428
Gov't. meetings	0.426	2.845	0.514*	0.811	-2.052	1.780	-0.323	0.957
Memb. in civic orgs. in BT	-5.240	9112.384	-0.073		22.611	2684.740	(omitted)	
No. of acq. made	1.081	0.853	(omitted)	0.179	0.377	0.338	0.203	0.217
No. of friends made	-1.218	0.966	0.308*	0.277	-0.021	0.399	-0.380	0.350
No. of close indiv.	0.103	0.383	-0.371	0.141	-0.037	0.217	0.256*	0.151
No. of gov't. ties	0.112	1.522	-0.074	0.422	-0.314	0.489	-0.097	0.393
No. of mosque ties	-1.200	1.048	-0.806*	0.280	-0.696	0.454	0.346	0.287
No. of support ties	1.381	1.180	0.327	0.246	-0.120	0.445	0.288	0.294
			-0.268					
R^2/ Prob>chi2	0.432		0.047		0.099		0.101	

significant at *p<0.10, **p<0.05, ***p<0.01

Table 5.4d Effects of Resettlement Inputs and Social Capital on the Indonesian Households' Wellbeing - Continued (Coefficient and Standard Error)

Variables	Community Activity Participation			
	1st Year		Last Year	
Model 1 (Resettlement Inputs)	**Coeff**	**SE**	**Coeff.**	**SE**
Gender	-1.819	1.871	-0.160	1.019
Age	0.021	0.036	0.002	0.025
Household size	0.683*	0.368	-0.008	0.184
Education level	0.087	0.371	-0.007	0.184
Location RT 2	-0.853	1.088	0.294	0.617
Location RT 3	-1.258	1.036	0.341	0.586
No. of public places	0.379	0.403	-0.017	0.223
No. of basic services	0.392	0.352	-0.939***	0.307
Participation in government meetings	2.135**	1.011	1.443**	0.587
Membership in civic organisations in BT				
Prob>chi2	33.705	7050.427	(omitted)	
	0.000		0.017	
Model 2 (Social Capital)				
Gender	-1.880	1.545	-0.043	0.967
Age	-0.010	0.031	-0.016	0.025
Household size	0.791**	0.394	-0.229	0.176
Education level	0.429	0.397	0.097	0.170
Location RT 2	-1.318	1.619	0.416	0.617
Location RT 3	0.134	1.208	1.242**	0.608
No. of acq. made	1.919*	1.112	-0.104	0.152
No. of friends made	-1.500	1.094	0.437*	0.231
No. of close indiv.	0.299	0.192	0.011	0.110
No. of government ties	3.115***	1.148	0.283	0.268
No. of mosque ties	0.659	0.578	-0.027	0.216
No. of support ties	0.042	0.395	-0.064	0.182
Prob>chi2	0.000		0.401	
Model 3 (Resettlement Inputs and Social Capital)				
Gender	-815.143	22900000.000	-0.155	1.038
Age	-4.297	574658.000	-0.011	0.028
Household size	78.773	7613895.000	-0.032	0.194
Education level	-40.961	13400000.000	0.012	0.191
Location RT 2	106.392	25300000.000	0.697	0.721
Location RT 3	-127.033	43900000.000	1.024	0.690
No. of public places	75.347	2016708.000	-0.441	0.308
No. of basic services	182.730	10700000.000	-0.818***	0.309
Gov't. meetings	906.628	48700000.000	0.704	0.689
Memb. in civic orgs. in BT	-678.965	25900000.000	(omitted)	
No. of acq. made	329.407	21800000.000	-0.164	0.169
No. of friends made	-337.696	29100000.000	0.562*	0.306
No. of close indiv.	13.331	9715090.000	0.148	0.138
No. of gov't. ties	237.656	20600000.000	0.310	0.292
No. of mosque ties	11.460	10200000.000	-0.141	0.238
No. of support ties	-37.845	7057842.000	-0.011	0.191
R^2/ Prob>chi2	0.000		0.044	

significant at *p<0.10, **p<0.05, ***p<0.01

Chapter 6

The Networks of the Households and Community Leaders

This final empirical chapter applies social network analysis to the social networks of the Indonesian households and Philippine community leaders that emerged from the two settings 11-12 years after involuntary resettlement. Applying a gender perspective, the social networks of men and women are compared and contrasted in terms of network size, friendship, geographical spread of friends, brokers, and influential actors. Overall, this chapter wraps up the social capital building stories of the Philippine and Indonesian resettlers as it presents a visualization of the interconnectivity of the households and the community leaders.

A version of this chapter is under review as:
Quetulio-Navarra, M., Žnidaršič, A., Niehof, A. A Gender Perspective on the Social Networks of Households and Community Leaders in an Involuntary Resettlement Context. *Gender Place and Culture,* submitted in August 2014.

6.1 Introduction

Involuntary resettlement does not only displace households physically, it can also sever their ties with people who are source of support. Cernea (2000) calls this involuntary resettlement risk 'social disarticulation'. Cernea and McDowell (2000: 30) assert that "forced displacement tears apart the existing social fabric. It disperses and fragments communities, dismantles patterns of social organisation and interpersonal ties; kinship groups become scattered as well. Life-sustaining informal networks of reciprocal help, local voluntary associations and self-organized mutual service are disrupted. This is a net loss of valuable social capital, that compounds the loss of natural, physical, and human capital." Among poor families, their ties or networks are crucial for 'getting by' or 'getting ahead' (Briggs 1998).

The emergence and building of new social capital of refugees or resettlers in resettlement communities has been a subject of research interest. Such studies have been undertaken in both urban and rural settings. They look into the experiences of refugees and families affected by development projects in first world countries and highlight the different elements of social capital, such as the individual's or family's networks, ties, trust and norms, which are crucial in community building (Curley 2009; Kleit 2010; Lamba and Krahn 2003; Wellman and Frank 2001; Westoby 2008).

Studies on involuntary resettlement that use a gender perspective are increasing, showing that forced displacement has unequal impacts on men and women, with women usually at a more disadvantaged position (Amirthalingam and Lakshman 2013; Bisht 2009; Contractor 2008; Edwards 2010; Fiddian-Qasmiyeh 2010; Freedman 2008, 2010; Indra 1999; Zai Liang and Yiu Por Chen 2004; Zetter and Boano 2009). Social capital studies that distinguish the social networks of men and women also reveal gender influences on network formation (Bekkers et al. 2008; D'Exelle and Holvoet 2011; Felmlee et al. 2012; McLaughlin et al. 2010; Moore 1990; Ní Laoire 2011; Pugliesi and Shook 1998; Roberts et al. 2008; Ryan 2008). However, none of these studies has applied a gender perspective to the formation of social networks in a resettlement context in developing countries. D'Exelle and Holvoet (2011) assert that social capital research has avoided to explore gender issues particularly in developing countries and if there are, the focus has been mainly on male networks (Molyneux 2002).

Utilizing social network analysis, this chapter contributes to the understanding of the role of gender in the formation and significance of social networks by showing how gender influences social network features at the levels of the household and community organisation after involuntary resettlement in, respectively, Indonesia and the Philippines. The knowledge gained can guide those who implement resettlement projects in designing gender-sensitive interventions to reinforce the benefits of the social networks of community leaders and households for the welfare of the resettled households and the new community as a whole.

6.2 Social Network Theories and Gender

Bourdieu and Wacquant (1992: 119) define social capital as the "sum of resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition." Coleman (1994) describes it as consisting of aspects of social structure that facilitate certain actions of individuals within the structure. Building on these definitions, Lin (2001: 25) defines social capital as the "resources embedded in social networks accessed and used by actors for actions." Putnam (1995) sees social capital as features of social organisation such as networks, norms, and trust that facilitate coordination and cooperation towards mutual benefit. Resources that are derived from social connections can take the form of tangible goods such as a car, money, a house, or intangible ones like endorsements, education, reputation, and security (Lin 2001). The amount of resources one can draw from one's network depends on the strength of the relationships (Lu et al. 2013).

Although seminal definitions and operationalizations of social capital vary, they have in common that social capital emerges from people's networks. Social networks are sets of actors connected by social relationships or ties. The connection(s) are called vertex or vertices. Personal networks are termed 'ego networks'. More precisely, an ego network consists of an individual (ego) and his or her immediate contacts also known as 'alters' (Newman 2010). These connections are valuable since they inform us on ways people gather emotional, economic, and financial support (Kebede and Butterfield 2009). Characteristics of a network vary. Measuring these characteristics and testing hypotheses that use a gender perspective, form the focus of this chapter.

6.2.1 Network Size

In social capital, the ties are the mechanism that allows the flow of information and mobilization of resources. The more network ties an individual has, the more information and resources (s)he can get from others, and the greater the stock of social capital (Bian 2008). According to Dunbar (2012) an individual's social network varies depending on personality, social skills, and gender.

Network studies yield conflicting findings on the size of networks according to gender. Studies of personal network size (to whom one is connected) reported similar sizes for men and women (Fischer 1982; Marsden 1987; Moore 1990). But a clear pattern is seen as regards the network size of men and women in studies done in developed versus developing countries. Research in first world countries report larger network sizes for women (Antonucci and Akiyama 1987; Burda et al. 1984; McLaughlin et al. 2010; Pugliesi and Shook 1998), while those conducted in developing countries report the opposite (D'Exelle and Holvoet 2011). We hypothesize that the networks of women within the Indonesian resettlement site and the networks of women leaders in the Philippine case will be smaller than the comparable ones of men because of women's lesser mobility as housewives and mothers. The network size is the total number of one's acquaintances and friends.

6.2.2 Friends and Acquaintances

Ties with friends and family are classified as strong ties or bonds that generate and imply trust and obligation and, therefore, are instrumental (through reliable information and strong influence) in finding a job in the labour market (Bian 1997). Ties with acquaintances are classified as weak or bridging ties and provide an individual with access to information and resources beyond his or her social circle (Granovetter 1982; Lin 2001). If poor families leverage their strong bonding ties to "get by" or survive, their bridging social capital is supposed to be crucial in "getting ahead" or in attaining development and growth (Briggs 1998). Friends can have dramatic effects on our lives, such as being happy or depressed, or getting divorced (Dunbar 2012). Morrow (2001: 57) found in her research involving children that "social capital resides in friendship relationships and peer groups that provide a sense of belonging in the here-and-now." Individuals tend to connect with similar people. This social phenomenon emanates from the principle of homophily, or the 'like-me hypothesis', according to which social interactions tend to take place among individuals with similar lifestyles and socioeconomic or demographic characteristics (Lin 2001).

Gender is one of these characteristics. In the study of Roberts et al. (2008) women fared better in making friends, whereas in Moore's (1990) investigation men performed better than women in the friendship arena. Moore (1990) attributed this result to the structural situation of women such as being unemployed and being expected to stay at home to take care of dependants. We hypothesize that in both cases (Indonesia and the Philippines) presented here, men will have fewer friends and more acquaintances while for women it is the opposite. This is inferred from the domestic arrangements in which women are expected to just stay at home (for housewives) or to go home immediately after work hours (for the employed) to attend to household chores and children, while men enjoy more leisure time. Sometimes homophilous relationships can also be based on propinquity; people who live close together tend to be more connected (cited in Meisel et al. 2012) Because of their limited mobility, little geographical spread of friendship ties is expected of both the Indonesian and the Philippine women. In both countries mobility is supposed to be curtailed by the physical division of the sites, into blocks or RT in Indonesia (Figure 6.1) or phases in the Philippines (Figure 6.5). The KV1 housing project in the Philippines accepted resettlers by phase with Phase 1-A (plains) receiving the earliest resettlers and the suburban part receiving the latest resettler-households. Later on, the physical division of KV1 was termed Phase 1A, Phase 1B, and so forth. The total number of friends in ego's network and ego's number of friendship ties with individuals coming from different RTs in Indonesia and phases in the Philippines were measured.

6.2.3 Brokers and Influential Actors

Brokers are individuals in a network who are connected to different clusters. The brokers have high betweenness centrality scores that measure "the extent to which a vertex lies on paths between other clusters" (Newman 2010: 185). Actors with high betweenness scores are influential within a network because they provide access to information and ideas. Removal of such actors would disrupt the communication between other actors because they lie on the largest number of paths among actors (Newman 2010). The term 'broker' is used for vertices with the highest betweenness centrality scores and, therefore, control the information flows between two separate groups of actors. We hypothesize that brokers in the Indonesian and Philippine

networks are most likely men, considering their advantages in mobility within the community and their time availability for different community activities.

The most influential individuals in the network are revealed by closeness centrality based on incoming arcs. Closeness centrality based on indegree takes into account not only direct connections with neighbours but also indirect connections, and is calculated as the inverse of the mean distance from a vertex to other vertices (Newman 2010). The most central actors according to closeness centrality based on indegree are easily reachable by all other members of the network, and are therefore the most influential actors within the network. We hypothesize that these will be men both in the Indonesian and in the Philippine network.

6.3 Methodological Design

The hypotheses were tested on two cases. The first case is that of the social networks of households in the Indonesian resettlement community who were involuntarily displaced and previously strangers to each other, eleven years after the resettlement. The second one is that of the Philippine networks of connections among the community leaders from different phases in the resettlement site, twelve years after the transfer.

In Indonesia, a survey was conducted from April to June 2012 in a rural community in Bantarpanjang Translok (BT), a government-managed resettlement community in the district of Cilacap, in Central Java. BT has a total land area of 3.1 hectares with 97 housing structures of around 45 square metres each. The resettlement community was built for poor households that were displaced by landslides in nearby communities. It has been accommodating households since 2001. In the Philippines, a household survey was undertaken from April to June 2011 in Kasiglahan Village 1 (KV1), a community situated in Rizal Province, municipality of Rodriguez. It has a total land area of 85.70 hectares with 9,915 housing structures of 32 square metres each. The resettlement community was built for poor households that were evicted due to development projects and natural and man-made disasters. Resettlement of families started in 1999.

6.3.1 Sampling in the Philippines and Indonesia

In Indonesia, all 76 legitimate beneficiaries of the resettlement project were interviewed. In the Philippines, it was targeted to have all the leaders in all the 12 phases in KV1 (covering the period of 2000-2011) as respondents. However, only 53 leaders from six phases participated in the survey. Some had already died or left KV1.

6.3.2 Data Collection

Quantitative and qualitative data gathering methods were applied in both sites. Data collection regarding the respondents' network in Indonesia was part of the household survey that was conducted in the resettlement community. In the Philippines, the gathering of data regarding the networks of the leaders within the community was done separately from the household survey. A one-page questionnaire that contained all the names of the household heads in the Indonesia community was prepared, while in the Philippines the names of all the leaders in all the phases in KV1 were listed. In

the interview with the household heads (BT) and community leaders (KV1) the respondents were asked how they would classify each individual in the questionnaire: as "don't know", "acquaintance", or "friend". A code was used for each. The interviewer clarified the difference between acquaintance and friend as follows. An acquaintance is an individual whom one does not meet frequently and share intimate details with, while with a friend is the opposite. Qualitative methods included key informant interviews, group interviews, participant and non-participant observation, in-depth interviews and focus group discussions.

6.3.3 Quantitative and Qualitative Analysis

Social network analysis (SNA) was utilized in the investigation of the networks. SNA is a set of theories and tools. Nooy et al. (2005: 5) assert that "the main goal of social network analysis is detecting and interpreting patterns of social ties among actors." The units of analysis are the people in the network who are referred to as "nodes" (or actor) and the "links" or relationships between people. The links between the nodes are given values through coding according to the degree of attachment: 0 if the person is not connected to the particular person in the list; 1 if the person is considered an acquaintance; and 2 if the person is a friend. Using the SNA software Pajek, data were analyzed and a network map or picture (also called sociogram) was produced. The map shows the individuals (or whatever nodes are under examination) as represented by points or "vertices" and the social relations as represented by lines between the points. We distinguish between two types of links: arcs and edges. An arc is a direct link between actor x and y which in case of a friendship relation means that person x selected person y as his/her friend. An edge denotes a reciprocal friendship relation between nodes x and y. A t-test was applied to test the differences in network characteristics between men and women, such as network size, friendship subnetwork, friendship distribution by location, brokers, and influential actors. Content analysis was applied on the qualitative data.

6.4 Field Results in Indonesia

Out of the 76 respondents in Indonesia, 70 are men and six are women. Nine resettled in BT in 2001, 30 in 2002, 26 in 2003, nine from 2004 until 2009, and two resettled in 2011. They are all victims of landslides in nearby villages in the mountains. However, although the landslides happened in 2000, it was only in 2001 that the government resettlement site was minimally ready for habitation. Houses were constructed first in 2001 and basic services and public places were provided and built gradually, depending on the availability of funds. People lived first with their relatives while waiting for the completion of the site. The households live in four blocks called RT (*rukun tetangga*). 1, Twenty households live in RT1, 28 in RT2, 25 in RT3, and three in RT5. Except RT5, all RTs are parts of the resettlement site. RT5 lies adjacent to (behind) the site. Figure 6.1 shows the structure of the settlement. The three families who live in RT5 were previous residents of RT 2 but they transferred to RT5 for reasons unknown.

Figure 6.1 The Indonesian Community

6.4.1 The Network

As shown in Table 6.1, the Indonesian network has 76 vertices, 70 male and six female. When a wife was asked why she would prefer her husband to be the respondent in the household survey, the answer was that her husband would be better able to understand the questions. The friendship subnetwork of strong ties has 242 edges, reciprocal friendship relations between two beneficiaries, and 787 arcs, signifying that a beneficiary has selected someone as a friend but not vice versa. One of the simplest characteristics of network as a whole is density, which is calculated in a directed graph as the proportion of arcs present in the network divided by the possible number of arcs (Wasserman and Faust 1998). The density measurement ranges from 0 to 1. The density of the friendship subnetwork in Indonesia is 0.220, while that of acquaintanceship ties is higher: 0.589. In his discussion on density of friendship networks according to the size of the population, Newman (2010) noted that the number of friends a person has is much determined by the time devoted to the maintenance of friendship. Therefore, friendship networks usually have a lower density than networks of acquaintances that require less time investment to maintain.

The number of outgoing arcs (also termed outdegree vertices) in a complete network is equal to the number of selected actors and constitutes the size of an ego network. Whole networks of friendship and acquaintanceship ties together were examined. The minimum size of an ego's network is ten and the maximum is 75. Closer investigation of the outdegree distribution reveals that out of the 76 household heads, seven indicated all the 75 respondents as either a friend or an acquaintance.

Size

To test the first hypothesis we investigated ego's network size which is the total number of acquaintances and friends of men and women separately.
H_0: Size of ego networks of women is equal to the size of ego networks of men.
H_1: Size of ego networks of women is smaller than size of ego networks of men.

The men in the Indonesian sample have on average 62.5 friends and acquaintances (standard deviation 13.0), while women reported on average 49.8 friends and acquaintances (standard deviation 16.3). Results of the t-test (t=-1.851, df=5.56, p=0.0588) show that the null hypothesis is not rejected at five percent level. Although women reported less friends and acquaintances than men, the differences are not statistically significant. Therefore, the first hypothesis that Indonesian women's network size (total number of acquaintances and friends) is smaller than that of the men, is rejected. These results imply that the new social and physical situation in the resettlement site does not seem to create unequal opportunities between men and women in forging connections in the new location. This result negates the assumptions related to gender roles with women being viewed as having a limited capacity to expand networks because of their domestic role and limited physical mobility.

Friendship versus acquaintanceship according to gender

In testing the second hypothesis we investigated number of friends in relation to number of acquaintances for men.
H_0: Men have the same number of friends and acquaintances in their ego networks.
H_1: Men have less friends than acquaintances in their ego networks.

Paired samples were used to test the hypotheses. Table 6.1 shows that the Indonesian men in the resettlement project have on average 16.8 friends and almost three times more acquaintances (45.6). The results of paired t-test (t=7.327, df=69, p=0.000) shows that null hypothesis is rejected at 5 percent level. Although we presume that the women will have more friends than acquaintances, the results in Table 6.1 tell a different story. In the Indonesian network, women have an average of 15.8 friends and 34.0 acquaintances.

Based on our data we can assert that although women do not have more friends than acquaintances, they have a higher proportion of friends compared to the size of their whole ego network. The proportion of friends in whole ego network was calculated as:

$$p_F = \frac{F}{F + A} = \frac{number\ of\ friends}{number\ of\ friends + number\ of\ acquintances}$$

The proportion ranges from zero, if person has no friends, to 1, if all persons in someone's network are indicated as friends.

Table 6.1 Networks Statistics of Indonesian Community

				Statistics
Number of actors				76
Number of females in a network (%)				6 (8 %)
Edges	Acquaintanceship subnetwork			1055
	Friendship subnetwork			242
Arcs	Acquaintanceship subnetwork			1290
	Friendship subnetwork			787
Density	Acquaintanceship subnetwork			0.589
	Friendship subnetwork			0.220
Size of an ego network	Whole network (friends and acquaintances)		Min / Max	10.0 / 75.0
			Q1 / Me / Q3	53.8 / 66.0 / 72.3
			Mean / St. dev.	61.5 / 13.6
	Friendship subnetwork		Min / Max	0.0 / 74.0
			Q1 / Me / Q3	4.0 / 9.0 / 24.3
			Mean / St. dev.	16.7 / 17.8
	Acquaintanceship subnetwork		Min / Max	1.0 / 71.0
			Q1 / Me / Q3	34.5 / 47.0 / 57.3
			Mean / St. dev.	44.7 / 17.3
Size of an ego network of women	Whole network (friends and acquaintances)		Min / Max	25.0 / 72.0
			Q1 / Me / Q3	42.3 / 51.0 / 58.3
			Mean / St. dev.	49.8 / 16.3
	Friendship subnetwork		Min / Max	6.0 / 43.0
			Q1 / Me / Q3	6.5 / 10.0 /18.0
			Mean / St. dev.	15.8 / 14.3
	Acquaintanceship subnetwork		Min / Max	5.0 / 50.0
			Q1 / Me / Q3	30.0 / 36.5 / 45.5
			Mean / St. dev.	45.7 / 17.2
	Proportion of friends		Mean / St. dev.	0.34 0.29
Size of an ego network of men	Whole network (friends and acquaintances)		Min / Max	25.0 / 72.0
			Q1 / Me / Q3	54.0 / 67.5 / 72.3
			Mean / St. dev.	62.5 / 13.0
	Friendship subnetwork		Min / Max	0.0 / 74.0
			Q1 / Me / Q3	3.5 / 9.0 / 24.8
			Mean / St. dev.	16.8 / 18.2
	Acquaintanceship subnetwork		Min / Max	1.0 / 71.0
			Q1 / Me / Q3	35.3 / 47.5 / 58.8
			Mean / St. dev.	45.7 / 17.2
	Proportion of friends		Mean / St. dev.	0.25 / 0.25

The proportion of friends is higher for women than for men. The proportion of friends for men is equal to 0.25 (Table 6.1, Figure 6.2), while for women it is 0.34. The second hypothesis (men have fewer friends than acquaintances, while it is the opposite case for women) can be partially confirmed. Men have fewer friends than acquaintances and the same applies to women, although we assumed the opposite. But our data also show that women have larger portion of friends in their network than men. These results can be explained by the cultural construction of gender roles wherein women are supposed to stay at home while their husbands work. Observation during the fieldwork revealed that the women love to gather and chat on the tiny sidewalk-like space in front of their houses with a little break during lunchtime for cooking. They also like to participate in activities that can support their family, like rotating savings and credit groups (*arisan*).

There are different *arisan* in the different RTs and they vary in the contribution (in money or in kind) asked from the members. Friendship among the women is also kindled by the community practice of *slametan*, the culture of partying that entails cooking and eating together on different occasions (Quetulio-Navarra et al. 2012). According to Guinness (1986) the *slametan* aims to ensure the wellbeing (*slamet*) of the host and at the same time promotes social harmony (*rukun*) in the community. Qualitative data revealed the same practices in the people's previous communities. The positive impact of friends on an individual's wellbeing and survival has been pointed out by many studies (Adams 1988; Antonucci and Akiyama 1995; Bian 1997; Briggs 1998; Dunbar 2012; Morrow 2001). Moreover, Kebede and Butterfield (2009) concluded that strong interpersonal ties among community members generate the connections and information necessary for community development and the social and economic wellbeing of households. An Indonesian mother intimated that although she thinks that life is harder in BT compared to their previous situation in the mountains, she is happier in the resettlement site because she has more friends, unlike in the mountains where her relatives living close by were the only friends she had.

On a different note, having more friends compared with men after the involuntary resettlement can also be an intentional effort of women to buffer the negative consequences of involuntary displacement, such as loss of social support, dismal facilities, and worsening poverty. Thus, the higher proportion of friends in the networks of women could mean that the forced resettlement shocks are either greater for or felt more by women than men.

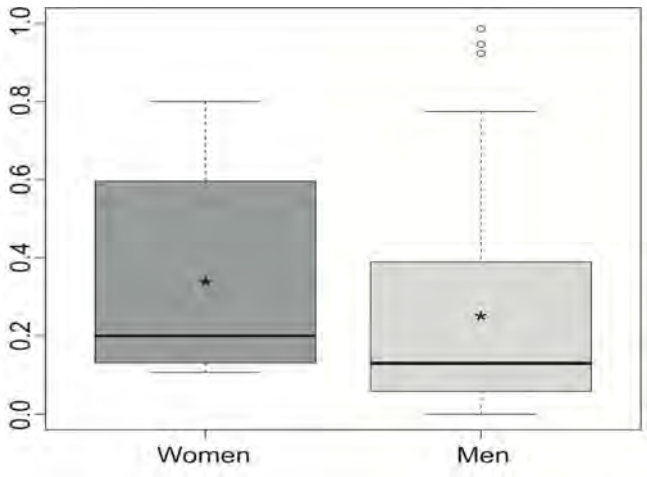

Figure 6.2 Boxplot of ratio of friends for Indonesian network

Friendship distribution according to location

In the third hypothesis we investigated number friends from another RT in an ego network where we had two sets of hypotheses according to gender:
For women:
H_0: Women have on average an equal number of friends within their RT and outside.
H_1: Women have on average more friends within their RTs than outside.
For men:
H_0: Men have on average an equal number of friends within their RT and outside.
H_1: Men have on average more friends within their RTs than outside.

As reflected in the bar graph (Figure 6.3), men in the Indonesian sample seem to have a better distribution of friends by RT than women. This is further corroborated by Table 6.2. The table shows that men on average have 9.6 friends outside the RT and 7.2 inside, with an average proportion of friends outside the RT of 0.52, while three men reported no friends. Women have on average 7.8 friends outside the RT and 8.0 friends inside, thus having a lower proportion (0.45) of friends outside their own RT than men. We performed two t-tests to compare the number of friends inside and outside locations according to gender. The results of the t-test for men (t=1.368, df=110.2, p=0.0870) show that the null hypothesis is not rejected at five percent level. Hence, there are no statistically significant differences between number of friends inside and outside their own RT for men. Also for women the difference is not statistically significant (t=-0.0354, df=7.8, p=0.4863). To investigate the difference between men and women in the average number of friends outside the own RT, a t-test was done as well. The results (t=0.3997, df=6.4, p=0.3512) show that the null hypothesis could not be rejected at five percent level, implying that there are no statistically significant differences in number of friends outside their own RT for men and women.

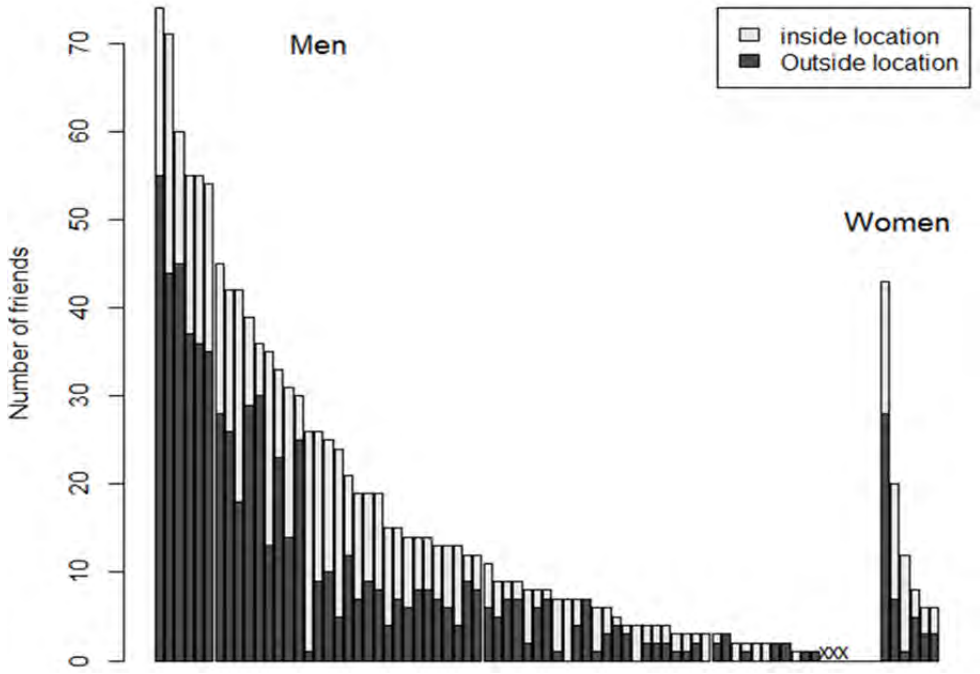

Figure 6.3 Number of friends inside and outside location in Indonesia by gender

Table 6.2 Friendship According to Location by Gender in the Indonesian Network

		Men	Women
Friends outside location	Mean / St. dev.	9.6 / 12.6	7.8 / 10.1
	Q1 / Me / Q3	1.25 / 5.5 / 9.0	3.0 / 4.0 / 6.5
Friends inside location	Mean / St. dev.	7.2 / 7.2	8.0 / 5.6
	Q1 / Me / Q3	2.0 / 5.0 / 10.8	3.0 / 7.0 / 12.5
Proportion of friends outside location	Mean / St. dev.	0.52 / 0.28	0.45 / 0.21

Brokers and influential actors according to support

H0: Men and women have on average the same betweenness scores.
H1: Men have on average higher betweenness scores than women.

The Indonesian network is composed mainly of men, therefore there it is no surprise that men are also the brokers in the network. Four of the five most important brokers are from RT1 (betweenness scores from 0.0054 and 0.0046) and one is from RT2. The t-test on the hypothesis (t=2.7486, df=6.8, p=0.0148) reveals statistically significant differences in betweenness scores between men and women. Average betweenness score for men is 0.00253, while for women the average scores are significantly lower (0.0014). Therefore, the results confirm our expectation that in the Indonesian case men play a more important brokerage role than women.

As shown in Figure 6.4, due to the high density of the Indonesian network, all vertices have high closeness centrality based on indegree, where the highest scores belong to one man from RT1 (vertex 62) and two men from RT2 (vertex 24 and 25). These results give evidence on the superiority of men over women in the network. Despite the little difference in the network size between men and women, men still traffic and possess the social resources of the community network. This perhaps is brought about by the assignment of power exclusively to men in the location. Since the construction of the site in 2001, RT and RW leadership positions have only been assigned to men. As one wife said during an FGD with women:

> *We cannot move without RT and RW leaders. We just follow the RT's and RW's orders and decisions. Every document such as national identity card, family card, money support card, health services card, and many others, is held by the RT and RW. We cannot go directly to an NGO or government officials without the RT's and RW's letter of recommendation.*
>
> (FGD woman participant, BT Indonesia, June 2012)

Apart from this, women in the community seem to reinforce the stereotypical "masculine advantage" of their husbands in terms of household and community leadership as well as in intellectual capacity. Thus, community activities are mostly attended by men while women remain in the background, preparing, cooking, and serving food to their husbands. Many women in the site, however, do also exercise

leadership skills in the voluntary groups such as *arisan*, of which wives and husbands recognize the positive value for their households. Nonetheless, women's leadership skills were apparently confined to their groups.

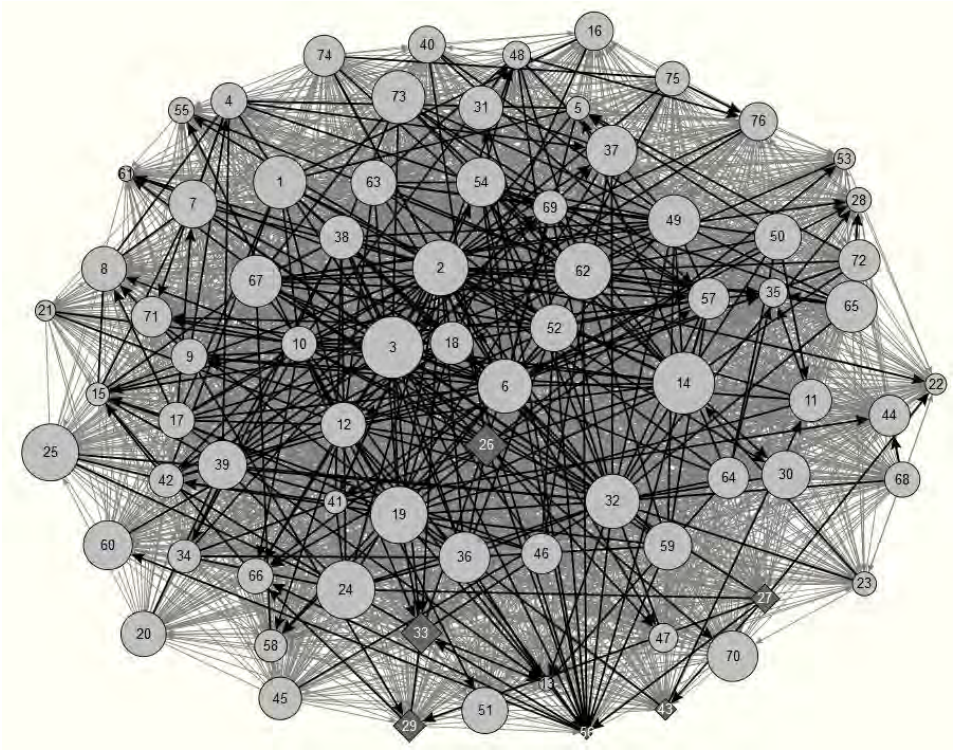

Figure 6.4 Indonesian network according to gender (diamond=female; circle=male; numbers represent the vertices ID) with size of the vertices proportional to betweenness centrality scores

Equally interesting to point out is the obvious absence of brokers and influential actors from RT3 despite the smallness of the site and the physical proximity of the RTs. This affirms the religious divide in the community. Although all residents are Muslim they are divided in terms of ways of practicing Islam. RT 1, 2, and 5 are all *Nahdatul Ulama* (NU), while the households in RT3 have a *Muhammadiyah* affiliation. Qualitative data revealed that both camps have a mutual dislike of each other and view their own religious practices as more superior than those of the other. Households from RT 1, 2, and 5 do not go to the mosque located at RT3, which was built with money from a *Muhammadiyah* organisation, but rather go to nearby mosques outside the site. At the time of the survey, one father from RT1 mentioned that NU people in the site are saving money to build a mosque on a lot in BT that was meant for the expansion of the daycare centre. Another implication of the religious divide is the reported low attendance of children from RT3 for routine check ups at the mother-and-child health post stationed at the house of a NU volunteer health worker in RT2. The health worker attributed the RT3-mothers' refusal to participate to the religious division.

6.5 Field Results in the Philippines

In the Philippines, 29 respondents were women and 24 were men. The KV1 site is composed of KV1 plains and KV1 suburban. KV1 plains was developed first and accommodated the earliest resettlers. Then the suburban part was developed and later resettlers transferred. Plains and suburban are divided into phases that are synonymous with blocks (see Figure 6.5) and each phase has its own homeowners association (HOA). Six out of the twelve phases in KV1 are represented in this study: three from Phase 1A, nine from Phase 1B, seven from Phase 1C, eight from Phase 1D, ten from Phase 1A&B Suburban. The other nine leaders are from the Action Group, an organisation that is not based on a particular phase in KV1 and cuts across the community. Some of the leaders in the different phases are also leaders in the Action Group. Four of the leaders are president in their organisation, one is an acting president, three are vice president, and the majority (31) is just on the board of directors.

Figure 6.5 Map of Philippine Community

6.5.1 The Network

Table 6.3 shows that the network of Philippine leaders has 53 vertices and more than half of them are women (55%). The density of the friendship subnetwork in the Philippines is 0.193, while that of the acquaintanceship subnetwork is higher (0.388). The average network size ranges from six to 50 friends and acquaintances combined.

Size

H_0: Size of ego networks of women is equal to the size of ego networks of men.
H_1: Size of ego networks of women is smaller than size of ego networks of men.

Male community leaders reported an average of 32.3 friends and acquaintances, women leaders an average of 29.1. Results of the t-test (t=-1.079, df=50.73, p=0.1430) show that the null hypothesis is not rejected at five percent level. Women leaders reported less friends and acquaintances than men. However, the differences are not statistically significant. Therefore, the first hypothesis that women's network size (total number of acquaintances and friends) is smaller than men's network size is rejected. Interestingly, both genders appear to have more or less equal chances in forging ties with their fellow leaders, and gender does not seem to be a constraining factor.

Table 6.3 Networks Statistics of the Philippine Community

				Statistics
Number of actors				53
Number of females in a network (%)				29 (55 %)
Edges	Acquaintanceship subnetwork			301
	Friendship subnetwork			153
Arcs	Acquaintanceship subnetwork			488
	Friendship subnetwork			238
Density	Acquaintanceship subnetwork			0.388
	Friendship subnetwork			0.193
Size of an ego network	Whole network (friends and acquaintances)	Min / Max		6.0 / 50.0
		Q1 / Me / Q3		21.0 / 36.0 / 40.0
		Mean / St. dev.		30.8 / 12.6
	Friendship subnetwork	Min / Max		0.0 / 32.0
		Q1 / Me / Q3		0.0 / 11.0 / 16.0
		Mean / St. dev.		10.3 / 8.4
	Acquaintanceship subnetwork	Min / Max		0.0 / 46.0
		Q1 / Me / Q3		16.0 / 21.0 / 27.0
		Mean / St. dev.		20.6 / 10.3
Size of an ego network of women	Whole network (friends and acquaintances)	Min / Max		6.0 / 50.0
		Q1 / Me / Q3		21.0 / 36.0 / 38. 0
		Mean / St. dev.		29.1 / 14.0
	Friendship subnetwork	Min / Max		0.0 / 32.0
		Q1 / Me / Q3		0.0 / 11.0 /18.0
		Mean / St. dev.		10.9 / 9.7
	Acquaintanceship subnetwork	Min / Max		0.0 / 38.0
		Q1 / Me / Q3		8.0 / 20.0 / 24.0
		Mean / St. dev.		18.3 / 10.1
	Proportion of friends	Mean / St. dev.		0.36 / 0.30
Size of an ego network of men	Whole network (friends and acquaintances)	Min / Max		8.0 / 46.0
		Q1 / Me / Q3		24.5 / 35.5 / 40.0
		Mean / St. dev.		32.3 / 10.7
	Friendship subnetwork	Min / Max		0.0 / 24.0
		Q1 / Me / Q3		3.5 / 111.0 / 14.0
		Mean / St. dev.		9.5 / 6.7
	Acquaintanceship subnetwork	Min / Max		4.0 / 46.0
		Q1 / Me / Q3		18.8 / 24.0 / 28.0
		Mean / St. dev.		23.3 / 9.9
	Proportion of friends	Mean / St. dev.		0.30 / 0.19

Friendship according to gender

H_0: Men have the same number of friends and acquaintances in their ego networks.
H_1: Men have less friends than acquaintances in their ego networks.

Male Philippines leaders have an average of 9.5 friends and 23.3 acquaintances, thereby the null hypothesis is rejected (t=5.139, df=23, p=0.000). Men have statistically significant less friends than acquaintances in their networks. As shown in Table 6.3, our presumption that women will have more friends than acquaintances is negated. Female leaders have an average of 10.9 friends and 18.3 acquaintances. Women also have a higher proportion of friends in their network than men. The proportion of friends among male Philippines leaders is 0.30, while that of women is 0.36 (Figure 6.6). The hypothesis on friendship according to gender is partially confirmed, men have fewer friends and more acquaintances than women. During in-depth interviews the women told us that prior to the election of the homeowners' association officers for each phase, they already knew each other because they would gather and talk about the bad state of the resettlement site. Later on they realized they needed to be involved in the resolution of the problems as they were leaders in the communities they came from and had connections outside to help them. They worked closely with the project managers, local government, and NGOs for the eventual provision of basic services in KV1. They continued to meet after they were elected in 2002 as leaders in their phases (1A, 1B, 1C, 1D, 1E) and, later on, named their group the 'Action Group'. The whole area of KV1 benefitted from their hard work. The story shows how genuine concern for the community, informal contact, and leadership experience drew women together, triggering friendships and cooperation with leaders from the other phases. This highlights the value of women leaders and their friendships in the first few years of the resettlement project.

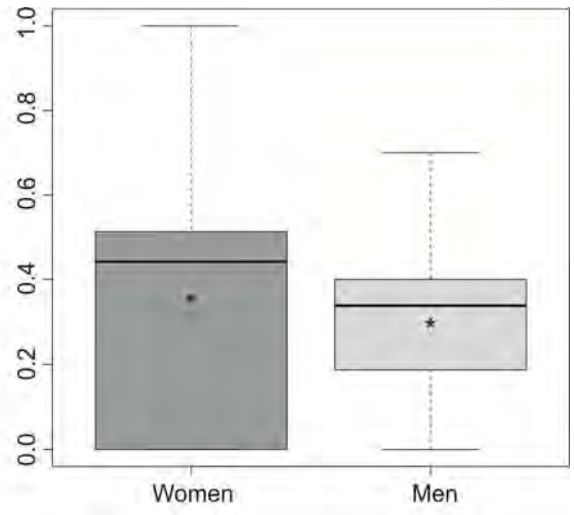

Figure 6.6 Boxplots of ratio of friends for Philippines network

Friendship according to location

For women:
H0: Women have on average equal number of friends within their phase and outside.
H1: Women have on average more friends within their phase than outside.

For men:
H0: Men have on average equal number of friends within their phase and outside.
H1: Men have on average more friends within their phase than outside.

Figure 6.7 presents number of friends in the Philippine networks according to the location criteria by gender. The Action Group was not included in this analysis and is discussed separately, considering that it is not based in any phase. Dark grey bars represent the number of friends outside the own phase, light grey bars those from the same phase. The bar or data in the stacked bar plots are arranged according to the number of friends regardless of the actor's location. The actors with the highest number of friends in the complete network are found on the left, those with the smallest number of friends in their network on the right. The symbol X denotes the number of network members with no selected friends. It can be seen that nine women and five men have no friends in their network. In female and male subnetworks there are three individuals who reported at least one friend but they have no friends outside their location. Bar plots show that men have a larger number of friends inside their own location while women have more friends outside than in their own location.

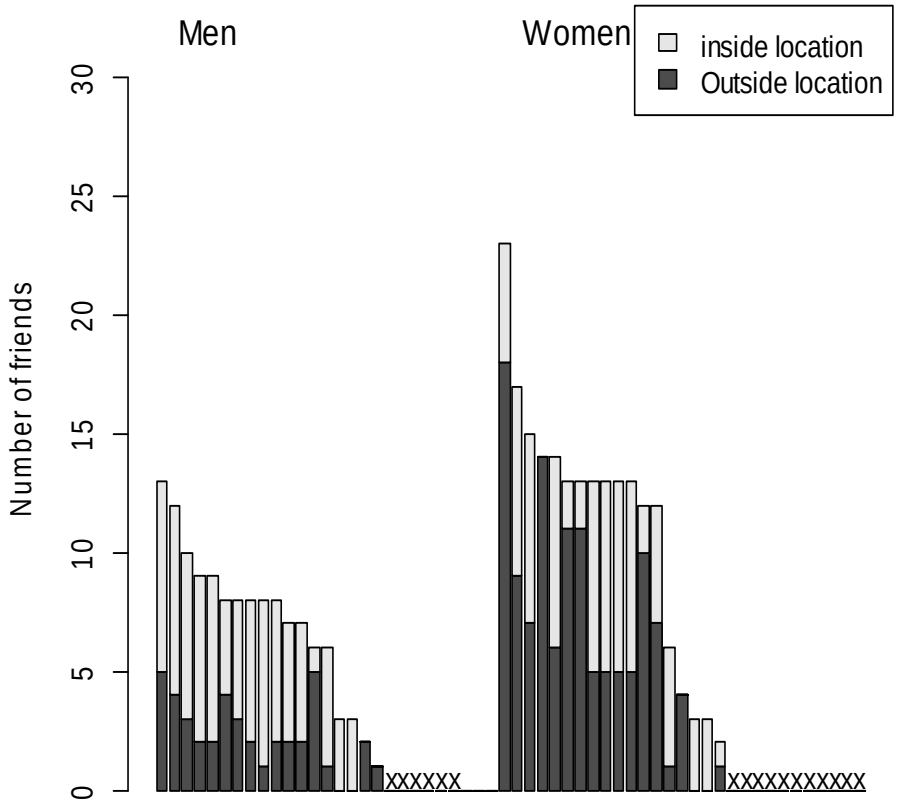

Figure 6.7 Number of friends inside and outside location in the Philippines

Similar results are seen when data from Phase-based organisations and the Action Group were combined (Table 6.4). Men have on average 3.6 friends inside their phase or group and 1.7 outside their phase/group. For women these numbers are 2.9 and 4.1 friends, respectively. In addition, for easier comparison of results according to gender, we calculated the proportions of friendship ties with individuals coming from different phases of the total number of friends in the networks.

The average proportion of friends outside their own location for men is 0.36, while for women it is 0.52. Differences in the number of friends inside and outside location (third hypothesis) were tested. However, considering that Action Group is not phase-based plus the special status of its members, its data were not factored in in the t-test. The results of the t-test for men (t=-0.580, df=40.6, p=0.7173) show that the null hypothesis could not be rejected; there is no statistically significant difference between the number of friends in and outside their own location. Also for women the difference is not statistically significant (t=-0.0354, df=7.8, p=0.4863). To check whether there are statistically significant differences between men and women in the average number of friends outside their own phase we performed the t-test. It shows (t=-0.0723, df=35,6, p=0.5286) that the null hypothesis could not be rejected. Thus, there is no statistically significant difference in number of friends outside their own location for men and women. Despite this result, the data highlight the instrumental role of the Action Group women leaders in friendship formation among leaders across the phases. The majority of Action Group members are female and in 2006 their membership reached to more than one thousand. The whole area of KV1 benefitted from the services of these leaders**.**

Table 6.4 Friendship According to Location by Gender in the Philippines network

		Men	**Women**
Friends outside location	Mean / St. dev.	1.7 / 1.6	4.1 / 5.0
	Q1 / Me / Q3	0.0 / 2.0 / 2.25	0.0 / 1.0 / 7.0
Friends inside location	Mean / St. dev.	3.6 / 3.1	2.9 / 3.3
	Q1 / Me / Q3	0.0 / 4.5 / 6.3	0.0 / 2.0 / 5.0
Proportion of friends outside location	Mean / St. dev.	0.36 / 0.30	0.52 / 0.31

Brokers and influential actors according to support

H0: Men and women have on average the same betweenness centrality scores (BCS).
H1: Men have on average higher betweenness scores than women.

As can be gleaned from the network map (Figure 6.8) regarding the brokerage role in the networks, one man and four women who have the highest betweenness scores appear as brokers. The most important broker (BCS 0.053) is a male leader from the phase A&B Suburban who is very well connected (vertex 38) with community leaders in the Action Group and also with leaders from other phases. The four women brokers who are the most influential network members come from phase 1-D (BCS 0.045, vertex 20), two leaders from the Action Group (BCS 0.038 and 0.033, vertex 50 and 45), and the fifth leader is from the smallest network in phase 1-A (BCS 0.035, vertex 2). Results of the t-test to test the above hypothesis (t=0.5278, df=50.5, p=0.599) show no statistically significant difference in betweenness centrality scores between men and women, implying that, on average, man and women play similar brokerage roles in the Philippines networks.

The women-dominated brokerage role can be attributed to women's proclivity to frequent contacts and sharing of information, resulting in 'webs of inclusion' (Helgesen 1990). Others have referred to this as a 'feminine advantage' that results from women leaders, who are supposedly more skilled at interpersonal relations, power sharing, and looking after their followers than their male counterparts (Rosener 1990; Carr-Rufino 1992; Yukl 2002). It should be mentioned that the four women brokers are all connected by friendship and membership of the Action Group. This affirms the important role of the Action Group in the dissemination of resources in the form of information, projects, and activities to different phases leaders, which benefits their members. Thus, five leaders one man and four women, turned out to be influential actors, having the highest closeness centrality based on indegree. All are members of the Action Group. Similar with the study of Berrou and Combarnous (2011), the phase leaders' ties or alters enjoying 'intermediate status', in this case the Action Group leaders, seem more important than their alters of 'higher status' (e.g. representatives from government, NGOs) in achieving positive outcomes for the community. One of the leaders said:

> *Almost all the basic services [referring to electricity, water, school, health centre, among others] and public places here particularly the Catholic church, were built because of the Action Group's hard work. We would meet almost every day to discuss our action plan, go to different government and NGO offices for assistance using our personal money for transportation and meals. There may be leaders from different phases, but they would depend on us for these urgent issues because they know our capacity as leaders as well as how connected we are with the NGOs, local government, and the project managers.*
>
> (In-depth interview with a female leader, KV1 Philippines, June 2011)

Qualitative data revealed that despite the fact that the most influential actors in the leadership network are predominantly women, it did not lead to the marginalization of men in the network in terms of accessing resources for their members. However, this gender imbalance has its downsides. The Action Group's livelihood projects that secured funding grants, e.g. dishwashing liquid making, candle making, as well as community activities like cake raffle, were mostly tailored for women. In this sense, men in the network are left out and this can affect their participation in other relevant community projects and activities. This could be a reason why the community's burgeoning problem of gang formations and gang-related crime are not being properly addressed.

The influential actors admittedly recognized the fact that their involvement in the resolution of community issues tapered off after their requests for basic services, public places, community projects such as "rice store for the poor", and the reduction of the monthly mortgage for the house and lot to Php 250.00 (5.90 US$), had been granted. Their performance as leaders in their phases likewise slowed down across the years and their engagement with the NGOs, local government, and project managers became less frequent.

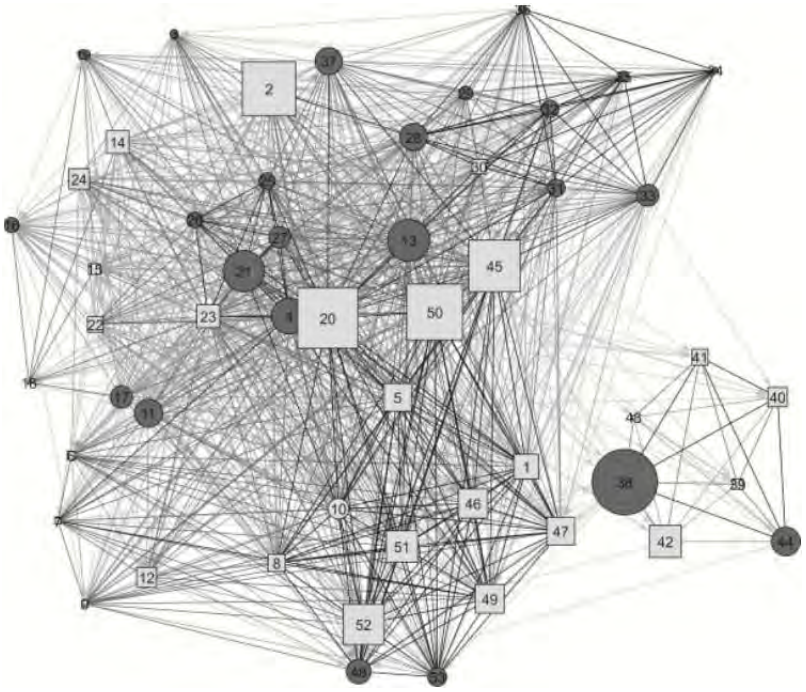

Figure 6.8 Philippine network according to gender (square=female; circle=male; the numbers represent the vertices ID) and betweenness centrality

6.6 Conclusions and Discussion

The social network analysis in Indonesia and the Philippines reveals that after a certain period in a new community and living among other involuntarily resettled strangers, households will eventually establish interconnections among them. The results likewise deliver insights not only on how gender shapes some of the features of the social networks of households and leaders in a resettlement site but also on how the context may reinforce gender advantages.

Bian (2008) argues that one's network size is equivalent to one's social capital. Hence, finding an almost identical average network size of men and women in both cases would imply more or less equal amounts of social capital of men and women in the resettlement communities. Further, this also connotes that men and women in both cases have similar social skills in forging connections and their new residence and that circumstances do not prevent such from taking place. Nonetheless, gender differences emerged in both settings, the female advantage in forming friendships being one of them. At the same time, the respective abilities of the Indonesian and Philippine women to make friends can be attributed to their differing contexts. Domestic arrangement and gender roles account for the ability of the Indonesian women, while similarity in leadership background and concern for the community can explain it for the Philippine women. But the fact that the women of both cases (housewives in Indonesia and leaders in the Philippines) have a bigger proportion of friends in their network than men can indicate that women are better at nurturing connections that develop into friendship. This highlights the role of friendship in mitigating women's

vulnerability after involuntary displacement and shows how the emerging community as a whole can benefit from the friendship networks of women when they are mobilized. Examples are the *slametan* and *arisan* in Indonesia and the formation of the Action Group and provision of basic services in the Philippines. Some social capital studies (Briggs 1998; Granovetter 1982; Lin 2001) have stressed the greater role that weak ties or acquaintances (in comparison to strong ties) play in the life of an individual, but these results show otherwise.

Regarding brokerage roles and influential actors, differences are seen between the two cases. In the Indonesian site, the default assignment of authority to men in the community and the wives supporting this gender construction, can account for male-dominated brokerage roles and influential actors. Contrastingly, in the Philippine location women leaders monopolize the brokerage role and are influential actors. The rationale for this outcome does not lie in cultural gender constructions, but rather is due to the fact that compared to male leaders, women leaders in the Philippine community have better interpersonal skills, are more empowered and more active in civic organisations and activities, bring more projects and activities to their members, and connect better to the authorities. Seemingly, the entire network, the male leaders included, is very much aware of this. However, these particular gender prevalences of important roles in the network have their drawbacks. Women in the Indonesian site could complain that their all male RT and RW leaders prevent them from initiating and accessing programs and projects, and from connecting to NGOs and government officials. In the Philippines, the men could complain that the projects initiated by the influential female leaders were mostly tailored for women.

This study demonstrates how gender constructs and context produce gender biases in a community's social network and that, unless an intervention from the outside reconfigures the situation, gender equality in terms of leadership, decision making, and access to programs and projects as well as to the relevant authorities is not achieved. It is imperative for project managers and concerned local officials of resettlement sites for involuntarily displaced poor households to understand the community's gender dynamics, so that they can capitalize on the influential actors of the network in the effective implementation of anti-poverty projects and programs as well as craft the right interventions to achieve gender equality in opportunities that will improve general wellbeing.

Chapter 7

Discussion and Conclusion

This chapter presents the overall findings of the study and their theoretical implications. It contains three parts. The first part recapitulates the research questions and discusses the answers that were found. The second part reflects on the social capital theory and the IRR Model by Cernea that were applied, and on the methodological approach that was used in the study. The last part identifies grey areas in social capital studies in an involuntary resettlement context that deserve further scientific investigation and pays attention to emergent policy issues.

7.1 Revisiting the Research Questions

In this study on the "mending of new communities in a resettlement site after involuntary displacement" it was investigated how social capital grows across time in an involuntary resettlement setting and what the role is of the context and its elements in shaping the process of social capital growth. The research was done for two cases. The first concerned involuntarily resettled households in Kasiglahan Village 1 in Rizal Province in the Philippines (the KV1 households), the second involuntarily resettled households in Bantarpanjang Translok in the province of Central Java in Indonesia (the BT households). Overall it was found that the process of social capital growth is largely beyond the control of the resettlers. It is shaped by the context and its constituting elements, rather than by the characteristics of the individuals and households concerned. This general finding is further discussed as we revisit the research question individually.

Question 1: What is the state of the community a year after the involuntary resettlement in terms of risk experience and structural and cognitive social capital building?

To examine the risk experience of the resettlement communities, the IRR Model of Cernea (2000) was used. The model postulates nine interlinked risks that are inherent in a resettlement context: landlessness, joblessness, homelessness, marginalization, food insecurity, increased morbidity and mortality, loss of access to common property, social disarticulation, and educational loss. Except the risks of increased mortality and that of loss of access to common property, the risk experience investigated comprised all risks in the model, with an emphasis on the risk of social disarticulation. Based on its total risks score after one year of residency in KV1, the Philippine community displayed zero resettlement risks and experienced major improvements in the areas of land and house ownership, whereas the Indonesian community suffered from the risks of homelessness and landlessness. When the total risk scores were disaggregated, the Indonesian households appeared to be more food secure and healthier than the Philippine households.

The two cases prove that after one year, new social capital could emerge in a new site inhabited by involuntary resettlers who came from different areas. Households in both communities were able to forge a significant number of social ties, including bonds, bridges, and few linkages, with individuals who were previously strangers to them. Trust and norms of reciprocity were also developed in the course of one year in their new residence. The numbers of acquaintances and friends made in KV1 and BT indicate that it is easier to make acquaintances than to form friendships. The households were also able to replace or restore their lost support ties and individuals they would engage with frequently. Developing linking ties remained rather elusive in both sites, despite the direct involvement of government people in the resettlement programmes. When comparing the two locations, it is apparent that the BT households fared better in developing both structural and cognitive social capital. BT and KV1 households also differed in terms of where acquaintances and friends were made. While the KV1 households would usually meet new friends and acquaintances in public places, the BT households formed these kinds of ties during community activities.

Question 2: Do the before and after resettlement profiles (individual and households, community, institutional context) account for resettlement risks experience and social capital building during the first year in the site, if so, in what way?

The regression analyses that were done on both cases generated robust proof about the multi-dimensional causes of the resettlement risks. During the first year, individual and household characteristics together with institutional variables would spell a great influence on increasing and mitigating the risk score of the resettled Philippine and Indonesian households. The significant socio-demographic and institutional variables yield effects on the risks level in both sites during the first year. Furthermore, the study slightly reconfigures the concept of vulnerability in a forced resettlement context as it yielded unexpected results on the variables of education and NGO and church involvement in the community. In the two communities, households with higher-educated heads were more vulnerable to forced resettlement shocks, because these households encountered more losses when they resettled. The second unusual finding was that the active involvement of NGOs and the church (in the KV1 community) exacerbated the risk experience of the resettlers rather than facilitating the improvement of their wellbeing. This can be explained by the implications of the community engagement of these actors as manifested in sowing agitation among the households or community leaders regarding urgent social issues and triggering disagreements between the community and the local government. Instead, as the regression results indicate, the engagement that should be cultivated during first year of resettlement should be between the community and the local government because the latter has the legal power to provide for the urgent needs of the newly-resettled households.

Regressing the before and after resettlement profiles in terms of individual, household and community characteristics on structural and cognitive social capital building after one year of transfer, showed that the process is shaped in different ways and degrees by individual and household characteristics, community attributes, and institutional features both before and after resettlement. The individual characteristics that emerged strongly and frequently as significant for the different forms of structural social capital were the male gender (Philippine case) and the household head's level of civicness after resettlement (both cases). Vulnerabilities could also strengthen social capital, as found for both the KV1 households (positive link between the variables sick children and simple job of husband with number of support ties) and the BT households (low-prestige job of wife and smaller house size were linked to higher levels of reciprocity). Negative community attributes such as the number of dividing factors and the number of social services the resettlers were denied access to, apparently did not have a dis-couraging effect but rather spurred the formation of ties. The results also highlight the enhancing role of public places in forging connections among the new residents. The building of cognitive social capital could be mostly attributed to community characteristics in the Philippine case, whereas in the Indonesian case it is a blend of household and community characteristics.

Social capital formation during the first year of resettlement was also examined under the lenses of the theory of the historical path-dependency of social capital formation (Putnam et al. 1993) and the framework of the World Bank (2010a) that emphasizes the role of institutional interventions in social capital building. The analysis yielded confirmation of both the historical and the institutional explanation. While the Philippine case validates the World Bank view, the Indonesian case clearly attests to the validity of Putnam's theory. It can be concluded that civic engagement history only

influences social capital building when the community shares and regularly practices cultural traditions, as in the Indonesia case. In the absence of such shared history and cultural practice, as in the Philippine case, institution-related factors take over.

Question 3: What factors can explain the possible differences between the two sites?

The factors of cultural continuity and institutional features could explain the variance in risks experience and social capital building between KV1 and BT during the first year of resettlement. Compared with the Indonesian households, the Philippine households gained (house-and-lot package) more from the involuntary resettlement, which was due to an existing national resettlement policy and experienced and educated community leaders. The community leaders who were well connected with government and NGOs were aware of their people's housing and other rights, hence could demand and catalyse the provision of basic services and public places in KV1. The same institutional features enabled the social capital creation in the site. The project management office set up in the site by virtue of the social housing program of the country undertook community organising activities with the resettlers and community leaders that eventually led to social capital building. However, the residents had a difficult time in securing food for their households due to their worsened poverty situation and the lack of opportunity or skills to plant their own crops in their backyard or nearby farmlands.

The Indonesian households were not compensated for the house and land they lost to the landslides because of the absence of a national law or policy on involuntary resettlement that could have stipulated such compensation. The neighbourhood (RT) and ward (RW) leaders could only request the village head (their only linking tie) to facilitate and grant the community the possibility of purchasing the house and lot, which until the time of field study was still an unresolved issue. Apart from this, the households became more food secure after their transfer to the site. They continued to work in nearby farms and made new arrangements to plant on the lands of the forestry agency. Furthermore, the BT households' shared important cultural practices (such as the *slametan* and praying and observing religious events together) somehow induced the creation of social capital among the resettlers in the new site.

A big advantage of sharing the same cultural background and practices in the Indonesian community is that it is self-sustaining and therefore translates into the continued strengthening of social capital in the community over time. Nonetheless, the weak presence of institutional-related factors (policies, government representatives) impeded the realization of security of tenure among the households, the physical development of the site, and the facilitation of connections between RT and RW leaders with government officials. In the Philippines, social capital appears to be highly dependent on the interventions (social activities, physical development) by the different institutions (e.g. government, church, NGOs). Unfortunately, these institutions act on fleeting motivations, thus maintaining or reinforcing social capital in the community is not guaranteed.

Question 4: How did the structural social capital in the two sites develop over time?

The KV1 and BT communities both demonstrated a yearly growth of structural social capital as represented by the households' strong and weak ties. The growth trajectory had a period of upsurge at the time of an influx of new resettlers and the installation of basic services and public places. The spike in social capital progress was immediately followed by years of stabilization. This clearly implies that social capital development,

apart from other factors is also influenced by the physical situation of the community as well as by changes in the population of resettlers.

Households in both communities also made more new acquaintances than friends over the years, displaying a consistency regarding the context where they usually made their ties and the profile of these ties. Ties in KV1 from the first year till the year of the field study were frequently created in public places, whereas the BT residents would usually make new connections during their participation in community activities. From this it can be inferred that while the formation of structural social capital in the Philippines is place-based, in Indonesia it is issue-based. During the entire study period, resettlers in both cases would gravitate towards ties with homophilous rather than heterophilous individuals in the community. Their horizontal ties would increase every year, whereas their vertical and support ties remained few from the first year until the year of study. Structural and logistical limitations were found to account for the consistently low numbers of government and NGO ties of the households. The composition of the support ties in each site did not also change across the years. Strong ties characterized the Philippine support ties and weak ties (neighbours) comprised the Indonesian support ties.

Question 5: What does the comparison between the two settings tell us about the impact of personal and household characteristics, institutional, cultural and historical factors on structural capital formation?

The comparison of the two government resettlement sites reveals similarities and differences regarding the impact of personal and household characteristics, institutional, cultural, and historical factors on the households' structural social capital. The impact of personal and household characteristics seems greater in KV1 than in BT, as evidenced by more variables that turned out significant for strong ties creation. In BT only the variable year resettled emerged as a predictor for both strong and weak ties. The strong association of resettling late with the increase in strong and weak ties as revealed in both locations again emphasises the positive link of increased population and developed physical status of the site with social capital building. Furthermore, the decrease in the number of personal and household-related variables (compared with the first year results) that turned out to be related with ties formation implies an overall diminished impact of such variables on structural social capital formation in later years. Over the years, changes on individual and household characteristics spelled little influence on the building of ties.

Opposite results on the impact of institutions on social capital during latest year in the two sites stress the critical role of having a national involuntary resettlement policy in the continued creation of social capital. In the Philippine case, as with the social capital created during first year, the power of the institutions over structural social capital creation over the years persisted. Most of the significant institutional factors are tied to the national resettlement policy (R.A. 7279) that is linked to international policies. The international involuntary resettlement policies of development institutions and R.A. 7279 were the basis for pivotal interventions. These were: formulation of a Resettle-Action Plan (RAP) that would guide the stakeholders in implementing the resettlement programme in KV1, a participation 'space' for the community leaders and their close coordination with vertical ties, and the setting up of the project management office that was tasked to regularly engage with the resettlers. In the Indonesian case, no institution-related variables turned out to be related to the formation of ties, which can be rationalized by the absence of a national and responsive involuntary resettlement policy in Indonesia.

History as indicated by the households stocks of structural social capital accumulated over the early years in the sites, likewise defines the level of social capital in the last year in both sites. In the Indonesian case, cultural reproduction and a high regard for harmony in the community (*rukun*) bridged the short-term and the long-term social capital.

Question 6: Do the institutional interventions in the site and social capital interplay with the evolution of the economic, physical, and social wellbeing of the households from their first year in the site to several years later? If so, in what way?

The clear interplay of the institutional interventions or resettlement inputs and social capital with the economic, physical, and social wellbeing of the households was evident during both the first and the last year. Likewise, as the different aspects of well-being evolved, so did the influence of the institutional interventions and social capital different areas of wellbeing on the resettlers as depicted by the changing year they turned out to be significant. Nonetheless, the effect of social capital on overall well-being appeared more pronounced than the resettlement inputs. Between 'hard' resettlement inputs (basic facilities and infrastructures) and 'soft' inputs (organisations, meetings), the influence of hard inputs scored more frequently.

Opposing effects of hard resettlement inputs on the wellbeing of the KV1 and BT households were revealed as well. While the financial obligations inherent in basic services might have encouraged the KV1 residents to find employment and aim for higher income during first and last year period, these would aggravate the economic standing of the BT households during their first year in the site. For BT resettlers who mostly came from the mountains, paying for utilities was something new to them. Moreover, fewer basic services during the first year were associated with the number of sick adults in the KV1 case while more basic services is positively linked to the increase of sick adults in the BT case. The previous explanation regarding the accompanying financial obligations would most likely account for such a result. The same is reflected in the differing impact of the number of public places on the child sickness situation in the two settings. For the KV1 households, public places contributed to child sicknesses, whereas the opposite was the case for the BT households. Children in KV1 would frequent public places (e.g. streets, sidewalks) in the site to socialize with friends. When they get hungry, they would go home ask for some money to buy food from the side-walk vendors or from stores around. These children are likely to catch viruses and bacteria from these places and from the food they buy. On the contrary, BT adults are friendly and would often gather for chats, prayer, parties, and meetings in public places. Thus, public places (e.g. mosque, kiosks, sidewalks) seem to play a central role not only in the social lives of these households but in promoting good health as well. Meetings organized by government representatives turned out consistently meaningful for the social wellbeing of the resettlers in both communities, during the first as well as the last year.

Different forms of structural social capital were positively linked with the improvement of all areas of wellbeing of the KV1 and BT residents. In both communities, economic and physical wellbeing were dominantly influenced by strong ties (support ties and close individuals), whereas social wellbeing was shaped by a mixture of strong ties (friends, close individuals) and weak connections (acquaintances, government ties). With regard to 'getting by' or 'getting ahead', the results reveal that while the Philippine households are generally just 'getting by', the Indonesian households reflect

a blend of 'getting by' in terms of household income and food security and 'getting ahead' in terms of the other indicators.

Question 7: Does gender influence the social network features of the household and community organisation after involuntary resettlement in the two sites? If so, in what way?

The two resettlement cases clearly demonstrated the power of gender over some of the social network features of the BT households and the KV1 community leaders and how context might have conditioned this. Most of the social network features of the BT households reflect the male advantage, whereas the social networks of the KV1 leaders featured a female advantage. In both settings, men and women were found to be on equal footing as regards opportunities for and capacity to connect with the households and leaders within their communities. Thus, in the light of Bian's (2008) argument that the more network ties an individual has, the more information and resources (s)he can get from others, and the greater the stock of social capital, both genders in the two locations share more or less the same level of social capital.

Women in both sites showed advantage over the men in cultivating friendships. Domestic arrangement and gender roles would account for that in the BT case, whereas common leadership background and shared concern for the community was the rationale in the KV1 case. These results can also suggest that women more naturally and effortlessly are able to cultivate friendships, which result in activities like the informal savings and credit association (*arisan*) and the *slametan* in the Indonesian case and formation of the Action Group in the Philippine case. Both men and women in the two sites have friends dispersed all over the different blocks. This negates the notion that women are less able than men to make friends with individuals beyond their block due to limitations in physical mobility.

It is not surprising that men in BT represent the brokers and influential actors in the social networks. Men have culturally and historically been the bearers of power in the community. Women acknowledge and support this power hierarchy. Hence, although there might be no gender differences in network size and physical distribution of friends, men still control the flow of information and the social resources in the networks. Contrastingly, in KV1 the brokers and influential actors in the networks of community leaders are predominantly women. This can be attributed to the superiority of female leaders in terms of interpersonal, leadership, technical and networking skills. However, the gender advantage in both settings appeared to have drawbacks as well. Women in BT are prevented to participate in community decision-making, their creativity is curtailed, and their leadership skills are confined to women groups. In KV1, men are marginalized in community project formulation and implementation.

7.2 Theoretical and Methodological Reflections

The discussion on the empirical chapters undeniably begs the tweaking of theories and perspectives on social capital generation and Cernea's IRR Model for gaining relevant and applicable insights on involuntary resettlement in Southeast Asia, as I intend to demonstrate below. After these theoretical reflections, I shall briefly reflect on how the methodological design of the study contributed to the quality of the results.

7.2.1 Social Capital Generation

Mending of new social communities can start immediately after the resettlement

The study provides strong evidence that the mending of new social communities as illustrated by social capital building, takes place right after the resettlement amidst a worsening poverty situation in the new location. This is clearly in contrast to the claim by Putnam et al. (1993) that social capital accumulation cannot be enhanced in the short term. Further, the process of structural social capital building continues over the years with episodes of growth spurts and subsequent stabilization. As one resident said, it was impossible not to make new connections in the site, since almost everybody was a stranger.

Civic engagement history can only significantly influence social capital building and enhancement in a site when it is shared by almost the entire community

The results of the study both affirm and challenge the path dependency theory of Putnam et al. (1993) on the generation of social capital. The variance in the findings between the two locations clarifies the limits of civic engagement history in short-term and long-term social capital building. As can be gleaned from the Indonesian case, civic engagement history indeed exerted influence on the social capital building during the first year of residency until the year of the field study because the households, although unknown to each other, were bound by shared cultural traditions and practices that they were able to reproduce in BT. On the other hand, the theory does not seem well applicable to the Philippine case because there the households did not have a common civic engagement history that could be reactivated after the transfer.

Social capital history can be created by new inhabitants of a resettlement site even in a short period of time

The path dependency theory of Putnam et al. (1993) stress that history controls the trajectory of social capital building in a setting because it is deeply rooted in time. But how does a new community inhabited by involuntary resettlers form its own social capital history? Should it wait for decades or centuries in order to claim its own history? This research yields proof that stocks of social capital accumulated during the early years of residency in the location can already be considered to form the households' social capital history that spells impact on the trajectory of social capital in later years.

Institutional perspective should specifically advocate for the creation of policies and projects that target community's physical development and social organisation

While I generally agree with the World Bank's (2010a) statement that institutional interventions through policies, programs, and projects can build and strengthen the social capital of the individuals, households, and the resettlement communities concerned, I see it as overarching. However, this point of view does not contribute much to the operationalization of the institutional perspective. Findings in this research reveal that not all institutional endeavours build and strengthen social capital, but that it is the interventions zeroing on the community's physical development and social organisation that matter. The proponents of the institutional perspective should

update their position on social capital building and issue definite statements based on relevant studies.

7.2.2 Social Resources for Involuntary Resettlers

Facilitation of distant ties creation at the level of community leaders

The different names or labels of structural social capital forms can be classified into two: intimate ties (bonds, horizontal, strong) and the distant ties (bridges, vertical, weak). The intimate ties offer resources that help someone to get by in life while the distant ties provide resources that can aid somebody in getting ahead in life. Between the two, poor households are strongly advised to cultivate more distant ties. However, this is easier said than done. As the study has shown, the formation of distant ties remains elusive at the level of the household and takes place effortlessly at the level of community leaders. At the level of the household, people connect automatically with homophilous individuals, and establishing ties with people who are in power or authority seems far-fetched. Similarly, people who have power and authority also view forging ties with the households as difficult, since opportunities to engage with them are scarce. Most of the time they deal with the leaders of the community. Over the years despite having distant ties in their network, households still heavily rely on their intimate ties for getting by and for getting ahead in life.

It is the opposite with the case of the community leaders whose effectiveness seems to be judged by the degree to which they mobilize their distant ties for the improvement of their community. The two sites illustrate how well-connected leaders capitalize on their distant ties and reap benefits from this that can be enjoyed by the entire community in the form of basic services, infrastructure, or rice subsidies. Hence, instead of strongly advocating the creation of distant ties by households, the focus should be shifted to community leaders who can serve as a link of the households to resources of the government, NGOs, and the private sector.

7.2.3 The IRR Model

Inclusion of sub-risks to capture totally the risks of involuntary resettlement

The results of the study show that resettlers can face risks that are beyond the risks that are specified by the IRR model. Insufficient metrics lead to inadequate solutions. Based on the IRR model, it appears that the homelessness risk in the two sites had already been addressed by the government through the provision of new housing structures. But the homelessness risk that the households went through was not just losing their house. They also lost the quality of their previous houses in terms of materials, size, and divisions. These are not captured by the model and, therefore, often overlooked or not seen as a priority by project implementers. Effective anti-poverty interventions can only be achieved if they are tailored based on a true measure of the households' resettlement risks. Including possible sub-risks for each major risk in the IRR model can improve its applicability and effectivity in measuring the level of vulnerability of the affected households and, at the same time, pave the way for more responsive and appropriate resettlement programs. Moreover, such can also raise awareness among the resettlement experts and stakeholders on the magnitude of each major resettlement risk.

7.2.4 Methodological reflections

The study takes pride on being the first to investigate the process of mending of new social communities after involuntary resettlement through the lens of social capital theory. The longitudinal perspective implied by the formulation of the research problem necessitated integrating the application of the calendar method (with third-party help) into the household survey and triangulating the resulting data with the data resulting from the application of qualitative methods, to enhance data reliability and validity. During my presentation in an international conference on research methods, Dr. Bob Belli, a calendar method expert asked me if gathering the longitudinal social capital data from the Philippine and Indonesia communities would have been possible without using the calendar method. I answered negatively. Given the time constraint and limited resources of a PhD research project, a prospective longitudinal study design to collect social capital building data during a longer period of time, was not an option. This study provides proof that the application of the calendar method is a good alternative, even when it concerns economically and educationally deprived households (a 'hard-to-reach' population). The tailored calendar tool was able to secure good quality longitudinal data through retrospectively collecting yearly relevant information from the households starting from a year before the resettlement until 11 to 12 of residency in the site. The tool with its landmarks (e.g. birthdates of children, residency status of children) was able to trigger recall of relevant information (events, names, dates, numbers) over the years in the resettlement community.

Moreover, this research also demonstrated how to handle and capitalize on the presence of a third person or bystander during interviews (which is often a naturally occurring situation in poor communities) in collecting good quality data. Instead of shooing such persons away, their presence in the interview can be integrated into the interview tool, controls can be established, and the effectiveness of their interventions can be evaluated.

The widely accepted invaluable benefit of combining quantitative and qualitative methods in gathering data is further upheld by this study. Indeed, the numbers, names and years collected from the respondents regarding their social capital would have not been enough to write a good story about how their new social communities were mended after the involuntary resettlement. The stories, quotations, and observations obtained during the fieldwork uncovered meanings as well as validated the quantitative data reported by the household heads.

7.3 Implications for Future Research and Policy

This study has demonstrated how institutional interventions, culture, and religion shape the growth of social capital in an involuntary resettlement context. The social capital trajectory in the Indonesian context is much determined by the shared culture and religion of the people involved, perhaps due to the absence of a responsive resettlement policy and programs. Meanwhile, social capital development in the Philippine context is greatly influenced by institutional interventions, probably due to the absence of shared culture and religion. But these are all (informed) assumptions. Conducting the same social capital study in two different settings that both have the features of supporting institutions and shared culture and religion would shed light on which between the two sets of factors propels social capital growth in an involuntary resettlement setting.

Another area for further investigation is the role of social capital in getting ahead economically among the involuntary resettled households. Social capital studies have asserted that social capital is the 'missing link' in fighting poverty. However, this study failed to generate robust findings on the link between social capital and the improvement of economic wellbeing, considering that the two sites were still more or less in the phase of 'getting by'. Doing similar research as in this study in a resettlement site that reflects an overall 'getting ahead' stage would yield insights on the power of social capital in lifting resettled households out of poverty.

This study also produced findings that are relevant for policy making on involuntary resettlement. First, the protection of the rights of the affected households during involuntary resettlement as enshrined in the international and national laws cannot be guaranteed without a national policy on involuntary resettlement. The opposing cases of the Philippines and Indonesia clearly illustrate the social consequences of having and lacking an involuntary resettlement policy. The Indonesian case obviously pales in comparison with the Philippine case in terms of land and housing status, basic services, public places and project managers, due to the absence of a resettlement policy that would oblige the state to provide such. The national resettlement policy in the Philippine case, although not followed strictly and implemented only gradually, still compelled project implementers to provide the site with more basic services, public places, and a project management office within the site. Moreover, such policy that informs the public about the households' rights during forced displacement also encouraged other sectors (NGOs, church) to provide for or demand with the community leaders the services and facilities due to the community. Contrastingly, the Indonesian households do not have a legal basis to demand social services and other needed interventions. They could only request or beg with the project implementers.

In the second place, a budget should be allocated for community organisation to ensure its continued implementation. The study reveals that apart from the main goal of informing the resettlers about the activities and projects that would be rolled out in the location, there are unintended positive consequences of community meetings conducted by the government in a resettlement site, such as an increased level of structural social capital and community participation of the households. Meetings with the resettlers and community leaders are part of the community organisation component of the Resettlement Action Plan in the Philippine setting. Nonetheless, unlike the other components (livelihood, housing, facilities), community organising is not budgeted and therefore it is not a priority area. It was mired with insufficient manpower and funds for meetings-related expenses. Eventually, meetings were only done during the early years of the site and these and other related activities faded out over the years.

Thirdly, the community leaders in both settings displayed an ability to mobilize linking ties for the sake of the entire community. Thus, the more linking ties they have the greater potential of resources available for them. In this regard, government officers in charge of supervising resettlement programs should make a conscious effort to link community leaders with entities who can offer the community resources.

Lastly, to get closer to achieving the effectiveness of community organisation, the design and planning of involuntary resettlement should factor in the sociability pattern of the resettlers (how and where do people like to meet informally) and gender equality (housewives should also be consulted and heard). It is also necessary to establish checks on patron-client relationships that are likely to emerge from issue- or inter-

ventions-based engagement between the community leaders and the reigning local politicians. As shown in the Philippine case, some leaders in the community were strongly identified with the former mayor of the city. When a new mayor got elected these leaders were eased out from the social programmes, and the new administration organised an election of new community leaders. This divided the community and different factions surfaced, which undermined social cohesion in the site.

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Appendix 1: Survey Tools

HOUSEHOLD COMPOSITION SHEET

NOTE: List all the people in the household first and then ask questions 1.2 to 1.9

The household is defined as all the people living together under one roof and sharing expenses.

No.	1.1 List names of all individuals in the household (List household head first) **NAME**	1.2 Relationship to household head **CODE**	1.3 Sex Male…….. 1 Female…. 2 **CODE**	1.4 Age **YEARS**	1.5 Marital Status Single……. 1 Married……..2 Annulled. ……3 Separated …. 4 Widowed…... 5 Co-habiting…6 **CODE**	1.6 Is "____'s" spouse currently a member of the household? If yes, use number of spouse If no, write 99 **NUMBER**	1.7 Working Status Not applicable….. 1 School/Study…… 2 Employed……. 3 Self-employed…. 4 Unemployed……. 5 **CODE**	1.8 Occupation **CODE**	1.9 Educational Level **CODE**
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

Code Box for 1.2

Head …….. 1
Wife/husband …….. 2
Son/daughter……3
Father/mother ……..……..4
Sister/brother…… 5
Stepson/stepdaughter……....6
Stepfather/stepmother……..7
Grandchild……..8
Grandparent……...9
Father-in-law/mother-in-law...10
Son-in-law/daughter-in-law…11
Sister-in-law/brother-in-law...12
Nephew/niece……13
Uncle/aunt ……..…14
Cousin……...……..15
Other relative……..16
Children from another family …17
Other non-relative……18
Partner……19

Code Box for 1.9

Not Applicable……..…..1
Never to school …… 2
Elementary school unfinished….3
Elementary school finished……..4
Secondary school unfinished…..5
Secondary school finished…….6
Vocational school ……7
College unfinished……8
College finished ……..……9
Other……..10

Code Box for 1.8

Not applicable.. 1
Farmer…….. 2
Entrepreneur… 3
Labourer…….. 4
Gov't empl…….5
Employee……. 6
Housewife……. 7
Houseband …..7
Retired……8
Others ……..…9

HOUSEHOLD QUESTIONNAIRE

Respondent_____ Mother tongue _____ Interviewer _____

Third-Party Helper _____ Province _____ Length of Interview

Present Address _____ Religion _____ Time Started :_____

Previous Address _____ Time Finished: _____

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
(Mark S for Single, M for Married, CH for Cohabitation, S for Separated, RM for Remmarried)														
Marital Status														
A Children (Mark N if not a resident, R if a resident/ Write birth year if born between 1998-2011/ Write age)														
Birthdates														
First child _____														
second _____														
third _____														
fourth _____														
fifith _____														
sixth _____														
B No. of children in school														
child in daycare														
child in elementary														
child in high school														
child in college														
child who stopped schooling														
child not yet in schooling age														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Appendix 1

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
C Household composition														
no. of adults														
no. of kids														
D Employment information														
wife														
husband														
partner														
child														
single household head														
E Household income														
Amount														
E.1 Source of income	**(1-Salary/ 2-Remittance/ 3-Business/ 4-Gift/ 5-Sideline/ 6- Others)**													
1/2/3/4/5/6														
Others														
F House information	**Lot Size: 32 sqm Floor Area: 21 sqm**													
Floor size														
No. of bedrooms														
Structure type	**(1-concrete/ 2-mixed materials/ 3-light materials/ 4-shanty/ 5-Others)**													
1/2/3/4/5														
Others														

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

F.1 Relationship issues with other individuals due to the house situation?

G Basic Services **(Mark S if sufficient, I if irregular, insufficient)**

water														
electricity														
health centre/hospital														
day care center														
school														
street														
sidewalks														
garbage collection														
streetlights														
security														
telephone connection														
cellphone connection														

H Expenses on Food

Percentage of household income spent on food														

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Appendix 1

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
I Health Status	**(Write the no. of household members who got sick, mark H if hospitalized, HT if not hospitalized/write the illness)**													
Household member who got sick														
adult														
illness														
child														
illness														
J. Public Places in the Community														
deepwell														
well														
public faucet														
park														
public benches														
sidewalk														
church														
basketball court														
store														
public market														
daycare center														
school														
health centre/hospital														
multi-purpose hall														
internet shop														
NHA office														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
J.1 When did you start visiting the public places?														
deepwell														
frequency in a year														
no. of acquaintances made														
no. of friends made														
well														
frequency in a year														
no. of acquaintances made														
no. of friends made														
public faucet														
frequency in a year														
no. of acquaintances made														
no. of friends made														
park														
frequency in a year														
no. of acquaintances made														
no. of friends made														
public benches														
frequency in a year														
no. of acquaintances made														
no. of friends made														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Appendix 1

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
sidewalk														
frequency in a year														
no. of acquaintances made														
no. of friends made														
church														
frequency in a year														
no. of acquaintances made														
no. of friends made														
basketball court														
frequency in a year														
no. of acquaintances made														
no. of friends made														
store														
frequency in a year														
no. of acquaintances made														
no. of friends made														
public market														
frequency in a year														
no. of acquaintances made														
no. of friends made														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
daycare centre														
frequency in a year														
no. of acquaintances made														
no. of friends made														
school														
frequency in a year														
no. of acquaintances made														
no. of friends made														
health centre/hospital														
frequency in a year														
no. of acquaintances made														
no. of friends made														
multi-purpose hall														
frequency in a year														
no. of acquaintances made														
no. of friends made														
internet shop														
frequency in a year														
no. of acquaintances made														
no. of friends made														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

	Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
	NHA Office														
	frequency in a year														
	no. of acquaintances made														
	no. of friends made														
K	**Community Activities**														
	Meeting organized by community organization														
	frequency in a year														
	no. of acquaintances made														
	no. of friends made														
	Meeting organized by government														
	frequency in a year														
	no. of acquaintances made														
	no. of friends made														
	Election														
	frequency in a year														
	no. of acquaintances made														
	no. of friends made														
	Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Fiesta														
frequency in a year														
no. of acquaintances made														
no. of friends made														
Xmas/New Year's/Valentine Party														
frequency in a year														
no. of acquaintances made														
no. of friends made														
Sports league														
frequency in a year														
no. of acquaintances made														
no. of friends made														
Holy Week/ 'Pasyon'														
frequency in a year														
no. of acquaintances made														
no. of friends made														
Wake														
frequency in a year														
no. of acquaintances made														
no. of friends made														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

L Social Life

Individuals you frequently meet apart from your household **(Write the name; M-male /F-female; number of face to face interactions per year; 1-old/2-new;**

Location- A- neighbour/ B- from other phase/ C- from other community/ D- from workplace/ E- relative)

Individual #1														
no. of face to face interaction														
Gender (M/F)														
1-old/2-new														
Locat (A/B/C/D/E)														
Job														
Individual #2														
no. of face to face interaction														
Gender (M/F)														
1-old/2-new														
Locat (A/B/C/D/E)														
Job														
Individual #3														
no. of face to face interaction														
Gender (M/F)														
1-old/2-new														
Locat (A/B/C/D/E)														
Job														

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Individual #4														
no. of face to face interaction														
Gender (M/F)														
1-old/2-new														
Locat (A/B/C/D/E)														
Job														
Individual #5														
no. of face to face interaction														
Gender (M/F)														
1-old/2-new														
Locat (A/B/C/D/E)														
Job														
Individual #6														
no. of face to face interaction														
Gender (M/F)														
1-old/2-new														
Locat (A/B/C/D/E)														
Job														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

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Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Individual #7														
no. of face to face interaction														
Gender (M/F)														
1-old/2-new														
Location (A/B/C/D/E)														
Job (A/B/C/D/E)														
Individual #8														
no. of face to face interaction														
Gender (M/F)														
1-old/2-new														
Locat (A/B/C/D/E)														
Job														
Individual #9														
no. of face to face interaction														
Gender (M/F)														
1-old/2-new														
Locat (A/B/C/D/E)														
Job														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Individual #10														
no. of face to face interaction														
Gender (M/F)														
1-old/2-new														
Locat (A/B/C/D/E)														
Job														
Three individuals important to your household. Write the names.														
Other means of engagement with the 3 important individuals (1-phone call/ 2-texting/ 3 -social networking (facebook at iba pa)/ 4-email/ 5- internet chatting)														
means of communication 1/2/3/4/5														

(Write the name; no. of face to face interactions in a year; Gender M- male F- female; 1-old/ 2-new; Type- N- from national government/ L-from local government; write the position)

Government Representative #1														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type N/L														
Position														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

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Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Government Representative #2														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type N/L														
Position														
Government Representative #3														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type N/L														
Position														
Government Representative #4														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type N/L														
Position														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Government Representative #5														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type N/L														
Position														
Three government representatives important to your household. Write the names.														
Other means of engagement with the 3 important government representatives (1-phone call/ 2-texting/ 3 -social networking (facebook at iba pa)/ 4-email/ 5- internet chatting)														
means of communication 1/2/3/4/5														
(Write the name; no. of face to face interactions in a year; Gender M- male F- female; 1-old/ 2-new; Type- L- local NGO/ N- from national NGO/ I- international NGO; write the position)														
NGO Representative #1														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type L/N/I														
Position														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

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Taon	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
NGO Representative #2														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type L/N/I														
Position														
NGO Representative #3														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type L/N/I														
Position														
NGO Representative #4														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type L/N/I														
Position														
Year	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
NGO Representative #5														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type L/N/I														
Position														

Three NGO representatives important to your household. Write the names.

Other means of engagement with the 3 important NGO representatives (1-phone call/ 2-texting/ 3 -social networking (facebook at iba pa)/ 4-email/ 5- internet chatting)

means of communication 1/2/3/4/5														

(Write the name; no. of face to face interactions in a year; Gender M- male F- female; 1-old/ 2-new)

Uri- 1- Catholic/ 2 - Iglesia ni Cristo/ 3- Baptist / 4- Methodist/ 5 -Mormons/ 6 - 7th Day Adventist/ 7- Muslim/ 8 Jehova's Witness 9- Born Again; Write the position)

Church Representative #1														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type 1/2/3/4/5/6/7/8/9														
Position														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Appendix 1

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Church Representative #2														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type 1/2/3/4/5/6/7/8/9														
Position														
Church Representative #3														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type 1/2/3/4/5/6/7/8/9														
Position														
Church Representative #4														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type 1/2/3/4/5/6/7/8/9														
Position														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Church Representative #5														
no. of face to face interactions														
Gender M/F														
1-old/2-new														
Type 1/2/3/4/5/6/7/8/9														
Position														
Three church representatives important to your household. Write the names.														
Other means of engagement with the 3 important church representatives (1-phone call/ 2-texting/ 3 -social networking (facebook at iba pa)/ 4-email/ 5- internet chatting)														
means of communication 1/2/3/4/5														

M Membership in Organization **(Write the organization name; 1- old/ 2- new; Rate of Participation 1-leader/ 2-very active/ 3-slightly active/ 4-not active)**

Homeowner's Association														
Name														
1-old/ 2-new														
Rate of participation 1/2/3/4														
Neighbourhood Association														
Name														
1-old/ 2-new														
Rate of participation 1/2/3/4														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

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Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Transportation Group														
Name														
1-old/ 2-new														
Rate of participation 1/2/3/4														
Federation/Alliance														
Name														
1-old/ 2-new														
Rate of participation 1/2/3/4														
Cooperative														
Name														
1-old/ 2-new														
Rate of participation 1/2/3/4														
Religious group														
Name														
1-old/ 2-new														
Rate of participation 1/2/3/4														
Parent-Teacher Association														
Name														
1-old/ 2-new														
Rate of participation 1/2/3/4														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Appendix 1

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Women's/Men's Group														
Name														
1-old/ 2-new														
Rate of participation 1/2/3/4														
Fraternity/Sorority														
Name														
1-old/ 2-new														
Rate of participation 1/2/3/4														
Employees' Union														
Name														
1-old/ 2-new														
Rate of participation 1/2/3/4														
Youth Group														
Name														
1-old/ 2-new														
Rate of participation 1/2/3/4														
Sports Group														
Name														
1-old/ 2-new														
Rate of participation 1/2/3/4														
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Health Committee														
Name														
1-old/ 2-new														
Rate of participation 1/2/3/4														

N Social Support. Write the name or association

Year	Emotional Support	Food Security	Money	Job	Childcare	Emergency	Water	Electricity	Health	Education	Home Improvement	Community Development	Business Opportunity
1998	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5	5	5
	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8

Year	Emotional Support	Food Security	Money	Job	Childcare	Emergency	Water	Electricity	Health	Education	Home Improvement	Community Development	Business Opportunity
1999	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5	5	5
	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8

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Year	Emotional Support	Food Security	Money	Job	Childcare	Emergency	Water	Electricity	Health	Education	Home Improvement	Community Development	Business Opportunity
2000	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5	5	5
	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8

Year	Emotional Support	Food Security	Money	Job	Childcare	Emergency	Water	Electricity	Health	Education	Home Improvement	Community Development	Business Opportunity
2001	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5	5	5
	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8

Year	Emotional Support	Food Security	Money	Job	Childcare	Emergency	Water	Electricity	Health	Education	Home Improvement	Community Development	Business Opportunity
2002	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5	5	5
	6	6	6	6	6	6	6	6	6	6	6	6	6

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	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8

Year	Emotional Support	Food Security	Money	Job	Childcare	Emergency	Water	Electricity	Health	Education	Home Improvement	Community Development	Business Opportunity
2003	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5	5	5
	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8

Year	Emotional Support	Food Security	Money	Job	Childcare	Emergency	Water	Electricity	Health	Education	Home Improvement	Community Development	Business Opportunity
2004	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5	5	5
	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8

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Year	Emotional Support	Food Security	Money	Job	Childcare	Emergency	Water	Electricity	Health	Education	Home Improvement	Community Development	Business Opportunity
2005	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5	5	5
	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8

Taon	Emosyonal na Suporta	Seguridad sa Pagkain	Pera	Trabaho	Pagaalaga ng Bata	Emergency	Patungkol sa Tubig	Elektrisidad	Kalusugan	Edukasyon	Pagaayos ng Bahay	Pagaayos ng Komunidad	Oportunidad sa Negosyo
2006	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5	5	5
	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8

Year	Emotional Support	Food Security	Money	Job	Childcare	Emergency	Water	Electricity	Health	Education	Home Improvement	Community Development	Business Opportunity
2007	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5	5	5
	6	6	6	6	6	6	6	6	6	6	6	6	6

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	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8

Year	Emotional Support	Food Security	Money	Job	Childcare	Emergency	Water	Electricity	Health	Education	Home Improvement	Community Development	Business Opportunity
2008	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5	5	5
	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8

Year	Emotional Support	Food Security	Money	Job	Childcare	Emergency	Water	Electricity	Health	Education	Home Improvement	Community Development	Business Opportunity
2009	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5	5	5
	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8

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Year	Emotional Support	Food Security	Money	Job	Childcare	Emergency	Water	Electricity	Health	Education	Home Improvement	Community Development	Business Opportunity
2010	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5	5	5
	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8

Year	Emotional Support	Food Security	Money	Job	Childcare	Emergency	Water	Electricity	Health	Education	Home Improvement	Community Development	Business Opportunity
2011	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5	5	5
	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8

Questions O to U

						Before Resettling	After Resettling
O	**Questions on Organization Membership**	**(Write the name or acronym)**					
O.1	Group 1						
O.2	Group 2						
O.3	Group 3						
O1	**Overall, do all the organizations share the same members?**	**Codes- 1- Yes, 2- No**				BR	AR
O1.1	Answer						
O2	**Does majority of the groups' members come from the same families?**		**Codes- 1- Yes, 2- No**			BR	AR
O2.1	Group 1						
O2.2	Group 2						
O2.3	Group 3						
O3	**Does majority of the groups' members come from the same religion?**		**Codes- 1- Yes, 2- No**			BR	AR
O3.1	Group 1						
O3.2	Group 2						
O3.3	Group 3						
O4	**Does majority of the groups' members share the same religion?**		**Codes- 1- Yes, 2- No**			BR	AR
O4.1	Group 1						
O4.2	Group 2						
O4.3	Group 3						
O5	**Does majority of the groups' members speak the same language or dialect?**		**Codes- 1- Yes, 2- No**			BR	AR
O5.1	Group 1						
O5.2	Group 2						
O5.3	Group 3						
O6	**Does majority of the groups' members share the same political views or belong to the same political group?**				**Codes- 1- Yes, 2- No**	BR	AR
O6.1	Group 1						
O6.2	Group 2						
O6.3	Group 3						
O.7	**Does majority of the groups' members have the same occupati**	**Codes- 1- Yes, 2- No**				BR	AR
O7.1	Group 1						
O7.2	Group 2						
O7.3	Group 3						

O.8	**Does majority of the groups' members have the same age brac**	**Codes- 1- Yes, 2- No**		BR	AR
O8.1	Group 1				
O8.2	Group 2				
O8.3	Group 3				
O.9	**Does majority of the groups' members have the same level of education?**	**Codes- 1- Yes, 2- No**		BR	AR
O9.1	Group 1				
O9.2	Group 2				
O9.3	Group 3				
O.10	**Does majority of the groups' members come from the same place of origin?**	**Codes- 1- Yes, 2- No**		BR	AR
O10.1	Group 1				
O10.2	Group 2				
O10.3	Group 3				
O.11	**How does the group usually decide?**			BR	AR
O11.1	Group 1	(1/2/3/Other)			
O11.2	Group 2	(1/2/3/Other)			
O11.3	Group 3	(1/2/3/Other)			
O.12	**Overall, how effective is the group leadership?**	**Codes- 1- Very Effective, 2- Slightly Effective, 3 Not Effective**		BR	AR
O12.1	Group 1				
O12.2	Group 2				
O12.3	Group 3				
O.13	**Do you think you learned new knowledge or something important from being a member in this organization?**		**Codes- 1- Yes, 2- No**	BR	AR
O13.1	Group 1				
O13.2	Group 2				
O13.3	Group 3				
P	**Networks and Mutual Support Organizations**				
P1	**If there is a problem related to the mosque, who gather to act on this?**	**Codes- 1- Yes, 2- No, 3 Don't Know**		BR	AR
P1.1	1. Nobody in the community/neighbourhood				
P1.2	2. District government				
P1.3	3. Sub-district government				
P1.4	3. National government				
P1.5	4. NGO				
P1.6	5. Representative from international or local organization				
P1.7	6. Members of the mosque				
P1.8	7. The whole community				
P1.9	8. Others. Please mention				
P1.10	9. Who acted as a leader				

P2	**When there is a problem on "violence" that affect the entire community/neighbourhood who work together to deal with the situation? Codes- 1- Yes, 2- No, 3 Don't Know**	BR	AR
P2.1	1.Each person/household would deal with the problem individually		
P2.2	2. Neighbours among themselves		
P2.3	3. District government		
P2.4	3. Sub-district government		
P2.5	4. Political leader		
P2.6	5. Representative from National government		
P2.7	6.NGO representative		
P2.8	7. Representative from international organization		
P2.9	8. Church representative		
P2.10	9. All community leaders acting together		
P2.11	10. The whole community		
P2.12	11. Others. Please mention		
P2.13	12. Who acted as a leader		
P3	**When there is a disaster like landslide, earthquake, flood, or fire that affected the entire community/ neighbourhood who work together to deal with the situation? Codes- 1- Yes, 2- No, 3 Don't Know**	BR	AR
P3.1	1.Each person/household would deal with the problem individually		
P3.2	2. Neighbours among themselves		
P3.3	3. District government		
P3.4	3. Sub-district government		
P3.5	4. Political leader		
P3.6	5. Representative from National government		
P3.7	6.NGO representative		
P3.8	7. Representative from international organization		
P3.9	8. Church representative		
P3.10	9. All community leaders acting together		
P3.11	10. The whole community		
P3.12	11. Others. Please mention		
P3.13	12. Who acted as a leader		

Q	Exclusion			
Q1	**Differences often exist between people living in the same community/neighbourhood. To what extent do differences such as the following tend to divide people in your community/neighbourhood? Codes- 1- Not Really, 2- Slightly, 3- So Much**		BR	AR
Q1.1	1. Differences in education			
Q1.2	2. Differences in wealth or material possession			
Q1.3	3. Differences in social status			
Q1.4	4. Differences between men and women			
Q1.5	5. Differences between young and old generation			
Q1.6	6. Differences among places of origin			
Q1.7	7. Differences between long time residents and early settlers			
Q1.8	8. Differences in political affiliations			
Q1.9	10. Differences in language/dialect spoken			
Q1.10	11. Differences in ethnicity			
Q1.11	12. Others. Please mention.			
Q.2	**Do these differences**	**Codes- 1- Yes, 2- No**	BR	AR
Q2.1	cause problems?			
Q2.2	Mention the problem			
Q.3	**How are these problems usually handled?**	**Codes- 1- Yes, 2- No**	BR	AR
Q3.1	1. People work it out between themselves			
Q3.2	2. Family/household members intervene			
Q3.3	3. Neighbours intervene			
Q3.4	4. Community leaders intervene			
Q3.5	5. Religious leaders intervene			
Q3.6	6. NGO intervenes			
Q3.7	7. International or local organization intervenes			
Q3.8	8. Government people intervene			
Q3.9	9. Politician intervenes			
Q.4	**Do such problems in Q2 lead to violence?**		BR	AR
Q4.1	Answer			
Q.5	**Are there any services where you or members of your household are occasionally denied of these services or have only limited opportunity to use?**		BL	PL
Q5.1	1. Education/schools			
Q5.2	2. Health services/clinics			
Q5.3	3. Housing assistance			
Q5.4	4. Job training/employment			
Q5.5	5. Credit/finance			
Q5.6	6. Transportation			
Q5.7	7. Water distribution			
Q5.8	8. Sanitation services			
Q5.9	9. Rural upgrading			
Q5.10	10. Justice/conflict resolution			
Q5.11	11. Mosque			

Q.6	**Do you think there are other households in this community that have such access problems? Codes- 1- Yes, 2- No**	BR	AR
Q6.1	Answer		
Q.7	**If YES, what percentage of households is excluded? Codes - 1-<25%, 2- 25-50%, 3- 51-75%, 4- 76-99%, 5- 100%**	BR	AR
Q7.1	1. Education/schools		
Q7.2	2. Health services/clinics		
Q7.3	3. Housing assistance		
Q7.4	4. Job training/employment		
Q7.5	5. Credit/finance		
Q7.6	6. Transportation		
Q7.7	7. Water distribution		
Q7.8	8. Sanitation services		
Q7.9	9. Urban upgrading		
Q7.10	10. Justice/conflict resolution		
Q7.11	11. Mosque		
Q.8	**What are the reasons or criteria why some people are excluded from these services? Codes- 1- Yes, 2- No**	BR	AR
Q8.1	1. Income level		
Q8.2	2. Occupation		
Q8.3	3. Social status		
Q8.4	4. Age		
Q8.5	5. Gender		
Q8.6	6. Dialect spoken		
Q8.7	7. Ethnicity		
Q8.8	8. Place of origin		
Q8.9	9. Length of stay in the site		
Q8.10	10. Religious beliefs		
Q8.11	11. Political affiliation		
Q8.12	13. Lack of education		
R	**Collective Action**		
R.1	**How often have members of this community/neighbourhood gotten together and jointly petitioned government officials or political leaders with village development as their goal? Codes- 1- Not once, 2- Sometimes, 3- Few Times, 4- Frequently**	BR	AR
R1.1	Answer		
R.2	**Was this action/were any of these actions successful? Codes- 1- All were successful, 2- Some were successful, some were not, 3- Nothing was successful**	BR	AR
R2.1	Answer		

R.3	**How often have you joined together with others in the community/neighbourhood to address a common issue?**			
		Codes- 1- Not once, 2- Sometimes, 3- Few Times, 4- Frequently	BR	AR
R3.1	Answer			
R.4	**Have you personally done any of the following things?**	**Codes- 1- Yes, 2- No**	BR	AR
R4.1	1. Voted in the elections			
R4.2	2. Actively participated in an association			
R4.3	3. Made a personal contact with a district/sub-district official			
R4.4	4. Made a personal contact with a government official			
R4.5	5. Made a personal contact with an NGO representative			
R4.6	6. Made a personal contact with a mosque representative			
R4.7	7. Made the media interested in a problem			
R4.8	8. Actively participated in an information campaign			
R4.9	9. Actively participated in an election campaign			
R4.10	10. Taken part in a protest march or demonstration			
R4.11	11. Contacted your elected regional representative			
R4.12	12. Taken part in a sit-in or disruption of government meetings/offices			
R4.13	13. Talked with other people in your area about a problem			
R4.14	14. Notified the court or police about a problem			
R4.15	15. Made a monetary or in-kind donation			
R4.16	16. Volunteered for a charitable organization			
R.5	**Have you been approached by someone personally to do any of the following?**	**Codes- 1- Yes, 2- No**	BR	AR
R5.1	1. Voted in the elections			
R5.2	2. Actively participated in an association			
R5.3	3. Made a personal contact with a district/sub-district official			
R5.4	4. Made a personal contact with a government official			
R5.5	5. Made a personal contact with an NGO representative			
R5.6	6. Made a personal contact with a mosque representative			
R5.7	7. Made the media interested in a problem			
R5.8	8. Actively participated in an information campaign			
R5.9	9. Actively participated in an election campaign			
R5.10	10. Taken part in a protest march or demonstration			
R5.11	11. Contacted your elected regional representative			
R5.12	12. Taken part in a sit-in or disruption of government meetings/offices			
R5.13	13. Talked with other people in your area about a problem			
R5.14	14. Notified the court or police about a problem			
R5.15	15. Made a monetary or in-kind donation			
R5.16	16. Volunteered for a charitable organization			
R.6	**Who makes the decision related to a development project needed by the community/neighbourhood?**			
		Codes- 1- The community leaders decide, 2- The whole community decides, 3- Other, pls mention	BR	AR
R6.1	Answer			

R.7	**Overall, how would you rate the spirit of participation in the community/neighbourhood?**		
	Codes- 1 Very Low, 2- Low, 3-Moderate 4- High, 5- Very High	BR	AR
R7.1	Answer		
R.8	**Overall, how would you rate the working relationship between the community/neighbourhood and the district/sub-district government representatives?**		
	Codes- 1 Very Low, 2- Low, 3-Moderate 4- High, 5- Very High	BR	AR
R8.1	Answer		
R.9	**Overall, how would you rate the working relationship between the community/neighbourhood and the central government representatives?**		
	Codes- 1 Very Low, 2- Low, 3-Moderate 4- High, 5- Very High	BR	AR
R9.1	Answer		
R.10	**Overall, how would you rate the working relationship between the community/neighbourhood and the mosque representatives?**		
	Codes- 1 Very Low, 2- Low, 3-Moderate 4- High, 5- Very High	BR	AR
R10.1	Answer		
R.11	**Overall, how would you rate the working relationship between the community/neighbourhood and the NGO representatives?**		
	Codes- 1 Very Low, 2- Low, 3-Moderate 4- High, 5- Very High	BR	AR
R11.1	Answer		
R.12	**Overall, how would you rate the working relationship between the community/neighbourhood and the international organization representatives?**		
	Codes- 1 Very Low, 2- Low, 3-Moderate 4- High, 5- Very High	BR	AR
R12.1	Answer		
R.13	**How much influence do you think people like yourself have in making this community a better place to live?**		
	Codes- 1- Significant, 2- Slightly Significant, 3-Not so Significant, 4- Nothing	BR	AR
R13.1	Answer		
S	**Solidarity**		
S.1	**When somebody in the community/neighbourhood has something unfortunate happened to him or her, such as sudden death in the family, whom does he or she turn to for help?**		
	(Write the code of the first three mentioned on their own rows)	BR	AR
S1.1	1 - No one would help		
S1.2	2 - Family		
S1.3	3 - Neighbours		
S1.4	4 - Religious leader or group		
S1.5	5 - Community leader		
S1.7	7 - Police		
S1.8	8 - Patron/employer/benefactor		
S1.9	9 - Political leader		
S1.10	10 - NGO representative		
S1.11	11- Government representative		
S1.12	12 - Mutual support group to which s/he belongs		
S1.13	13 - Assistance organization to which s/he does not belong		
S1.14	14 - other (specify)		

S.2	**When your neighbour suffers an economic loss (like "job loss"). Who do you think assists him/her financially?**		
	(Write the code of the first three mentioned on their own rows)	BR	AR
S2.1	1 - No one would help		
S2.2	2 - Family		
S2.3	3 - Neighbours		
S2.4	4 - Religious leader or group		
S2.5	5 - Community leader		
S2.7	7 - Police		
S2.8	8 - Patron/employer/benefactor		
S2.9	9 - Political leader		
S2.10	10 - NGO representative		
S2.11	11- Government representative		
S2.12	12 - Mutual support group to which s/he belongs		
S2.13	13 - Assistance organization to which s/he does not belong		
S2.14	14 - other (specify)		
T	**Trust and Cooperation**		
T.1	**Do people in this community/neigbourhood generally trust one another in matters of lending and borrowing?**		
	Codes- 1- They trust, 2- They don't trust	BR	AR
T1.1	Answer		
T.2	**When someone from the community/neighbourhood has to go away for a while, along with his or her family, in whose charge does she/he leave his or her house?**		
	Codes- 1 Other family member, 2- Neighbour, 3- Anybody in the community for this purpose, 4 Other, mention it	BR	AR
T2.1	Answer		
T.3	**When you suddenly go away for a day or two, whom do you count on to take care of your children?**		
	Codes- 1 Other family member, 2- Neighbour, 3- Anybody in the community for this purpose, 4 Other, mention it, 5- No child	BR	AR
T3.1	Answer		
T.4	**Do you agree or disagree that people here look out mainly for the welfare of their own families and they are not much concerned with community's welfare?**		
	Codes- 1- Strongly agree, 2- Agree, 3- Disagree, 4 Strongly Disagree	BR	AR
T4.1	Answer		
T.5	**If a community project does not directly benefit your neighbour but has benefits for others in the community/neighbourhood, does your neighbour contribute time for this project?**		
	Codes- 1- Will not give time, 2- Will give time	BR	AR
T5.1	Answer		
T.6	**If a community project does not directly benefit your neighbour but has benefits for others in the community/neighbourhood, does your neighbour contribute money for this project?**		
	Codes- 1- Will not give money, 2- Will give money	BR	AR
T6.1	Answer		

U	**Conflict Resolution**			
U.1	**Is this community/neighbourhood generally peaceful or conflictive?**			
		Codes- 1- Peaceful, 2- Conflictive	BR	AR
U1.1	Answer			
U.2	**Do people in this community/neighbourhood contribute time and money toward common development goals?**			
		Codes- 1- Will not give money, 2- Will give money	BR	AR
U2.1	Answer			
U.3	**Are the relationships among people in this community/neighbourhood generally harmonius or disagreeable?**			
		Codes- 1 Harmonius, 2- Disagreeable	BR	AR
U3.1	Answer			
U.4	**When two people in this community/neighbourhood have a fairly serious dispute with each other, who primarily help resolve the dispute?**			
		Codes- If Yes, write the code in the box	BR	AR
U4.1	1 - No one; people work it out between themselves			
U4.2	2 - Family/household members			
U4.3	3 - Neighbours			
U4.4	4 - Community leaders			
U4.5	5 - Religious leaders			
U4.6	6 - NGO representatives			
U4.7	7- Government representatives			
U4.8	8 - Political leaders			
U4.9	9 - Other (specify)			

Evaluation Section			
A	**Interviewee**		
A1	1. What rate/grade will you give to this interview?		**Codes- 1- Very Easy, 2- Easy, 3- Moderate, 4- Difficult, 5- Very Difficult**
A2	2. How much did you enjoy this interview?		**Codes- 1- Didn't enjoy it very much, 2- Didn't enjoy, 3- Moderate, 4- Enjoyed it, 5- Enjoyed it very much**
A3	3. Why did you need assistance or help during the interview a while ago?		**Codes- 1- Education level, 2- Can't read and write, 3- due to sickness, 4- to remember easily, 5-Other, specify**
B	**Interviewer**		
B1	1. What rate/grade will you give to this interview?		**Codes- 1- Very Easy, 2- Easy, 3- Moderate, 4- Difficult, 5- Very Difficult**
B2	2. How much did you enjoy this interview?		**Codes- 1- Didn't enjoy it very much, 2- Didn't enjoy, 3- Moderate, 4- Enjoyed it, 5- Enjoyed it very much**

Social Network Tool (Indonesia)

Social Network in Bantar Panjang

Codes
0- Don't Know
1- Acquaintance
2- Friend

RT 1	
	Agus
	Ahmad Iwan
	Ari Wijayanto
	Asep Suanda
	Buntoro
	Cahyanto
	Chandra Yanto
	Darsin
	Dartim
	Edi Tarmedi
	Eko
	Iwan Abadi
	Kasturi
	Kusnedi
	Muhsin
	Musalam
	Muslihin
	Nartam
	Puryono
	Rohendi
	Salikun
	Samsudin
	Sugeng
	Sulis
	Suryanto
	Ucu

RT 2	
	Arjo
	Buditursino
	Cucipto
	Danu
	Darmawan
	Herman
	Iksan
	Karsiti
	Muhamad
	Murai-udin
	Nining
	Rohmat
	Sardi
	Sartoyo
	Suhiryo
	Sukaya
	Sunaryo
	Usin
	Wapidino
	Waryono
	Wasino

RT 2	
	Darwanto
	Edi Supardi
	Eko D.
	Junaedi
	Kamid Kasjono
	Kastono
	Maman
	Midin
	Priyanto
	Rusnoto
	Sahrudin
	Sarwo
	Sodikin
	Sudin
	Sumini
	Sunarjo
	Tursiti
	Warkono
	Warsono
	Wasidin
	Wasiun
	Waslim
	Yuniarti

RT 3			
	A. Rahmansidik		Nurlaela
	Admin		Pendi Kenedi
	Agus Budianto		Rino
	Anton		Sadirun
	Arif		Sahidin
	Aziz Dani		Siswanto
	Bahri		Sugiyono
	Dakto		Suminto
	Darmanto		Suwito
	Darmono		Tarjo
	Darojat		Taskum
	Dasito		Wahyono
	Disyanto		Warsito
	Karsono		Waryo
	Kartem		Waryudin
	Kasromi		Wasiyan
	Kohidin		
	Kusnadi		
	Kuswandi		
	Martoyo		
	Muhamad Nuk		
	Muslihin		
	Narsito		

Appendix 1

Sample in-depth interview guide (for project managers in the Philippines)

INTERVIEW GUIDE

(Interview with Project Managers)

Name: _____ **Position:**_____

Affiliation: _____ **Age:**_____ **Gender:** _____

1. When did you start getting involved in the Kasiglahan Village Project?
2. What was your position and job? Tell me about it.
3. What are the objectives of the Kasiglahan Project?
4. Do you think all these objectives have been achieved after almost 13 years?
5. Is creating a new community part of these objectives? Why?
6. How do you define community?
7. Do you consider Kasiglahan Village 1 (Plains and Sub-Urban) as a community now? Why?
8. In a scale of 1-5, with 5 being the highest, what is the rate of Kasiglahan Village now?
9. In your view, how important is the formation of social relationships in the building of community?
10. In a scale of 1-5, with 5 being the highest, what is the rate of Kasiglahan as a social community?
11. Why did you give this rating?
12. What is the direction of Kasiglahan as a social community from 1998 till now? Getting better, getting worse, fluctuating?
13. What do you think are the reasons for this direction?
14. From 1998 to present, are there crucial moments that shape the social aspect of the community?
15. Do you see yourself and your Office as important in the households' social lives as well as in the formation of the community's social aspect? Why?
16. In a scale of 1-5, with 5 being the highest, what is the rate of your relationship with the community/households?
17. Why did you give this rating?
18. What activities, programs, or projects have you been doing in order to improve the social aspect of the community?
19. How many have been effective? How?
20. How often do you meet with the HOA, households, and other project implementers?
21. Can you recommend other measures for the improvement of the social aspect of the Kasiglahan Village?
22. Around how many individuals in Kasiglahan do you know as acquaintances and as friends? About how many acquaintances do you make every year? About how many friends do you make every year?
23. Was there a time that you ask favors/help from some of these acquaintances? Friends? What kind of favors? About how many times did this happen?
24. Do the same individuals ask favors from you as well? What kind of favors? How often?
25. What's your perception on this?

Appendix 2: Sample Paper and Pencil Filled-out Calendar Tool (first page)

HOUSEHOLD QUESTIONNAIRE **Entry Year: 2003**

Respondent's Name _ Leonora Garcia
Languages/dialects spoken__ Tagalog, Visaya
Interviewer: __ Lyza Perez

Name of Person Assisting the Respondent _Babylyn Sy (Daughter)
Province_____ Dumaguete
Length of Interview

Address___ Blk 18 Lot 181- Phase D
Religion_____ Roman Catholic
Time Started : _____ 1:30 PM

Place of Origin_____ EDSA Shrine
Time Finished: _____ 2:30 PM

	Taon	~~1998~~	~~1999~~	~~2000~~	~~2001~~	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
	(Mark S for Single, M for Married, CH for Cohabitation, S for Separated, W for Widow/Widower, RM for Remmarried)														
	Marital Status					M	W	RM----------X							
A	**Children**	(Mark N if not residing with the respondent, R if residing/ Write the year of birth if not born between 1998-2011/ write the age)													
	When were they born?														
	eldest 1985					R----------X 25/yo									
	second														
	third														
	fourth														
	fifth														
	sixth														
B	**Number of children in school**														
	child in daycare														
	child in elementary														
	child in high school														
	child in college														
	child who stopped					1----------X									
	child not yet in schooling age														
	Taon	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Appendix 3: Tables

Table A3.1a: Individual, Household and Community Characteristics Effects on Philippine Households' Structural Social Capital (Regression Analysis with Pairwise Deletion)

N=150	Public Places		Comm Activity		Close Ind.		Support Ties		Bonds		Bridges		Linkages	
	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er
Model 1 (Individual Characteristics)														
Yearresettled	2.83	5.36	-3.79	2.75	-0.09	0.14	-0.32	0.33	-3.30	2.03	1.98	5.57	-0.02	0.06
Age	-1.36	0.99	-1.12*	0.51	-0.05	0.03	-0.14*	0.06	-0.97*	0.38	-1.71	1.03	-0.01	0.01
Total Civicness rate	1.44**	0.35	1.07**	0.18	0.01	0.01	0.03	0.02	0.66**	0.13	1.90**	0.36	0.00	0.00
Educational Level	-5.03	6.38	-1.66	3.27	-0.37*	0.17	-0.13	0.39	-2.09	2.42	-5.17	6.63	0.23**	0.07
Female	-62.28**	22.16	-19.73	11.37	-0.93	0.58	-1.17	1.35	-20.11*	8.40	-64.17**	23.02	-0.47	0.26
Living in Sub Urban	1.95	23.89	11.75	12.26	0.80	0.62	1.42	1.45	6.05	9.06	10.40	24.81	-0.21	0.28
Place of Origin	-3.00	4.40	0.02	2.26	0.12	0.11	-0.47	0.27	-0.83	1.67	-2.53	4.57	-0.03	0.05
Catholic	30.29	41.04	-0.99	21.05	1.36	1.07	1.25	2.49	16.77	15.56	15.18	42.62	0.38	0.48
Iglesia ni Cristo	52.82	46.42	-2.59	23.81	1.31	1.21	2.31	2.82	16.22	17.60	38.16	48.21	0.39	0.54
	R^2=	20.0%	R^2=	26.0%	R^2=	8.4%	R^2=	10.4%	R^2=	23.9%	R^2=	25.1%	R^2=	12.5%
Model 2 (Household Characteristics)														
Kids in school	13.65	11.84	12.59*	5.81	0.25	0.29	0.62	0.65	10.69*	4.45	16.18	12.69	0.05	0.14
Wife Employment Status	53.37	63.92	37.69	31.38	-0.78	1.57	-0.92	3.52	23.94	24.00	62.12	68.46	0.25	0.76
Husband Empl. Status	-68.38	46.79	-7.53	22.97	0.63	1.15	1.35	2.57	-8.45	17.56	-64.50	50.11	0.43	0.55
Household Size	2.84	7.48	0.93	3.67	-0.18	0.18	0.26	0.41	-1.12	2.81	4.70	8.01	-0.01	0.09
Wife Prestige	-2.94	2.72	-1.99	1.34	-0.03	0.07	-0.07	0.15	-1.25	1.02	-3.63	2.91	0.01	0.03
Husband Prestige	1.34	2.38	3.40**	1.17	0.02	0.06	-0.07	0.13	1.19	0.90	3.11	2.55	-0.02	0.03
Household Income	47.96	28.89	-9.13	14.19	0.62	0.71	0.63	1.59	5.73	10.85	31.58	30.95	-0.04	0.34
House floor size	1.32	1.75	2.67**	0.86	0.05	0.04	0.01	0.10	0.78	0.66	3.33	1.88	-0.01	0.02
Number of bedrooms	48.04*	22.44	26.88*	11.02	-0.54	0.55	3.12*	1.23	18.43*	8.42	58.92*	24.04	0.13	0.27
% of income for food	-0.30	0.54	-0.14	0.26	0.00	0.01	0.00	0.03	0.02	0.20	-0.47	0.57	0.00	0.01
Number of sick child	18.54	15.43	-4.43	7.58	0.89*	0.38	2.77**	0.85	14.06*	5.79	4.33	16.53	0.17	0.18
Wife Occupation	9.87	11.47	10.31	5.63	0.27	0.28	1.01	0.63	6.82	4.31	14.21	12.28	0.00	0.14
Husband occupation	-10.26	9.21	-18.84**	4.52	0.02	0.23	0.25	0.51	-7.06*	3.46	-19.77*	9.86	0.04	0.11
	R^2=	16.0%	R^2=	30.0%	R^2=	14.2%	R^2=	23.3%	R^2=	22.0%	R^2=	16.8%	R^2=	4.5%

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Model 3 (Community Characteristics)														
Participation in community	18.91	13.32	13.31	7.42	0.68*	0.34	1.73*	0.81	14.70**	5.40	20.01	14.12	-0.12	0.15
Relationship of community to:														
Local government	-0.10	15.21	5.23	8.47	-0.28	0.39	1.15	0.92	-6.96	6.16	13.10	16.13	0.46**	0.18
Central government	26.62	15.02	-0.70	8.36	0.89*	0.38	0.04	0.91	8.36	6.08	18.58	15.92	-0.39*	0.17
Church	15.53	10.15	10.72	5.65	-0.04	0.26	0.55	0.62	5.91	4.11	21.13	10.76	0.20	0.12
NGO	-26.01*	13.01	-3.40	7.24	-0.28	0.33	-0.33	0.79	-5.33	5.27	-24.70	13.79	0.15	0.15
Int'l. Organisation	-10.86	13.64	-10.09	7.60	0.17	0.35	-0.58	0.83	-1.53	5.53	-20.06	14.46	0.31	0.16
No. of basic services	-1.13	3.48	-0.41	1.94	-0.05	0.09	-0.05	0.21	-1.61	1.41	0.00	3.69	0.07	0.04
No. of public places	13.36**	4.47	-1.81	2.49	0.06	0.11	0.49	0.27	0.66	1.81	11.46*	4.74	-0.05	0.05
No. of dividing factors	-5.68	3.35	-1.79	1.87	0.04	0.09	-0.08	0.20	-1.61	1.36	-5.79	3.55	0.02	0.04
No. of denied soc. services	9.21*	4.14	3.50	2.30	-0.07	0.11	0.02	0.25	2.77	1.68	9.91*	4.39	0.05	0.05
Reasons for denied services	-2.94	4.44	3.92	2.47	-0.05	0.11	0.00	0.27	-1.06	1.80	2.04	4.71	0.04	0.05
Whole Comm. Decides	-17.97	23.15	-8.59	12.89	-0.21	0.59	-1.54	1.41	-8.53	9.38	-19.70	24.54	-0.21	0.27
Community is Peaceful	5.44	24.85	2.99	13.84	-1.51*	0.63	-2.68	1.51	-8.45	10.07	12.55	26.34	-0.08	0.29
	R^2=	22.0%	R^2=	16.0%	R^2=	14.6%	R^2=	13.4%	R^2=	15.9%	R^2=	24.5%	R^2=	15.8%

Significant at *p<0.05. **p<0.01.

Appendix 3

Table A3.1b: Individual, Household and Community Characteristics Effects on Philippine Households' Cognitive Social Capital (Regression Analysis with Pairwise Deletion)

N=150	Trust		Reciprocity	
	Coef.	Std.Er	Coef.	Std.Er
Model 1 (Individual Characteristics)				
Yearresettled	0.06*	0.03	0.01	0.03
Age	0.00	0.01	0.00	0.01
Total Civicness rate	0.00	0.00	0.00	0.00
Educational Level	-0.01	0.03	0.00	0.04
Female	0.09	0.11	0.02	0.14
Living in Sub Urban	0.23	0.12	-0.12	0.15
Place of Origin	-0.01	0.02	-0.03	0.03
Catholic	0.20	0.21	0.09	0.26
Iglesia ni Cristo	0.24	0.24	0.40	0.30
	R^2=	9.8%	R^2=	4.9%
Model 2 (Household Characteristics)				
Kids in school	-0.01	0.06	0.01	0.07
Wife Employment Status	0.03	0.32	0.08	0.39
Husband Empl. Status	0.20	0.23	-0.10	0.29
Household Size	0.01	0.04	0.01	0.05
Wife Prestige	-0.01	0.01	0.00	0.02
Husband Prestige	-0.01	0.01	-0.02	0.01
Household Income	0.08	0.14	0.13	0.18
House floor size	-0.02	0.01	-0.01	0.01
Number of bedrooms	-0.04	0.11	0.00	0.14
% of income for food	0.00	0.00	0.00	0.00
Number of sick child	0.01	0.08	0.08	0.10
Wife Occupation	0.05	0.06	0.04	0.07
Husband occupation	0.08	0.05	0.09	0.06
	R^2=	9.9%	R^2=	8.5%
Model 3 (Community Characteristics)				
Participation in community	0.10	0.07	0.26**	0.08
Relationship of community to:				
Local government	0.15*	0.07	-0.10	0.09
Central government	-0.11	0.07	-0.15	0.09
Church	0.00	0.05	-0.06	0.06
NGO	0.05	0.06	0.06	0.08
Int'l. Organisation	0.03	0.07	0.15	0.08
No. of basic services	0.04*	0.02	0.00	0.02
No. of public places	0.02	0.02	-0.02	0.03
No. of dividing factors	0.04*	0.02	0.02	0.02
No. of denied soc. services	0.02	0.02	0.03	0.02
Reasons for denied services	0.01	0.02	-0.07*	0.03
Whole Comm. Decides	-0.07	0.11	-0.06	0.14
Community is Peaceful	0.18	0.12	0.20	0.15
	R^2=	19.9%	R^2=	20.0%

Significant at *p<0.05. **p<0.01.

Table A3.2a: Individual, Household and Community Characteristics Effects on Indonesian Households' Structural Social Capital (Regression Analysis with Pairwise Deletion)

N=76	Public Places		Comm Activity		Close Ind.		Support Ties		Bonds		Bridges		Linkages	
	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er
Model 1 (Individual Characteristics)														
YearResettled	4.92	6.60	0.27	6.31	-0.11	0.16	-0.38	0.40	1.56	4.04	3.13	8.31	0.03	0.06
Age	0.56	1.15	-0.38	1.10	-0.01	0.03	-0.02	0.07	-0.75	0.70	0.90	1.45	-0.01	0.01
Total Civicness	0.17	0.15	0.25	0.14	0.00	0.00	0.00	0.01	0.12	0.09	0.30	0.18	0.00**	0.00
EducationalLevel	-13.04	9.32	12.66	8.92	-0.03	0.23	0.34	0.57	4.93	5.71	-4.91	11.74	0.10	0.09
Male	18.66	47.18	28.74	45.15	-1.64	1.16	-3.03	2.88	16.86	28.90	25.59	59.44	0.01	0.45
Living in RT1	13.97	31.15	41.67	29.81	0.34	0.76	1.06	1.90	26.63	19.08	30.92	39.25	0.30	0.30
Living in RT2	-4.33	29.32	49.36	28.06	-0.73	0.72	0.70	1.79	41.13*	17.96	3.91	36.95	0.59*	0.28
Bantarmangu	20.95	26.85	8.27	25.70	-0.04	0.66	0.93	1.64	3.52	16.44	26.82	33.83	-0.25	0.26
	R^2=	7.1%	R^2=	14.7%	R^2=	7.6%	R^2=	4.7%	R^2=	13.7%	R^2=	8.0%	R^2=	24.2%
Model 2 (Household Characteristics)														
Kids in school	15.25	17.56	-1.30	16.95	0.00	0.39	1.08	1.01	3.77	10.78	11.54	21.97	-0.04	0.18
Wife Employment Status	15.52	102.79	-22.69	99.21	-2.30	2.29	-0.08	5.93	-31.76	63.09	20.44	128.61	-0.20	1.04
Household Size	4.55	12.68	2.25	12.24	0.00	0.28	0.10	0.73	-3.17	7.78	10.09	15.87	0.02	0.13
Wife Prestige	-0.52	4.40	1.09	4.25	0.20*	0.10	0.05	0.25	0.82	2.70	0.11	5.51	0.02	0.04
Husband Prestige	-2.01	2.34	-1.12	2.26	0.03	0.05	0.05	0.13	-0.32	1.43	-2.74	2.92	-0.01	0.02
Household Income	30.43	36.07	25.13	34.81	-1.06	0.80	-0.39	2.08	19.42	22.14	34.92	45.13	0.70	0.37
House floor size	-1.42	1.45	-0.19	1.40	0.04	0.03	-0.03	0.08	0.61	0.89	-2.22	1.81	-0.01	0.01
Number of bedrooms	-12.92	28.39	48.30	27.40	0.03	0.63	2.82	1.64	25.00	17.42	13.49	35.52	0.43	0.29
% of income for food	0.73	0.67	-0.40	0.65	-0.02	0.01	-0.07	0.04	-0.35	0.41	0.57	0.84	-0.01	0.01
Number of sick child	-6.47	23.62	-6.81	22.80	0.37	0.53	-0.02	1.36	-5.85	14.50	-7.25	29.56	-0.18	0.24
Wife Occupation	-0.27	13.18	-6.31	12.72	-0.683*	0.29	-0.23	0.76	-0.82	8.09	-6.95	16.49	-0.07	0.13
Husband occupation	-0.98	6.80	0.24	6.56	0.10	0.15	-0.06	0.39	-1.21	4.17	0.61	8.51	0.00	0.07
	R^2=	12.8%	R^2=	11.7%	R^2=	18.8%	R^2=	13.8%	R^2=	14.1%	R^2=	11.4%	R^2=	15.1%

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Model 3 (Community Characteristics)														
Comm.participation	28.16	16.87	14.04	15.13	-0.78	0.42	0.53	1.02	3.21	9.63	38.77	19.64	0.06	0.19
Relationship of comm. to:														
Local govt.	7.59	12.58	24.24*	11.28	0.34	0.31	0.42	0.76	16.18*	7.18	16.24	14.64	-0.19	0.14
Central govt.	-19.53	17.72	7.80	15.90	-0.09	0.44	-1.84	1.07	2.96	10.12	-16.64	20.63	0.12	0.20
Mosque	-2.88	16.51	-19.77	14.81	0.12	0.41	-1.15	1.00	-6.26	9.43	-17.41	19.22	-0.20	0.19
No. of basic services	-11.98	9.56	-20.77*	8.57	-0.78*	0.24	-0.75	0.58	-9.78	5.46	-24.54*	11.13	0.01	0.11
No. of public places	13.48	10.68	37.42**	9.58	0.57*	0.26	1.58*	0.64	28.87**	6.10	24.42	12.44	0.23	0.12
No. of dividing factors	20.58*	8.05	22.57**	7.22	-0.38	0.20	0.45	0.49	13.73**	4.60	29.51**	9.37	0.18	0.09
No. denied soc. services	-2.44	6.36	8.40	5.70	-0.23	0.16	0.56	0.38	6.21	3.63	0.11	7.40	0.05	0.07
Reasons denied services	-9.95	8.72	-10.20	7.82	0.37	0.21	0.84	0.53	-7.69	4.98	-10.97	10.15	-0.09	0.10
Whole Comm. Decides	-61.40*	25.75	-93.04*	23.10	0.16	0.63	-2.53	1.55	-49.51**	14.71	-108.03**	29.98	-0.17	0.29
Community is Peaceful	-48.99	99.61	-142.83	89.34	-0.03	2.45	-3.72	6.01	-59.00	56.88	-136.36	115.96	-0.51	1.13
Comm. is Harmonious	75.72	52.38	102.82*	46.98	0.81	1.29	2.61	3.16	71.56*	29.91	109.73	60.98	0.63	0.59
	R^2=	27.1%	R^2=	40.9%	R^2=	26.6%	R^2=	29.8%	R^2=	41.0%	R^2=	38.2%	R^2=	16.8%

Significant at *p<0.05. **p<0.01

Table A3.2b: Individual, Household and Community Characteristics Effects on Indonesian Households' Cognitive Social Capital (Regression Analysis with Pairwise Deletion)

N=76	Trust		Reciprocity	
	Coef.	Std.Er	Coef.	Std.Er
Model 1 (Individual Characteristics)				
YearResettled	0.02	0.02	0.07	0.08
Age	0.00	0.00	0.00	0.01
Total Civicness	0.00	0.00	0.00	0.00
EducationalLevel	0.02	0.03	-0.05	0.11
Male	-0.01	0.16	-0.28	0.57
Living in RT1	0.09	0.10	0.00	0.38
Living in RT2	0.03	0.10	0.35	0.35
Bantarmangu	0.11	0.09	-0.27	0.32
	R^2=	9.1%	R^2=	7.0%
Model 2 (Household Characteristics)				
Kids in school	0.10*	0.05	-0.21	0.21
Wife Employment Status	0.35	0.29	2.18	1.21
Household Size	-0.03	0.04	0.00	0.15
Wife Prestige	-0.02	0.01	-0.11*	0.05
Husband Prestige	-0.01	0.01	-0.06	0.03
Household Income	-0.04	0.10	0.28	0.42
House floor size	0.01	0.00	-0.03*	0.02
Number of bedrooms	-0.11	0.08	-0.10	0.33
% of income for food	0.00	0.00	0.00	0.01
Number of sick child	0.01	0.07	-0.61*	0.28
Wife Occupation	0.04	0.04	0.25	0.16
Husband occupation	0.02	0.02	0.13	0.08
	R^2=	24.1%	R^2=	23.0%
Model 3 (Community Characteristics)				
Comm.participation	0.14*	0.05	-0.17	0.21
Relationship of comm. to:				
Local govt.	0.10*	0.04	-0.06	0.16
Central govt.	0.00	0.06	0.19	0.22
Mosque	-0.10	0.05	0.35	0.21
No. of basic services	0.02	0.03	0.17	0.12
No. of public places	0.02	0.03	0.23	0.13
No. of dividing factors	0.00	0.03	-0.02	0.10
No. denied soc. services	0.00	0.02	0.11	0.08
Reasons denied services	-0.02	0.03	-0.27*	0.11
Whole Comm. Decides	0.15	0.08	-0.46	0.32
Community is Peaceful	-0.38	0.32	1.17	1.25
Comm. is Harmonious	0.40*	0.17	1.34*	0.66
	R^2=	32.4%	R^2=	29.0%

Significant at *p<0.05. **p<0.01

Table 3.3a: Effects of Civic Engagement History and Institutional Factors on the Philippine Household's Rebuilt Structural Social Capital (Regression Analysis with Pairwise Deletion)

N=150 (PHILIPPINES	Public Places		Comm Activity		Close Ind.		Support Ties		Bonds		Bridges		Linkages	
	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er
Male	0.26**	20.34	0.10	12.12	0.21*	0.62	0.07	1.39	0.15	8.43	0.25*	22.03	0.10	0.28
Household Income	0.18*	20.52	0.02	12.23	0.21*	0.62	0.14	1.40	0.16*	8.50	0.13	22.23	0.04	0.28
Employed	0.01	19.37	0.02	11.54	-0.16	0.59	0.07	1.33	0.11	8.03	-0.02	20.98	0.17	0.27
*Participation in Comm.	0.15	10.48	0.10	6.25	0.09	0.32	0.18	0.72	0.11	4.34	0.16	11.35	-0.02	0.15
*No. of Part. in Comm.	0.15*	0.41	0.05	0.24	0.03	0.01	0.07	0.03	0.07	0.17	0.14	0.44	0.27**	0.01
*Rel. Comm & Local Gov	-0.15	11.34	-0.14	6.76	-0.11	0.34	0.02	0.78	-0.18	4.70	-0.14	12.28	0.07	0.16
No. of Public Places Visits	0.39**	0.01	0.14	0.01	0.08	0.00	0.30**	0.00	0.36**	0.00	0.32**	0.01	0.04	0.00
No. of Public Places	0.04	4.26	-0.17	2.54	-0.06	0.13	0.00	0.29	-0.22*	1.77	0.03	4.62	-0.10	0.06
Comm. Support Score	0.11	1.51	0.30**	0.90	0.24**	0.05	0.02	0.10	0.22**	0.62	0.18*	1.63	0.03	0.02
Part. in Comm. Activities	0.27**	0.34	0.38**	0.20	0.02	0.01	0.06	0.02	0.32**	0.14	0.33**	0.37	-0.09	0.00
R^2	44.1%		30.9%		13.6%		20.9%		36.7%		43.3%		12.9%	

*Data were based on 'before resettlement'
significant at *p<0.05, **p<0.01

Table 3.3b: Effects of Civic Engagement History and Institutional Factors on the Philippine Household's Rebuilt Cognitive Social Capital (Regression Analysis with Pairwise Deletion)

N=150 (PHILIPPINES	Trust		Reciprocity	
	Coef.	Std.Er	Coef.	Std.Er
Male	-0.05	0.15	-0.04	0.15
Household Income	0.01	0.15	0.14	0.16
Employed	0.06	0.15	0.13	0.15
*Participation in Comm.	0.15	0.08	0.10	0.08
*No. of Part. in Comm.	0.10	0.00	0.00	0.00
*Rel. Comm & Local Gov	-0.14	0.09	-0.21	0.09
No. of Public Places Visits	0.00	0.00	0.10	0.00
No. of Public Places	0.19	0.03	-0.17	0.03
Comm. Support Score	-0.21*	0.01	0.02	0.01
Part. in Comm. Activities	-0.16	0.00	0.09	0.00
R^2	12.4%		6.6%	

*Data were based on 'before resettlement'
significant at *p<0.05, **p<0.01

Table 3.4a: Effects of Civic Engagement History and Institutional Factors on the Indonesian Household's Rebuilt Structural Social Capital (Regression Analysis with Pairwise Deletion)

N=76 (INDONESIA)	Public Places		Comm Activity		Close Ind.		Support Ties		Bonds		Bridges		Linkages	
	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er	Coef.	Std.Er
Male	0.01	56.16	0.08	46.07	-0.24	1.37	-0.04	3.44	0.00	26.57	0.07	69.92	-0.03	0.43
Household Income	-0.04	12.82	-0.05	10.52	0.14	0.31	0.00	0.79	-0.02	6.07	-0.06	15.97	0.10	0.10
Employed	0.13	46.65	0.08	38.28	0.12	1.14	0.01	2.86	0.12	22.07	0.10	58.09	-0.08	0.36
*Participation in Comm.	0.29*	13.97	0.22*	11.46	-0.18	0.34	0.10	0.86	0.26**	6.61	0.27*	17.40	0.15	0.11
*No. of Part. in Comm.	-0.05	0.29	0.01	0.24	-0.10	0.01	-0.16	0.02	0.00	0.14	-0.05	0.36	-0.29	0.00
*Rel. Comm & Local Gov	-0.02	11.89	0.19	9.76	0.10	0.29	0.11	0.73	0.22*	5.63	0.03	14.81	-0.19*	0.09
No. of Public Places Visits	0.22	0.02	0.34*	0.01	-0.14	0.00	-0.01	0.00	0.44**	0.01	0.21	0.02	0.51**	0.00
No. of Public Places	-0.02	11.52	0.09	9.45	0.05	0.28	0.12	0.71	0.16	5.45	-0.02	14.34	-0.04	0.09
Comm. Support Score	-0.14	2.85	0.25	2.34*	0.16	0.07	0.30*	0.17	0.19	1.35	0.02	3.55	0.15	0.02
Part. in Comm. Activities	0.11	0.30	0.15	0.24	-0.03	0.01	0.17	0.02	0.09	0.14	0.18	0.37	0.50**	0.00
R^2	11.8%		40.2%		12.3%		12.4%		50.9%		14.4%		54.2%	

*Data were based on 'before resettlement'
significant at *p<0.05, **p<0.01

Table 3.4b: Effects of Civic Engagement History and Institutional Factors on the Indonesian Household's Rebuilt Cognitive Social Capital (Regression Analysis with Pairwise Deletion)

N=76 (INDONESIA)	Trust		Reciprocity	
	Coef.	Std.Er	Coef.	Std.Er
Male	0.11	0.28	-0.22	0.70
Household Income	-0.10	0.06	-0.09	0.16
Employed	-0.04	0.23	0.23	0.59
*Participation in Comm.	-0.10	0.07	0.03	0.18
*No. of Part. in Comm.	-0.07	0.00	0.35	0.00
*Rel. Comm & Local Gov	0.22	0.06	-0.09	0.15
No. of Public Places Visits	-0.01	0.00	0.07	0.00
No. of Public Places	0.17	0.06	0.19	0.14
Comm. Support Score	0.20	0.01	-0.04	0.04
Part. in Comm. Activities	0.23	0.00	-0.34	0.00
R^2	13.5%		14.6%	

*Data were based on 'after resettlement'
significant at *p<0.05, **p<0.01

SUMMARY

Displacement of poor families contribute to the worsening of their poverty situation yet involuntary resettlement still takes place. According to the latest Report of the Indonesian Centre on Housing Rights and Eviction, more than 12,000 people were reportedly evicted in August 2008 to give way to the "green space" land reclamation projects (COHRE 2008). In the Philippines, 59,462 households were relocated in the period 2001 – 2006 (HUDCC 2008) because of various infrastructure projects. Though more recent data are lacking, there is no evidence that the pace of displacement is slowing down.

The Impoverishment, Risks and Reconstruction (IRR) model of Cernea (2000) identifies nine interlinked potential risks inherent to displacement: landlessness, joblessness, homelessness, marginalization, food insecurity, increased morbidity and mortality, loss of access to common property, social disarticulation and educational loss. Out of the nine risks, social disarticulation or the loss of social capital in a resettlement site is the most complicated, because different factors are involved and because of its impact on vulnerability to the other risks. Social capital building or transplanting in an entirely different or new environment such as resettlement sites has remained an elusive topic in the research arena. This study tries to fill the void by addressing the following research problem: *How does social capital grow across time in an involuntary resettlement setting and what is the role of the context and its elements in shaping this growth?*

The study used a comparative approach and a longitudinal perspective. Applying a longitudinal perspective aimed at capturing the process of social capital building through time. It entailed a framework that wove the factors involved in the process – as hypothesised on the basis of social capital and resettlement theories – into a timeline that comprised four periods. These four periods included before resettlement, the first year in the site after resettlement, the following years in the site, and the year of the field study (2011 in the first study area and 2012 in the second). The influence of social capital development in each period on the following period was investigated.

Using a comparative perspective, two resettlement communities in Southeast Asia were chosen for this study. The first study site was in the Philippines and concerned an urban resettlement community named 'Kasiglahan Village 1' (KV1), situated in Barangay San Jose, Rodriguez, Rizal Province. The second study site, a rural resettlement community named 'Bantarpanjang Translok' (BT), was in Indonesia and located in Bantarpanjang, Cimanggu, Cilacap district in Central Java Province, Both are government-managed resettlement communities. Moreover, the resettled households in both countries had incomes that were below the minimum standard of living, and the ages of the communities were sufficiently similar – the Philippine site was 12 years old, and the Indonesian site was 11 years in existence at the time of fieldwork. The age of the resettlement site is crucial for the longitudinal perspective utilized for this research. Although comparable in important aspects, the two locations differ in terms of their cultural traditions, physical location, institutional context, national

resettlement policies, religion, ethnicity, and demographic and socio-economic profile. This allowed for a contextual analysis on the way in which social capital evolves.

Data for this study were gathered by combining qualitative and quantitative methods. Qualitative methods, such as in-depth interviews, exploratory interviews, observation, focus group discussions and life histories, were blended with quantitative methods. The latter included a household survey that used a tailored calendar tool to enhance the validity and reliability of the retrospective data. Social network analysis was conducted as well.

The results of the analysis of the state of the communities before involuntary resettlement and a year later conveyed the following. Overall, involuntary resettlement in both setting did not significantly harm the households' structural and cognitive social capital. After a year, the households in both settings were able to create and somehow duplicate the levels of trust and reciprocity they had in their previous communities. Moreover, the data suggest that the civic engagement history of the households is only influential in social capital building within a new community when the households share cultural traditions and social practices that are regularly observed. In the absence of such cultural traditions and social practices, it is institutional interventions that will stimulate social capital formation.

When looking at social capital creation across time in the two locations, the forging of ties among the household grows every year. There are three perspectives that can explain such a process. These are represented by variables relating to (i) individual and household attributes, (ii) the institutional context, and (iii) social capital history. On developing weak and strong ties, both cases demonstrate growth spurts during the year when there was an influx of resettlers and basic services and public places had been put in place. Moreover, after a period of upsurge, social capital attains a level of steady growth. Social capital growth can be seen as intertwined with the stabilisation of the resettlement sites in terms of physical infrastructure and social services as well as the achievement of a sense of "getting settled".

The study provides rich insights about the effects of resettlement programs and social capital on whether households in an involuntary resettlement context 'get by' or manage to 'get ahead' and improve their situation. The outcomes differ according to resettlement policies, culture, location, and phase of resettlement (first year and last year). In addition, all forms of structural social capital turned out meaningful for getting by and getting ahead, although some types of ties would feature more prominently than others. In the Philippines case, the number of support ties played a significant role in the economic and physical well-being of the households, while in the Indonesian case it is the number of close individuals and number of government ties that mattered most. Overall, 'soft' resettlement inputs were found indispensable in both locations for the households' capacity to get by and get ahead. Government meetings and membership of civic organizations contributed positively to household food security (last year) and social well-being (both years) of the Philippine resettlers. For the Indonesians, these contributed to their household income (first year) and social well-being in both periods. Community organisation should therefore be an integral part of resettlement projects.

Social network analysis was conducted on the networks of households in Indonesia and those of community leaders in the Philippines. In Indonesia and the Philippines, social network analysis revealed that after a certain period in a new community and

living among other involuntarily resettled strangers, households eventually establish interconnections among them. Gender proved to be a factor not only in shaping social networks but also in reinforcing certain advantages of some of the features of the social networks in a resettlement site. Gender differences emerged in both settings, the female advantage in forming friendships being one of them. In both cases, women (housewives in Indonesia and leaders in the Philippines) have a bigger proportion of friends in their network than men, indicating that they are better at nurturing connections that develop into friendship. The analysis also shows how the emerging community as a whole can benefit from the friendship networks of women. The default assignment of authority to men in the community and the wives supporting this gender construction, can account for the male-dominated brokerage roles and men being the influential actors in the Indonesian site. Contrastingly, in the Philippine location women leaders monopolize the brokerage role and are influential actors. Compared to male leaders, there the women leaders in the community have better interpersonal skills, are more empowered and are more active in civic organisations and activities. They bring more projects and activities to their members and connect better to the authorities than their male counterparts.

This study provides strong evidence on a number of issues. First, the mending of new social communities by social capital building takes place right after the resettlement and amidst a worsening poverty situation in the new location. Second, civic engagement history can only significantly enhance social capital building in a site when it is shared by almost the entire community. Third, social capital history can be created by the new inhabitants of a resettlement site even in a short period of time. And fourth, the results of applying the institutional perspective underscore the importance of the creation of policies and projects that target the community's physical development and its social organisation. Overall, the process of social capital growth seems to be largely beyond the control of the individual resettlers. It is shaped by the context and its constituting elements, rather than by the characteristics of the individuals and households concerned.

SAMENVATTING

Hoewel onvrijwillige verplaatsing van arme gezinnen hun situatie verslechtert, komt het nog steeds veel voor. Volgens een rapport van een Indonesisch onderzoekscentrum voor rechten op huisvesting bij onvrijwillige uitzetting werden alleen al in augustus 2008 12.000 mensen uit hun woning gezet om plaats te maken voor 'groene ruimte' projecten (COHRE 2008). In de Filippijnen ondergingen in de periode 2001-2006 in totaal 59.462 huishoudens het lot van uitzetting en herhuisvesting vanwege infrastructurele projecten (HUDCC 2008). Ofschoon er geen meer recente data beschikbaar zijn, wijst niets er op dat het aantal gevallen van onvrijwillige uitzetting en herhuisvesting afneemt.

In het ÍRR model van Cernea (2000) waarin verarming, risico's en reconstructie een sleutelrol worden toegekend in processen van onvrijwillige verplaatsing, worden negen onderling verbonden risico's voor de betrokken huishoudens geïdentificeerd. Deze zijn: verlies van land, verlies van werk en baan, verlies van eigen huis, marginalisatie, voedsel gebrek, gezondheidsrisico's, verlies van toegang tot algemeen eigendom, sociale disarticulatie, en verlies van onderwijs en scholing. Van deze negen is het risco van sociale disarticulatie, het verlies van sociaal kapitaal (sociale contacten en netwerken), het meest complex omdat dit risico de betrokken personen en huishoudens kwetsbaarder maakt voor de andere risico's. De problemen bij het opbouwen van nieuw sociaal kapitaal of het meenemen van bestaand sociaal kapitaal naar een geheel nieuwe omgeving is een onderwerp dat weinig aandacht krijgt in de literatuur. Deze studie is bedoeld om in deze lacune te voorzien door onderzoek naar de volgende probleemstelling: *Hoe bouwen mensen sociaal kapitaal op in een context van onvrijwillige herhuisvesting en welke rol spelen omgevingsfactoren in de manier waarop dit proces verloopt?*

In de studie werden een vergelijkende benadering en een longitudinaal perspectief toegepast. Het longitudinale perspectief was bedoeld om het proces van het opbouwen van sociaal kapitaal door de tijd heen te traceren. Hiertoe werden op basis van de theoretische literatuur de factoren geïdentificeerd die in het proces een rol zouden kunnen spelen. Het tijdsbestek dat werd onderzocht werd in vier fasen onderverdeeld: het jaar voorafgaande aan de onvrijwillige verplaatsing, het eerste jaar in de nieuwe woongemeenschap, de daarop volgende jaren, en het jaar waarin het veldonderzoek werd gedaan (2011 in het eerste onderzoeksgebied en 2012 in het tweede). De ontwikkeling van het sociale kapitaal van de betrokken huishoudens en de invloed van de geïdentificeerde factoren hierop per fase alsmede de invloed van een voorafgaande fase op een volgende fase, werden onderzocht.

In het kader van de vergelijkende benadering werden twee woongemeenschappen van onvrijwillig verplaatste gezinnen gekozen. De eerste was een stedelijke locatie in de Filippijnen genaamd Kasiglahan Village 1 (KV1), in Barangay San Jose, Rodriguez, provincie Rizal. De tweede was de rurale gemeenschap Bantarpanjang Translok (BT) in Cimanngu, district Cilacap, provincie Midden Java, in Indonesië. Beide werden door de overheid opgezet en worden door de overheid beheerd. In beide gemeenschappen betrof het arme huishoudens. De gemeenschappen waren ten tijde van het veldwerk ongeveer even oud, KV1 was 12 jaar oud en BT 11 jaar. Dit was belangrijk vanwege het longitudinale perspectief dat in het onderzoek werd toegepast. Ofschoon de twee onderzoekslocaties dus in belangrijke aspecten vergelijkbaar waren, verschilden ze in andere opzichten zoals culturele tradities, religie en etniciteit, demografische en sociaal-economische kenmerken van de huishoudens, fysieke

kenmerken van de locaties, institutionele context, en beleid van de betrokken overheden. Dit maakte een contextuele analyse van het proces van sociaal kapitaal ontwikkeling mogelijk.

De data voor deze studie werden gegenereerd met behulp van een combinatie van kwalitatieve en kwantitatieve onderzoeksmethoden. Kwalitatieve methoden waren diepte interviews, observatie, focus groep discussies, en het documenteren van levensgeschiedenissen. Om de validiteit en betrouwbaarheid van de data te versterken, werden de kwalitatieve methoden in samenhang met een huishoudsurvey en het instrument van de kalender methode toegepast. Tevens werd netwerk analyse gebruikt.

De vergelijking van de situatie van de gemeenschappen in het jaar voorafgaande aan hun onvrijwillige verhuizing met die in het eerste jaar in de nieuwe woongemeenschap resulteerde in het volgende beeld. In beide gemeenschappen (KV1 en BT) had het structurele en cognitieve sociale kapitaal van de huishoudens niet significant geleden onder de onvrijwillige verplaatsing. Na een jaar in de nieuwe vestiging waren de huishoudens er in geslaagd onderling vertrouwen en reciprociteit vast te houden en te vermeerderen. Uit de data blijkt ook dat civiele betrokkenheid bij de gemeenschap alleen een positieve invloed heeft op sociaal kapitaal als de huishoudens actief culturele en sociale tradities delen en in stand houden. Als dat niet het geval is, zijn institutionele factoren van grotere invloed.

Wat betreft het genereren van sociaal kapitaal door de tijd bleek dat in beide gemeenschappen het aantal sociale contacten ieder jaar toenam. De drie typen variabelen die dit kunnen verklaren zijn: (i) individuele en huishoudkenmerken; (ii) de institutionele context; en (iii) de sociaal kapitaal geschiedenis. De ontwikkeling van zogenaamde 'zwakke' en 'sterke' banden liet een sterke toename zien in de jaren waarin er een influx was van nieuwe bewoners en openbare ruimten en basisvoorzieningen werden geïnstalleerd. Na zo'n piek in de toename van sociaal kapitaal stabiliseerde het niveau en was er sprake van een geleidelijke toename. Daaruit blijtk dat de ontwikkeling van sociaal kapitaal samenhangt met de fysieke infrastructuur van en de basis voorzieningen in de locatie.

Het onderzoek levert belangrijke inzichten op over de effecten van hervestigingsprogramma's en sociaal kapitaal op het vermogen van de betrokken huishoudens om zich staande te houden of hun situatie te verbeteren. De uitkomsten verschillen al naar gelang het overheidsbeleid, culturele achtergronden, locatie, en fase van vestiging (eerste of laatste jaar). Alle vormen van structureel sociaal kapitaal bleken belangrijk voor zowel standhouden als vooruitkomen, hoewel sommige sociale banden belangrijker bleken dan andere. In KV1 waren de relaties waar men een beroep op kan doen voor steun van groot belang voor het economische en fysieke welbevinden van huishoudens, terwijl in BT dit gold voor nauwe banden en overheidsconnecties. In beide locaties bleken zogenaamde 'zachte' inputs van de overheid, zoals het organiseren van bijeenkomsten en het stimuleren van bewonersorganisaties, van groot belang. Voor de KV1 huishoudens droegen deze significant bij aan hun voedselzekereheid (laatste jaar) en sociaal welzijn (eerste en laatste jaar). Voor de BT huishoudens waren deze van positieve invloed op het huishoudinkomen (eerste jaar) en sociaal welzijn (beide jaren). Daarom moet gemeenschapsorganisatie een integraal onderdeel van hervestigingsplanning zijn.

De sociale netwerken van huishoudens in Indonesië en die van lokale leiders in de Filippijnen werden aan een netwerk analyse onderworpen. De analyse wees uit dat na een bepaalde periode in een nieuwe gemeenschap sociale netwerken worden

opgebouwd. Hierin bleken verschillen tussen mannen en vrouwen. Vrouwen bleken sterker in het opbouwen van vriendschapsnetwerken. Van de huisvrouwen (in BT) en de vrouwelijke leiders (in KV1) was het aandeel van vriendschapsbanden in het sociale netwerk beduidend groter dan dat van mannen. De analyse laat zien hoe de betrokken gemeenschap als geheel kan profiteren van de vriendschappen van vrouwen. In de netwerken van de Indonesische mannen was het aandeel relaties met gezaghebbende personen groter dan dat in de netwerken van vrouwen, waarmee mannen een intermediaire rol konden vervullen en hun invloed konden aanwenden ten behoeve van de gemeenschap. In de Filippijnen daarentegen, bleken de vrouwelijke leiders meer invloedrijk dan hun mannelijke collega's. Ze hadden betere contactuele vaardigheden en waren actiever in organisaties en gemeenschapsactiviteiten. Daarmee konden ze voor hun achterban meer voor elkaar krijgen.

Het onderzoek heeft op belangrijke punten nieuwe inzichten opgeleverd. Ten eerste is gebleken dat het vormen van een nieuwe sociale gemeenschap meteen begint, ook in een situatie van toegenomen armoede. Ten tweede bleek de grote invloed van op traditie gebaseerde gemeenschapszin op de vorming van sociaal kapitaal. Ten derde wijst het onderzoek uit dat de vorming van sociaal kapitaal, anders dan in de literatuur vaak verondersteld, niet veel tijd nodig heeft. Ten vierde is het belang gebleken van institutionele en beleidsinitiatieven gericht op de fysieke ontwikkeling van en het vormen van sociale organisaties in de nieuwe gemeenschappen. Alles bij elkaar blijken de onvrijwillig verplaatste individuen weinig controle te hebben over het proces van de groei van sociaal kapitaal, dat vooral wordt bepaald door institutionele en culturele factoren.

About the Author

Melissa Quetulio-Navarra was born on May 24, 1973, in Mandaluyong City, Philippines and was raised in Quezon City. She attended the Philippine Normal University (PNU) with a PNU Alumni Association Scholarship and a PNU Exchange Scholarship, where she received the double degree of Bachelor of Arts and Bachelor of Science in Education major in English in 1994. After university graduation, she was hired as a lecturer in AMA Computer College and Pamantasan ng Lungsod ng Maynila and taught various English courses such as English grammar and composition writing, technical writing, and literature. In 1995, while working as a university lecturer, she enrolled in a Master of Arts programme on English Language and Literature in Ateneo de Manila University and finished the academic requirements.

Her teaching career took a turn in 1997 when she accepted the government position as a technical assistant to a Commissioner in the Presidential Commission for the Urban poor (PCUP), a government agency under the Office of the President of the Philippines. Since 1997 up to the present, she has held several leadership positions in PCUP in the areas of policy review and formulation, project management, local and international high-level coordination and networking, among others.

In 2005, she was chosen as one of the few grantees of Japanese Grant Aid for Human Resource Development Scholarship and studied at the Graduate School for International Cooperation Studies, Kobe University, Kobe, Japan. In 2007, she earned the degree of Master of Arts in International Studies. Her thesis focused on involuntary resettlement in the Philippines. Three years later, in 2010 she started her Doctor of Philosophy studies at Wageningen University, the Netherlands, under the Netherlands Fellowship Programme. While her research in the Philippines was funded by NUFFIC, the fieldwork in Indonesia was funded by the Neys-Van Hoogstraten Foundation. Her research interests include social capital, social network analysis, involuntary resettlement, poverty, and calendar methodology. In 2013, she was accepted as a visiting study fellow in Refugees Studies Centre of University of Oxford with a WASS Junior Research Grant.

She has presented some of her PhD study research results on the areas of methods application and social capital in several local and international conferences with funding from the LEB Foundation, the Neys Van Hoogstraten Foundation, WASS, and the University of Humanistics. Moreover, she has published articles in several peer-reviewed international journals such as Habitat International, International Journal of Social Sciences and Humanity Studies, Field Methods (in 2015), as well as contributed a chapter to the book "Good Work: the Ethics of Craftmanship".

Melissa Quetulio-Navarra

Completed Training and Supervision Plan

Wageningen School of Social Sciences (WASS)

Wageningen School of Social Sciences

Name of the learning activity	Department/Institute	Year	ECTS*
A) Project related competences			
Research Proposal Writing	SCH	2010	6.0
"Rebuilding Social Capital After Involuntary Resettlement in the Philippines and Indonesia"	WASS Review	2011	1.0
"Data Quality in the Application of Tailored Calendar Methods in Hard-to Reach Population: Results and Lessons"	ISA-RC33 Logic & Methodology in Sociology Conference, Sydney Australia	2012	1.0
"The Disruption and Rebuilding of Social Capital After Involuntary Resettlement in the Philippines and Indonesia"	International Conference on Social Sciences 2012, Kusadasi, Turkey	2012	1.0
"Application of Mixed Methods and Third-Party Help in a Hard-to-Reach Population"	Goodwork Conference, University for Humanistics, Utrecht	2012	1.0
"Social Capital in Involuntary Displacement and Resettlement"	International Conference on Social Sciences (ICSS) 2013, Kusadasi, Turkey	2013	1.0
"Social Capital and Sustainable Development in Involuntary Resettlement Context"	DEBEMSCAT National Conference, Masbate, Philippines	2014	1.0
"Quality of Data Collected from a Vulnerable Population in Indonesia: Using the Calendar Method with Third-Party Help"	XVIII ISA World Congress of Sociology, Yokohama, Japan	2014	1.0
Visiting fellowship	Refugees Studies Centre, University of Oxford, UK	2013	6.0
B) General research related competences			
Information Literacy, including Introduction to Endnote	WGS	2010	0.6
Cognitive Issues in Survey Response	Mansholt & CERES GS	2010	3.0
From Topic to Thesis Proposal (YRM 61303)	YRM	2010	3.0
Social Capital (SCH 51306)	SCH	2010	6.0
Basic Statistics (MAT-14303)	MAT	2010	3.0
A Practical Course on the Methodology of Fieldwork	CERES Summer School	2010	2.5
Qualitative Analysis (YRM 60806)	WASS	2010	6.0
Social Networks Analysis	ECPR Summer School	2010	5.0
C) Career related competences/personal development			
Innovation for Sustainability: Bringing Theory into Practice	PE&RC, Transforum, WASS	2010	3.0
Storytelling Seminar	WASS	2011	
Total			**51.1**

*One credit according to ECTS is on average equivalent to 28 hours of study load

Printed by: Wöhrmann Print Service, Zutphen, the Netherlands