

THE DISRUPTION AND REBUILDING OF SOCIAL CAPITAL IN INVOLUNTARY RESETTLEMENT IN THE PHILIPPINES AND INDONESIA

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Abstract

Resettlement studies are in agreement that involuntary resettlement tears apart the existing social fabric where poor households can draw different forms of resources for survival or sustenance. Utilizing the social capital theory, the present study presents findings on the extent of how the structural and cognitive dimensions of social capital was disrupted by the displacement and how it was subsequently rebuilt amidst strangers in the new government resettlement sites a year later.

Key Words: involuntary resettlement, social capital building

JEL Classification: Z13, R23

1. INTRODUCTION

Estimates reveal that there are approximately 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 (2010) stresses that involuntary displacement occurs when the decision of moving is made and imposed by an external agent and staying is not an option. There are three types of involuntary displacement: development-induced displacement and resettlement, disaster-induced displacement and conflict-induced displacement (FMO, 2010; WB, 2010). The resettled household and individuals are called “resettlers”, “displacees”, or “relocatees”. Cernea and McDowell (2000, p.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...”

Some involuntary resettlement in urban and rural contexts have already been investigated from the perspective of the families’ disrupted social relations, using the social capital lens. These studies describe the experiences of refugees and families affected by development projects in first world countries and present the individual’s or family networks’, ties, trust and norms as indispensable mechanisms in building a “new social world”. This was applied to, for example, refugees in Australia (Westoby, 2008), “new Canadians” (Lamba & Krahn, 2003), and women in the United States who were evicted and resettled due to low-income housing redevelopment project (Barry Wellman, 2001; Alexandra M. Curley, 2009; Kleit, 2010).

This research presents findings on how the social capital for households displaced due to development projects and natural disaster in the Philippines and in Indonesia, respectively, was disrupted and rebuilt after their resettlement, and how these processes differed between the two sites. The following research questions were addressed in the study:

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

2. How do characteristics of the respondents, their household, and the resettlement community relate to the rebuilding of social capital in the new community?
3. How does the role of social capital differ between the sites in the two countries?

2. SOCIAL CAPITAL IN INVOLUNTARY RESETTLEMENT

Researchers on social capital in forced migration have used definitions of social capital as set forth by Bourdieu, Coleman and Putnam. Bourdieu and Wacquant (1992) 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”, a definition taken over by Lin (2001). Coleman (1994) 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 features of social organization such as networks, norms, trust that facilitate coordination and cooperation towards mutual benefit. 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, a house and intangible ones like endorsements, education, reputation, or security (Lin, 2001). Woolcock and Narayan (2000) emphasize the “networks view”, stressing the importance of the vertical and horizontal ties, associations, and relations between people, within and among other entities such as community groups, non-government organizations, 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 ties to “get by” or survive, their bridging 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 position of the individual in the social structure, which both facilitate or constrain the investment of social capital (Lin, 2001). Age featured as an element that shaped the size of the social networks among refugees in Canada from

different regions (Lamba & Krahn, 2003). Willems (2003) also found age to be an important factor in the social networks of Congolese, Rwandese, and Burundese refugees in Dar es Salaam.

Shared cultural practices within an ethnic group catalyse face-to-face interaction, as also shown by Somalian refugees in Australia (McMichael & Manderson, 2004). A study on resettlement experience in Dar es Salaam (Willems, 2003) showed that among the refugees, there were gender differences in the social ties men and women forged when comparing the post relocation phase and the pre-relocation situation. The changes in the number and gender of their ties before and after resettlement show how displacement had changed the lifestyle and employment status of women and men and how these changes affected the formation of their ties in their new community.

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 (A. M. Curley, 2010). However, the dismal quality of social services in a relocation project site, particularly the provision of peace and order, can also spur the forging of relations among the resettled residents (Clampet-Lundquist, 2010). In the project, the shared common space such as benches in front of the buildings and a community centre offering various activities for both kids and adults, positively facilitated the establishment of connections among the resettlers.

3. METHODOLOGICAL DESIGN

In the Philippines, a household survey was undertaken from April to June 2011 in Kasiglahan Village 1 (KV1). KV1 is a government-managed urban resettlement 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, natural and man-made disasters. Resettlement of families started in 1999.

In Indonesia, a survey was conducted from April to June 2012 in Bantarpanjang Translok (BT). BT is also a government-managed rural resettlement community situated in the district of Cilacap, in Central Java. Bantarpanjang Translok 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.

3.1 Sampling and Survey in the Philippines and Indonesia

In the Philippines, the 150 household-head respondents were chosen through simple random sampling with replacement from a sampling frame of 6,144 households. The target respondents of the study were the original house-and-lot owners. The master list of the beneficiaries was not updated, so we had to use simple random sampling with replacement. Replacements were made known after a long and tedious verification process in the field.

In Indonesia, considering there were only 76 legitimate household beneficiaries in the community, it was decided to interview all of them. The households are called 'occupants' because they do not own the house they are occupying.

Similar data gathering methods (quantitative and qualitative) were applied in both study sites. A household composition sheet and a tailored-calendar tool comprised the quantitative methods, while qualitative methods included key informant interviews, group interviews, participant and non-participant observations, in-depth interviews and focus group discussions.

The questions in the instrument are modification of the social capital measurement tool developed by Krishna and Shrader (2000). The calendar collected histories (from the year before the resettlement until the time of the survey) 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; and 6.) respondent's perception on the community. For this study only the data on the year before and a year later are tackled.

3.2 Measuring Social Capital

Social capital in this study was measured using proxies which can be divided in structural indicators and cognitive indicators. The measurement of social capital in this study recognizes the multi-dimensionality of the theory and avoids its tautological measurement that has flawed numerous social capital studies (see Stone, 2001). Structural indicators pertain to the determination of the network size at individual level for each year by counting the total number of people they reported based on the number generator, name generator, and combined name and resource generator. To examine the household's amount of social resources, the

ties were grouped according to the arguments of bonds, bridges, and linkages (Woolcock, 2001). Data on cognitive indicators (trust and norms of reciprocity) of the households and community before and after resettlement were elicited by asking the respondents questions relating to behaviour and attitude.

3.3 Analysis of Quantitative and Qualitative Data

The quantitative data were entered into Excel and were analysed using SPSS. T-test was performed on “before” and “after” resettlement continuous variables and non-parametric Wilcoxon test was applied on categorical variables. Subsequently, regression analysis was conducted on identified dependent and independent variables found on Table 1. Qualitative data were recorded and transcribed. Atlas t.i. was used in data processing and analysis.

4. FIELD RESULTS

Sixty-eight percent of the respondents in the Philippines 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. Most are Catholics. The respondents started moving to the area from 1999 until 2009. The resettlement package includes a house and lot in a resettlement community. The house and lot is payable in 20 years at Php 250 (5.9 USD) per month .

Majority of the respondents in Indonesia were male (92.1 %) and 7.1 percent female. A big number of respondents belonged to the age bracket of 41-60 years old with combined percentage of 64.6. High school was the highest education level reported by the respondents and with 71.1 percent of the household heads reaching only until elementary level. More than half of the respondents were either doing elementary jobs (31.6 %) or were farmers (23.7 %). The average household size is 3.96 and the average household income is IDR 10,975,006.58 (1,141.45 USD). Everybody is a Muslim. The households transferred to the community from 2001 until 2011. Their occupancy in Translok (the resettlement site) is in a sort of lease agreement.

4.1 Community Profile Before and After

The profiles of the households' previous communities and their resettlement community at 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, the communities of origin seemed better equipped with basic services such as water and electricity connections, paved streets, (mean score 20.44) than KV1 (mean score 17.13). Similarly, there were more public places available where they came from 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. They participated more in community activities in KV1 (9.16 mean increase). The level of contacts of the community with different entities such as the local government, central government, church, NGOs, and international organizations also did not improve much after the resettlement.

Most of the resettlers in Indonesia came from the mountains, therefore the increase in the number of basic services and public places is very much expected to increase when they transferred to their new community which is situated on flat land. However, the increase in the number of available basic services (0.99) and public places (0.61) was not so dramatic as the basic services were provided gradually (e.g. piped water, electricity, health clinics) to the households and public places were built based on the availability of budget. They were a little more active in community activities as evidenced by 0.13 increase on the rate of participation. Nonetheless, the state of the community whether residents were harmoniously living together changed from a previous 100 percent to 94.7. Slight increases are seen on the rate of community's relationship with different entities from the government, mosque, and NGO.

4.2 Household Profile Before and After

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 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. This may be a reason in the reduction of household income a year after their transfer to the community. Their average yearly household income of Php 92,139.87 (2,194 USD) in their previous residence was reduced to Php 86523.9 (2,060 USD) after their relocation. 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.

After their relocation to Translok, the number of employed wives decreased at 3.95 percent and the number of unemployed wives increased (1.74 %). Contrastingly, the number of employed husbands increased (2.63 %) and the number of unemployed ones decreased by 2.63 percent. This might explain the 27-percent increase in the household income after the relocation. Housing situation became bad in the resettlement site for most of the respondents. Housing materials changed from their previous concrete structure to wooden one and the number of bedrooms as well as house floor size decreased. Rate of civickness likewise increased by 1.17 mean score during the first year in the site.

4.3 Social Capital Before and After

Table 2 shows that there was a 23-percent reduction in the total network size of the Philippine households. This is due to the significant reduction (from the previous one) in the number of new acquaintances made in the public places in the new community and in their support ties. Nonetheless, the rest of their ties made in varying situations increased after the resettlement. They might have made new close friends and new contacts with individuals from potentially helpful entities, but this did not translate to dramatic increase in the number of individuals who they would rely on for support. Significant differences can be seen in the households number of bonds, bridges, and linkages before and after the resettlement. Their bonds almost doubled after relocating (from an average yearly rate of 43.37 to 73.85) and their bridges spiked as well from a mean of 146.45 to 205.65. The number of their linkages who in these context are individuals from the government and NGO also increased, although not much compared with the previous situation. These linkages range from government clerks and NGO staff to mayors, project managers, NGO officers. These were the entities that were tapped by the community leaders for the building of the church, public market, day care centres, school and provision of water and electricity. The level of trust, which is combined generalized trust and trust towards familiars (family members, neighbours, other people in community) increased a little after the transfer of the households in the Kasiglahan Village, from a mean of 2.71 to 2.73. Notwithstanding, 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 someone's house or child in the event of going away for a holiday with the family or for other reasons, they would entrust their house to their neighbour than with 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 considerably low. The level of reciprocity before and after the relocation process yield a significant difference along with the features of this reciprocity like concern for others, contribute money to project of others, and contribute time and money for development projects in the community. Level of reciprocity increased in half in the new community (from an average of 1.98 to 2.86) and basing on the reciprocity rating scale of one to four, the reciprocity level in Kasiglahan can be considered good.

In Indonesia, the households' number of ties in different context increased from 50 percent to almost 100 percent. The increase in their ties after the transfer to the new community seems to be well reflected on their support ties which apparently doubled (from a mean of 7.97 to 14.49). Significant mean differences are seen in the before and after state of the households' bonds, bridges, and linkages. Together with this is the huge increase in all their bonds, bridges, and linkages after the relocation. Level of trust decreased a little in their first year in Translok (from 2.84 mean to 2.76). Notwithstanding, looking closer, the decrease of trust towards other family member or relatives for child care and house sitting in cases they need to go away, is clearly explained by the positive development of trust towards their new neighbours. Coming from a 60.5 percentage of respondents who would entrust their house to neighbours, the percentage increased to 90.8 percent after the relocation. Improvement is also seen in trust towards neighbours for childcare which rose from 34.2 percent to 59.2 percent. Level of reciprocity among the new resettlers reduced minimally (0.34 mean difference) after the relocation. Nonetheless, the reciprocity scores before and after (5.34 and 5.03 means respectively) is considered high under one to seven scale.

4.4 Role of Individual, Household, & Community Qualities on Social Capital After Resettlement

The three levels of important qualities (individual, household, community) were grouped into independent variables and the different dimensions of social capital were organized as dependent variables. Multiple linear regression (pairwise deletion of missing values) was done for three groups of potential predictors-individual qualities, household qualities, community qualities with the different dimensions of social capital. Household income variable was transformed into its

log form in order to make the distribution more normal. Results for the Philippines are reflected on Table 3 and Table 4 for Indonesia.

4.4.1 Ties from public places and community activities, close individuals, support ties

As can be seen on Table 3, among the three models, it is the community qualities model ($R^2=22\%$) that can explain best the variation in the ties made in public places. This model three tells us that the number of public places in a community also matters in establishing ties with new people, the more public places present, the more opportunities in making friends and acquaintances during the first year of residence in a resettlement site. The same model also accounts best for the public places ties in the Indonesia case with an $R^2=27.1\%$ and with number of dividing factors as the best predictor (Table 4). More issues for divisions, more reasons for people to gather and chat on public places. In terms of the ties made during participation in community activities such as meetings and parties in the Philippines, household qualities model, particularly the variable husband prestige, turned out as producing the strongest effect ($R^2=30\%$). Compared with women in the community, men with better job which means higher prestige score would attend more meetings in the community. In contrast, Model 3 ($R^2=40.9\%$) came out the most significant in Indonesian context with the number of public places as the best predictor. When it comes to the ties the households cultivated with individuals who they would meet almost every day and who later became their “close friends”, the community qualities in the Philippines ($R^2=14.6\%$) and Indonesia ($R^2=26.6\%$) can explain it well. For ties made with people who provided them support in different needs (money, food, etc.), the number of sick child in Model 2 ($R^2=23.3\%$) turned out as the biggest influence in the Philippine context. A sick child can put a parent or head of the household in vulnerable situation that assistance from neighbours and friends is necessary. On the other hand, it is still the number of public places (in Model 3, $R^2=26.6$) in Translok that spelled the strongest effect on number of support ties.

4.4.2 Bonds, bridges, and linkages, trust, and norms of reciprocity

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 civickness came out as the variable that has the strongest effect on creating ties with persons who are similar with him or her. Number of bonding ties in Translok can be attributed to community qualities ($R^2=41\%$), with number of public places as the best predictor. When it comes to building bridges (acquaintances, people from church, workplace, etc.) the individual qualities model, particularly the civickness rate or

level of the respondents generated the strongest significant effects ($R^2=25.1\%$). In Indonesia, bridging ties were induced by a situation where the leaders would decide for projects instead of the whole community (Model 3, $R^2=38.2\%$). Linkages with the government and NGO was facilitated by the rate of relationship between the KV1 community and the local government (Model 3, $R^2=15.8\%$). On the other hand, the linkages established by the Translok residents was due to their level of civicness found in the individual qualities model ($R^2=24.2\%$). Fathers in the community are generally civic-minded, they would attend meetings, wrote project proposals to the village leader for rice subsidy and for the eventual selling of the house and lot in Translok to the occupants. The level of trust towards the community or generalized trust during the first year in KV1 was stimulated by the number of dividing factors in the community as well as the number of present basic services (Model 3 $R^2=19.9\%$). This may be due to the fact that most of the basic services in KV1 were borne out of the initiatives of the community leaders and the organization leaders during the first. In Indonesia, it is the rate of participation in the community (Model 3, $R^2=32.4\%$ that reinforced the level of generalized trust. In contrast, trust towards the familiars (friends, neighbours, relatives) was encouraged by a lower household income ($R^2=18.9\%$) in the Philippines and a smaller percentage of household income spent on food (Model 3, $R^2=25.4\%$) in Indonesia. Norms of reciprocity in Philippine case was facilitated by rate of participation in the community (Model 3, $R^2=20\%$) and number of social services they were denied of or had limited access to in Indonesia case (Model 3, $R^2=29\%$).

5. DISCUSSIONS AND CONCLUSIONS

The study brings forth some evidences on how victims of involuntary resettlement in two different contexts in Southeast Asia rebuilt their social capital during the first year in their new communities amidst strangers and poverty. In both the Philippine and Indonesia cases, public places and community activities were instrumental in cultivating bonding ties with people who they just recently met. It was likewise illustrated in both sites that the resettlers were capable of expanding their bridging ties in their first year. Nonetheless, marginal increase in their linking ties is evident in both cases. Both contexts do not have high level of trust to the community in terms of lending and borrowing money but they have high level of trust to their familiars regarding house sitting and child care. Differences between the two locations are also evident. While the number of acquaintances made in public places decreased in Kasiglahan on the first year, the opposite happened in Translok. If the households in the Philippines would reciprocate resources more in the new site, households in Indonesia reciprocated a little less

after the relocation. But overall, Indonesia's level of reciprocity is much higher than the Philippines. Moreover, individual, household and community qualities generated different effects on the building of the new social capital in the resettlement sites. In the Philippine case, qualities inherent in an individual were both responsible for the generation of bonding ties and community qualities for the linkages. On the other hand, the qualities of the Translok community facilitated the establishment of the bonds and bridges and the individual qualities were responsible for the households' linkages.

These results from both countries stress how the context and built-in resilience among the households played a huge role in the rebuilding of their social capital after the involuntary displacement. The community leaders in the Philippines who came from urban centres and resettled in a new urban environment demonstrated their capacity to mobilize their bridges and linkages so the households would be provided with water, electricity, etc. On the other hand, the culture of partying and meetings in Indonesia played a big role in building reciprocity among the new neighbours. These findings somehow reject the argument that it takes time to build social capital (Putnam & Feldstein, 2003). In a matter of one year, the households were able to socially adapt in the new setting, expand their social capital, as well as replace the lost ones.

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Appendix

Table 1
Dependent Variables

Grouping	Variables	Explanation
Size of network	Total Ties Made in Public Places	Sum of acquaintances and friends made in public places
	Total Ties Made in Community Activities	Sum of acquaintances and friends made in community activities
	Number of Simple Individuals Frequently met	
	Number of Support ties	Individuals who helped them in different needs (emotional support, money, child care, food security, etc.)
Social Resources	Bonds	Combined number of friends made in public places & community activities; simple individuals frequently met; friends, neighbours & family members who would help them
	Bridges	Combined number of acquaintances made in public places & community activities; ties from church; other individuals (not friends, neighbours & family members) who would help them
	Linkages	Number of ties with government (community, local, central, national levels) & ties with individuals working for NGOs
Trust	Generalized trust	Sum of all 1= yes answers for the following Dummy variable, where 1= trust the community in general in terms of lending and borrowing money Dummy variable, where 1= trust other people for neighbour when leaving the house Dummy variable, where 1= trust other people for neighbour when leaving the child
	Trust towards familiars	Sum of all 1= yes answers for the following Dummy variable, where 1= trust other family members when leaving the house Dummy variable, where 1= trust neighbour when leaving the house Dummy variable, where 1= trust other family members when leaving the child Dummy variable, where 1= trust neighbour when leaving the child
Reciprocity	Total level of reciprocity	Sum of all 1= yes answers for the following Dummy variable, where 1= give time to other projects not benefitting their own phase (block) Dummy variable, where 1= give money to other projects not benefitting their own phase (block) Dummy variable, where 1= give time and money to development projects in their community Assigned scores to answer - Don't agree= 1 and Strongly disagree= 2 for the question: "People here in the community only look after their family's welfare?"

Independent Variables

Grouping	Variables	Explanation
Individual Attributes	Place of origin	Different cities/villages of origin were ranked based on distance from the present community
	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 civioness	Scores on civioness indicators were summed up
	Religion (for Philippines)	Dummy variable, where Catholic= 1; Dummy variable, where Iglesia ni Cristo= 1
	Living in Plains or Sub-urban	Dummy variable, where Sub-urban = 1
	Living in RT1/RT2	Dummy variable, where RT1= 1; Dummy variable, where RT2= 1
	Educational level	Unfinished elementary until college level
Household Attributes (after resettlement)	Household income	Household income for the year after resettlement
	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 0= unemployed; 1=elementary occupations;
	Husband Occupation	2= plant & machine operators & assemblers;3= crafts and trades workers; 4= skilled agricultural & fishery workers; 9= Local Officials, government managers, shop owners, businessman, trader
	Wife prestige	Values were given based on SIOPS (Treiman's Standard Int'l. Occupational Prestige Scales)
	Husband prestige	Values were given based on SIOPS
	House floor size in square metres	
Number of bedrooms		
Percentage of household income spent on food		
Number of sick child in the household		
Community Attributes (after resettlement)	Number of basic services available in the community	
	Number of public places available 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 or in disagreement	Dummy variable, where Harmonious=1
	Whole community decides on projects	Dummy variable, where whole community decides=1
	Rate of participation in the community	Dummy variable, where Very low=1; Low=2; Moderate=3; High=4; Very high=5
	Rate of relationship between community & local gov't	Dummy variable, where Very low=1; Low=2; Moderate=3; High=4; Very high=5
Rate of relationship between community & central gov't	Dummy variable, where Very low=1; Low=2; Moderate=3; High=4; Very high=5	
Rate of relationship between community & church/mosque	Dummy variable, where Very low=1; Low=2; Moderate=3; High=4; Very high=5	
Rate of relationship between community & NGO (Phil)	Dummy variable, where Very low=1; Low=2; Moderate=3; High=4; Very high=5	
Rate of relationship between community & intl.org. (Phil)	Dummy variable, where Very low=1; Low=2; Moderate=3; High=4; Very high=5	

Social Capital Profile Before and After

Table 2

Variables	Philippines					Indonesia				
	N=150 Before	After	Difference	T	P-Value	N=76 Before	After	Difference	T	P-Value
Acquaintances Made in Public Places				.624	.533				-1.876	.065
Mean	365.24	198.48	166.76			29.64	51.18	-21.54		
Std Deviation	3587.314	707.241				62.843	83.886			
Friends Made in Public Places				-1.947	.053				-2.975	.004
Mean	23.48	59.28	-35.81			10.91	19.66	-8.75		
Std Deviation	71.739	248.472				16.540	22.235			
Acquaintances Made in Community Activities				-1.796	.074				-3.921	.000
Mean	45.30	59.26	-13.96			41.83	65.46	-23.63		
Std Deviation	200.40	185.30				46.004	58.780			
Friends Made in Community Activities				-2.545	.012				-2.609	.011
Mean	8.94	18.17	-9.23			18.93	31.63	-12.70		
Std Deviation	26.46	46.70				29.025	42.650			
Individuals Frequently Met				-3.044	.003				-6.295	.000
Mean	5.11	5.65	-.54			3.25	4.82	-1.57		
Std Deviation	3.341	3.175				1.729	2.393			
Support Ties				.631	.529				-11.167	.000
Mean	11.37	10.91	.45			7.97	14.49	-6.51		
Std Deviation	10.384	7.501				5.448	5.992			
Total Network Size				.391	.696				-3.866	.000
Mean	457.63	351.28	106.35			113.88	189.78	-75.89		
Std Deviation	3640.789	998.303				116.408	170.498			
Bonds				-2.390	.018				-4.090	.000
Mean	43.37	73.85	-30.48			39.01	68.11	-29.09		
Std Deviation	80.224	180.975				43.848	61.848			
Bridges				-2.050	.042				-3.215	.002
Mean	146.45	205.65	-59.20			74.28	120.67	-46.39		
Std Deviation	469.317	557.016				86.653	123.245			
Linkages				-1.520	.131				-4.429	.000
Mean	.79	.96	-.17			.59	1.00	-.41		
Std Deviation	1.434	1.446				.912	1.033			
Total Level of Trust				-.521	.603				1.931	.057
Mean	2.71	2.73	-0.02			2.84	2.76	0.08		
Std Deviation	0.83	0.77				.367	.486			
Total Level of Reciprocity				-15.666	.000				2.904	.005
Mean	1.93	2.86	-0.93			5.37	5.03	0.34		
Std Deviation	.906	.769				.964	1.243			

significant at $p < 0.05$ & $p < 0.01$.

Table 3
 Individual Household and Community Qualities Effects on Philippine Households' Social Capital

	Public Phases Ties		Comm/Activity Ties		Close Individuals		Support Ties		Bonds		Bridges		Linkages		Generalized Trust		Trust to Families		Reciprocity		
	Coef	SE/Err	Coef	SE/Err	Coef	SE/Err	Coef	SE/Err	Coef	SE/Err	Coef	SE/Err	Coef	SE/Err	Coef	SE/Err	Coef	SE/Err	Coef	SE/Err	
Model 1 (Individual Qualities)	R ² = 20.0%																				
Years/retired	2.835	5.360	-3.793	2.750	-0.933	.139	-3.233	3.26	-3.298	2.032	1.976	5.566	-0.17	.062	.063 *	.027	.002	.018	.005	.034	
Age	-1.356	.992	-1.119 *	.509	-0.049	.026	-1.383 *	.060	-0.965 *	.376	-1.710	1.031	-0.12	.011	.003	.005	.005	.003	-.002	.006	
Total Children rate	1.445 **	.380	1.075 **	.180	.009	.009	.028	.021	.662 **	.133	1.902 **	.384	.004	.004	-.001	.002	-.003 *	.001	.002	.002	
Educational level	-5.035	6.381	-1.655	3.274	-3.172 *	.166	-1.281	.386	-2.086 *	2.419	-5.174 **	6.627	.234 **	.074	-0.11	.033	.013	.021	.003	.041	
Female	-62.278 **	22.163	-19.725	11.370	-9.34	.577	-1.171	1.347	-20.111 *	9.402	-64.171 **	23.017	-4.175	.257	.085	.113	-.022	.073	.024	.044	
Living in S. du Urban	1.952	23.892	11.746	12.258	.803	6.22	1.423	1.452	6.047	10.402	24.813	1.452	.277	.028	.085	.122	.022	.079	-.121	.153	
Place of Origin	-2.997	4.405	.020	2.260	.124	.115	-4.73	.268	-.832	-1.670	4.275	-0.25	.051	-.025	-.051	-.014	-.023	-.021	.015	-.027	.283
Catholic	30.290	41.038	-9.989	21.055	1.355	1.068	1.252	2.494	16.769	15.557	15.183	4.620	3.78	.475	.204	.210	-.047	.135	.090	.263	
Iglesia ni Cristo	52.822	46.418	-2.590	23.815	1.314	1.208	2.305	2.821	16.224	17.597	38.162	48.207	.389	.538	.227	.237	-.095	.153	.404	.298	
	R ² = 20.0%																				
Model 2 (Household Qualities)	R ² = 28.0%																				
Kids in school	13.654	11.844	12.592 *	5.815	.249	.292	6.23	6.52	10.694 *	4.446	16.181	12.685	.054	.140	-.011	.059	.034	.036	.011	.073	
Wife Employment Status	53.371	63.923	37.694	31.384	-.784	1.574	-9.16	3.517	-8.450	23.938	62.120	68.465	249	.757	.028	.319	-.151	.193	.082	.394	
Husband Employment Status	-66.378	46.785	-7.531	22.970	.635	1.152	1.246	2.574	17.564	-64.497	50.109	8.009	.435	.554	.196	.234	.041	.142	-.099	.288	
Household Size	2.840	7.478	.929	3.671	-.181	.184	.262	.411	-1.120	2.807	4.704	8.009	-0.11	.089	.010	.037	.017	.023	.015	.046	
Wife Prestige	-2.941	2.720	-1.986	1.336	-.026	.067	-.066	.150	-1.249	1.021	-3.827	2.914	.006	.032	-.009	.014	.009	.008	-.004	.017	
Husband Prestige	1.344	2.385	3.397 **	1.171	.020	.059	-0.71	.131	1.191	.895	3.109	2.554	-.017	.028	-.015	.012	-.007	.007	-.020	.015	
Household Income	47.980	28.892	-9.126 **	14.185	.627	.711	.627	1.590	5.731	10.847	31.577	30.945	-.039	.342	.075	.144	-.175 *	.087	.126	.178	
House floor size	1.321	1.751	2.687 **	.860	.050	.043	.006	.096	7.84	6.58	3.327	1.876	-0.11	.021	-0.16	.009	-.003	.005	-0.07	.011	
Number of bedrooms	48.045 *	22.441	28.883 *	11.018	-.536	.553	3.119 *	1.235	18.431 *	8.425	58.917 *	24.035	.127	.266	-.037	.112	.117	.068	.004	.138	
% of income spent on food	-.301	.536	-.145	.263	.003	.013	-.004	.030	.022	.201	-.469	.574	.004	.006	.000	.003	.002	.002	.000	.003	
Number of sick child	18.544	15.431	-4.433	7.576	.890 *	.380	2.765 **	.849	14.061 *	5.738	4.329	16.527	.167	.183	.014	.077	.010	.047	.076	.095	
Wife Occupation	9.872	11.468	10.308	5.630	.274	.282	1.008	.631	6.822	4.305	14.211	12.283	.003	.136	.049	.057	.013	.035	.044	.071	
Husband occupation	-10.256	9.205	-18.843 **	4.520	.020	.227	.246	.507	-7.064 *	3.456	-19.671 *	9.859	.044	.109	.076	.046	.025	.028	.088	.057	
	R ² = 16.0%																				
Model 3 (Community Qualities)	R ² = 30.0%																				
Rate of participation in community	18.913	13.323	13.311	7.418	.676 *	.340	1.725 *	.809	14.656 **	5.395	20.009	14.123	-.122	.154	.099	.055	.065	.045	.264 **	.080	
RelationshipCommunity&Local	-.096	15.214	5.231	8.470	-.276	.388	1.150	.824	-6.964	6.162	13.101	16.127	.464 **	.176	.151 *	.074	-.025	.062	-.096	.091	
RelationshipCommunity&Central	26.620	15.015	-.697	8.360	.892 *	.383	.041	.912	8.360	6.082	18.384	15.917	-.386 *	.173	-.110	.073	-.022	.051	-.147	.090	
RelationshipCommunity&Church	15.526	10.147	10.716	5.649	-.039	.329	.552	.716	5.911	4.110	21.126	10.757	.202	.117	.001	.054	-.017	.034	-.056	.061	
RelationshipCommunity&NGO	-26.006 *	13.005	-3.402	7.240	-.277	.332	-.331	.329	-5.329	5.288	-24.697 *	13.786	.150	.150	.045	.060	.005	.044	.055	.061	
RelationshipCommunity&Int Org	-10.882	13.644	-10.085	7.596	.169	.348	-.581	.828	-1.525	5.526	-20.058	14.463	.307	.158	.031	.067	-.032	.046	.146	.082	
No. of basic services	-1.130	3.479	-.407	1.937	-.054	.089	-.052	.211	-1.610	1.409	1.409	.004	.066	.040	.006 *	.017	-.006	.012	.003	.021	
No. of public places	13.357 **	4.469	-1.810	2.488	.056	.114	.491	.271	6.64	1.810	11.461 *	3.688	-.053	.052	.022	.022	.014	.015	-.023	.027	
No. of dividing fences	-5.677	3.353	-1.788	1.867	.045	.086	-.080	.204	-1.608	1.358	9.194	3.555	.021	.039	.038 *	.016	-.008	.011	.019	.020	
No. of denied social services	9.209 *	4.140	3.488	2.205	-.073	.106	.023	.251	2.775	1.677	9.911 *	4.389	.060	.048	.024	.020	-.007	.014	.033	.025	
No. of reasons for denied services	-2.937	4.441	3.916	2.473	-.053	.113	.005	.270	-1.059	1.739	2.045	4.708	.039	.051	.006	.022	.022	.015	-.069 *	.027	
Whole Community Decides	-17.974	23.147	-8.595	12.887	-.205	.591	-1.337	1.405	-9.375	-19.897	24.537	24.537	-.211	.267	-.066	.113	.049	.078	-.055	.138	
Community is Peaceful	5.440	24.850	2.988	13.855	-1.507 *	.634	-2.276	1.590	-8.452	10.065	12.533	26.343	-.075	.287	-.181	.122	-.086	.084	.204	.149	
	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 = 45.8%																				
	R ² = 19.9%																				
	R ² = 5.9%																				
	R ² = 20.0%																				

*p<0.05 **p<0.01.

Table 4
 Individual, Household, and Community Qualities Effects on Indonesia Households' Social Capital

N=76	Public Places Ties		Comm Activity Ties		Close Ind.		Support Ties		Bonds		Bridges		Linkages		Gen. Trust		Trust to Fam.		Reciprocity		
	Coeff	SE/Err	Coeff	SE/Err	Coeff	SE/Err	Coeff	SE/Err	Coeff	SE/Err	Coeff	SE/Err	Coeff	SE/Err	Coeff	SE/Err	Coeff	SE/Err	Coeff	SE/Err	
Model 1 (Individual Qualities)																					
YearResided	4.921	6.597	.274	6.314	-.106	.162	-.379	.403	1.557	4.041	3.133	8.312	.027	.063	.018	.022	-.056	**	.021	.071	.080
Age	.563	1.149	-.379	1.099	-.006	.028	-.020	.070	-.749	.704	.899	1.447	-.011	.011	-.004	.004	-.004		.004	-.003	.014
TotalCivness	.172	.147	.248	.140	-.004	.004	.002	.009	.116	.090	.303	.185	.005	**	.001	.000	.001	.000	.000	.000	.002
Educationallevel	-.13036	9.318	12.660	8.918	-.025	.228	.339	.569	4.928	5.707	-.4915	11.741	.097	.089	.022	.031	.060	*	.029	-.053	.113
Male	18.661	47.176	28.742	45.151	-.1.635	1.155	-.3.028	2.882	16.863	28.886	25.585	59.444	.013	.453	-.013	.156	-.106		.147	-.283	.571
Living in RT1	13.970	31.149	41.688	29.912	.344	.763	1.059	1.903	26.630	19.079	30.917	39.249	.298	.299	.086	.103	-.025		.097	.003	.377
Living in RT2	4.332	29.323	49.355	28.065	-.730	.718	.700	1.791	41.134 *	17.961	3.913	36.949	.585 *	.281	.030	.097	-.076		.092	.356	.355
Came from Banjarmasin	20.948	26.848	8.272	25.695	-.039	.657	.925	1.640	3.516	16.444	26.823	33.829	-.251	.288	.112	.089	.006		.084	-.275	.325
			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%		R ² = 9.1%		R ² = 18.6%		R ² = 7.0%
Model 2 (Household Qualities)																					
Kids in school	15.249	17.558	-.1.299	16.947	-.004	.391	1.081	1.012	3.768	10.777	11.542	21.968	-.039	.178	-.103 *	.049	.069		.049	-.206	.207
Wife Employment Status	15.520	102.787	-.22.691	99.210	-.2.297	2.291	-.084	5.926	-.31.768	63.092	20.444	128.606	-.200	1.043	.348	.290	.221		.287	2.185	1.211
Household Size	4.548	12.682	2.253	12.240	-.002	.283	.099	7.31	-.3.174	7.784	10.093	15.867	.016	.129	-.027	.036	.010		.035	.002	.149
Wife Prestige	-.518	4.405	1.095	4.251	.202 *	.098	.052	.754	.823	2.704	1.07	5.511	.017	.045	-.019	.012	.011		.012	-.110 *	.052
Husband Prestige	-.2.012	2.337	-.1.116	2.255	.025	.052	.050	.135	-.3.21	1.434	-.2.737	2.923	-.008	.024	-.005	.007	-.009		.007	-.662	.028
Household Income	30.434	36.069	25.132	34.814	-.1.056	.804	-.3.82	2.080	19.424	22.140	34.921	45.130	.686	.366	-.037	.102	.069		.101	.282	.425
House floor size	-.1.416	1.446	-.1.90	1.396	.042	.032	-.035	.083	.607	.888	-.2.219	1.809	-.013	.015	.007	.004	-.001		.004	-.034 *	.017
Number of bedrooms	-.12.918	28.387	48.298	27.399	.032	.633	2.824	1.637	25.001	17.425	13.490	35.518	.433	.288	-.108	.080	.084		.079	-.104	.334
% of income spent on food	.729	.672	-.3.98	.649	-.021	.015	-.069	.039	-.3.48	4.12	.573	.841	-.007	.007	-.003	.002	-.005	**	.002	.001	.008
Number of sick child	6.468	23.625	6.809	22.802	-.370	.527	-.025	1.362	-.5.850	14.501	-.7.247	29.559	-.180	.240	.013	.067	-.003		.066	-.805 *	.278
Wife Occupation	-.273	13.179	6.311	12.721	-.683 *	.294	-.226	.760	-.818	8.090	6.555	16.490	-.065	.134	.042	.037	.029		.037	.252	.155
Husband occupation	-.978	6.801	.243	6.564	.098	.152	-.057	.392	-.1.211	4.175	.607	8.509	.002	.069	.017	.019	.012		.019	.129	.080
			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%		R ² = 24.1%		R ² = 25.4%		R ² = 23.0%
Model 3 (Community Qualities)																					
Rate of participation in community	28.158	16.868	14.040	15.128	-.782	.415	.530	1.018	3.211	9.632	38.772	19.636	.063	.191	.141 *	.054	.020		.059	-.170	.212
RelationshipCommunity&Local	7.589	12.580	24.241 *	11.282	.344	.310	.419	.759	16.185 *	7.184	16.237	14.644	-.192	.142	.098 *	.040	.015		.044	-.061	.158
RelationshipCommunity&Central	-19.534	17.724	7.802	15.986	-.087	.437	-.1.840	1.069	2.961	10.121	-16.641	20.633	.120	.201	.004	.057	.020		.062	.192	.223
RelationshipCommunity&Mosque	-.2.878	16.512	-19.769	14.010	.122	.407	-.1.151	.996	6.261	9.429	-17.409	19.223	-.204	.187	-.101	.053	-.1.62 **		.057	.351	.208
No. of basic services	11.990	9.557	20.767 *	8.571	-.776 **	.235	-.751	.572	28.872 **	6.107	-24.541 *	11.125	.101	.128	.019	.031	-.022		.033	.170	.134
No. of public places	13.479	10.665	37.416 **	9.583	.567 *	.263	1.578 *	.645	28.872 **	6.101	24.425	12.438	.228	.121	.022	.034	.037		.037	.233	.120
No. of dividing factors	20.581 *	8.047	22.571 **	7.217	-.380	.198	.453	.485	13.731 **	4.595	29.507 **	9.368	.180	.091	-.004	.026	.039		.028	-.017	.101
No. of denied social services	-.2.438	6.360	8.405	5.704	-.231	.157	.566	.384	6.210	3.632	.110	7.403	.049	.072	.002	.020	.032		.022	.111	.080
No. of reasons for denied services	9.953	8.720	-10.198	7.821	.372	.215	.839	.526	-7.687	4.990	-10.975	10.151	-.085	.099	-.016	.028	.028		.020	-.070	.110
Whole Community Decides	-61.401 *	25.732	-93.038 *	23.097	.161	.634	-2.530	1.554	-4.514 **	14.706	-108.027 **	29.979	-.166	.282	.153	.083	.077		.090	-.456	.324
Community is Peaceful	-48.985	99.612	-142.826	89.340	-.032	2.464	-3.723	6.009	-58.988	56.883	-136.362	115.961	-.510	1.128	-.381	.320	-.148		.346	-1.714	1.254
Community is Harmonious	75.717	52.384	102.823 *	46.982	.812	1.290	2.605	3.160	71.563 *	29.913	109.726	60.981	.631	.593	.403 *	.168	-.082		.182	1.344 *	.659
			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%		R ² = 32.4%		R ² = 20.9%		R ² = 29.0%

*p<0.05, **p<0.01.