



**INNOVATIONS
FOR POVERTY
ACTION (IPA)**

Impact Evaluation of the Kalahi-CIDSS: Baseline Report

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ACRONYMS

4Ps	Pantawid Pamilyang Pilipino Program
ALS	Alternative Learning Schools
APIS	Annual Poverty Indicators Survey
ASSRC	Ateneo Social Science Research Center
BA	Barangay Assembly
BC	Barangay Captain
BDC	Barangay Development Council
BHS	Barangay Health Station
CDD	Community Driven Development
CEAC	Community Empowerment Activity Cycle
DSWD	Department of Social Welfare and Development
ERR	Economic Rate of Return
FGD	Focus group discussion
FMR	Farm-to-market roads
FIES	Family Income and Expenditures Survey
FSP	Food for School Program
GRP	Government of the Republic of the Philippines
IRA	Internal Revenue Allotment
IRC	International Rescue Committee
IRRI	International Rice Research Institute
IP	Indigenous peoples
IPA	Innovations for Poverty Action
IRA	Internal Revenue Allotment
Kalahi-CIDSS or KC	Kapit-Bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social Services
KI	Key Informant
KDP	Kecamatan Development Program
LDC	Local Development Council
LFS	Labor Force Survey
LGU	Local Government Unit
MCC	Millennium Challenge Corporation
MCA-P	Millennium Challenge Account-Philippines
MDC	Municipal Development Council
ME	Municipal Engineer
MIBF	Municipal Inter-Barangay Forum
MPDO	Municipal Planning and Development Officer
MRDP	Mindanao Rural Development Project
MSWDO	Municipal Social Welfare and Development Officer
NGO	Non-governmental organization
NSCB	National Statistical Coordination Board
NSO	National Statistics Office
NHTS-PR	National Household Targeting System for Poverty Reduction
O&M	Operations and Maintenance
PHP	Philippine Pesos
PPP	Purchasing Power Parity
PTCA	Parent-Teacher-Community Association
SCA	Structured community activity
SDS	Sustainable Development Solutions
SEA-K	Self-Employment Assistance Kaunlaran
SNP	Supervised Neighborhood Programs
SP	Subproject
SWS	Social Weather Stations

EXECUTIVE SUMMARY

Community-driven development (CDD) has become an increasingly common tool used by governments to address the needs of poor communities that may otherwise be ignored or dominated by political leadership. The approach is characterized by the movement of responsibility over resources and planning decisions away from central governments to local decision-makers in an effort to more accurately and efficiently identify the needs on the ground. Empowering the communities to take charge of their own development may also lead to long-term effects in how they perceive their own role in governance, with improvements in accountability, transparency, and quality of decisions. A keystone poverty reduction initiative of the Government of the Republic of the Philippines (GRP) is the Kapit-bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social Services (Kalahi-CIDSS or KC), a community driven development project implemented in the country's 42 poorest provinces. The program gives representative volunteer teams from barangays (villages) the power to select, design and implement the public projects which they most need. In 2011, KC received US\$120 million in funding from the United States government's Millennium Challenge Corporation (MCC) Compact in the Philippines and \$59 million in loan funding from the World Bank.

The MCC has contracted Innovations for Poverty Action (IPA) to carry out an impact evaluation of KC. The impact evaluation's key research questions can be divided into the following four themes:

1. Socio-Economic Effects:
 - Does KC increase household consumption?
 - Does KC increase labor force participation?
2. Governance Effects
 - Does KC increase government leader responsiveness to community needs?
 - Does KC reduce corruption and increase transparency?
3. Community Empowerment Effects:
 - Does KC increase participation in local governance?
 - Does KC increase collective action and contribution to local public goods?
4. Social Capital Effects
 - Does KC build groups and networks? In what ways are these networks applied?
 - Does KC enhance trust?

In order to isolate KC's effects, a randomized control trial evaluation design was chosen. The impact evaluation sample consists of 198 municipalities (with 33 to 69 percent poverty incidence), spread over 26 provinces and 12 regions. The 198 municipalities were paired based on similar characteristics (99 pairs) and then randomly assigned into treatment and control groups through public lotteries. The sample size is large enough to be able to detect MCC's projected eight percent change in household income as well as other smaller effects. As part of the impact evaluation, baseline quantitative and qualitative data were collected in the study area from April to July 2012. The quantitative data came from 5,940 household surveys in 198 barangays (one from each municipality) and 198 barangay surveys implemented in these same barangays. Data for the qualitative section were collected in a subsample of 24 municipalities (12 pairs), spread across 12 provinces. The qualitative data came primarily from key informant interviews with barangay and municipal leaders and focus group discussions with barangay residents. Together these data present a profile of the impact evaluation sample at baseline. IPA has prepared this baseline report to demonstrate the balance of treatment and control barangays and describe the baseline characteristics of the sample.

The following are the key findings:

Overall, control and treatment communities are balanced along key household and barangay level indicators: This confirms the evaluation’s randomized control trial design, and shows that the lottery-based assignment of treatment and control areas worked.

The sample overall is poorer than the national average. Since KC was designed to target poorer communities, monthly household consumption in sample areas was below national estimates, with per capita total monthly household consumption at PHP 2,832 (US\$70) versus a national average of PHP 4,004 (US\$100). At the same time, 41% of sample households were below official regional per capita income poverty thresholds, while government data shows that 22% of families nationwide below the national per capita income poverty threshold. Unemployment rates are also higher than the national average, and less than half of respondents have water piped directly to their homes.

Roads and water systems are the projects most desired by households and barangay officials. These are among the facilities most commonly proposed by barangays for KC funding, along with school buildings. At the same time, 24% of households participated in community efforts to repair or maintain roads, bridges or access trails.

Barangay assembly attendance is reportedly high, with 68% of households reporting having a member attend in the past 6 months. Residents perceive attendance in assemblies to be very important. Residents primarily attend to get information on local current events and issues, projects being implemented, activities of local officials, and how public funds are being spent. The majority of attendees in the assemblies are women.

Existing social networks within barangays are very strong. Respondents on average knew 70% of barangay residents. Also, over 80% of respondents said crime is never or rarely committed in their community.

The barangay captain is the most trusted government official. This is in part due to the barangay government’s proximity to constituents—about 87% of respondents said they knew their barangay captain and his or her spouse closely. Residents feel a sense of responsibility for electing these officials into office, which fosters trust and loyalty.

1. GOALS OF THE BASELINE REPORT

This baseline report was prepared by IPA with several key goals. The first is to confirm the evaluation's randomized control trial design by showing the balance of treatment and control groups. The second is to describe KC communities. The third is to show that the profile of respondents captures the characteristics of the program's target population. The fourth is to inform program stakeholders with the presentation of baseline data analysis findings.

2. OVERVIEW OF KC

A. KC Background

The Kapit-bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social Services (Kalahi-CIDSS or KC), is a community-driven development (CDD) project that is an important and prioritized poverty reduction initiative of the Government of the Republic of the Philippines (GRP) and is implemented by the Department of Social Welfare and Development (DSWD). KC eligibility for participation in KC is determined by poverty. At the provincial level, KC targets the 48 poorest provinces. At the municipal level, municipalities with 70% poverty incidence or above automatically received the project, and municipalities with below 33% poverty incidence automatically do not receive the project.

The first phase of KC took place from 2003-2009 with the support of the International Bank for Reconstruction and Development – World Bank, providing roughly US\$100 million in lending, the GRP financing US\$31 million, and communities and local governments contributing US\$51 million in training and grants to 4,583 barangays (villages) in 183 municipalities and the country's 42 poorest provinces (out of 81).

In 2011, KC was expanded, providing grants and technical support to 362 municipalities and cities within the original 42 provinces served by KC and six new provinces. This phase of KC was financed with a renewed US\$59 million in loan funding from the World Bank and a US\$120 million grant from MCC. In addition, local governments (region, municipality and/or barangay) are required to contribute 30% of project costs. Because there was not enough money to fund all municipalities, municipalities were selected via a lottery so that each municipality had an equal chance of being selected. This phase of KC is still ongoing and is the phase being evaluated.

KC aims to improve welfare in rural areas by targeting communities with a poverty incidence greater than the national average through small-scale, community-driven development subprojects aimed at addressing their most pressing needs (projects at the barangay level are called subprojects because they are part of the overarching KC 'project'). Each participating municipality is allocated approximately PHP 450,000 (about US\$11,250) times the number of barangays in the municipality. Teams composed of barangay resident volunteers develop proposals for infrastructure and services to meet poverty reduction goals. Proposals are then evaluated by individual municipalities. Representative teams from each barangay in the municipality vote for which subprojects are most deserving of funding; the funds are then designated to the barangays according to their ranking in the voting until the municipal allocation is used up.

The program also trains the communities and their local governments, both at the barangay and municipal level, in choosing, designing and implementing the subprojects. This is done through a three-year, five-stage program known as the KC Community Empowerment Activity Cycle (CEAC).

The main stages of the process are as follows:

1. Social preparation: The social preparation stage consists of roughly six months of training and facilitation from DSWD facilitators in order to prepare a subproject proposal. This stage begins with a municipal orientation gathering DSWD representatives and municipal officials to introduce the project objectives and sign an agreement. Afterwards, barangays organize an assembly of residents in which DSWD facilitators explain KC's goals and mechanics to members of the community. Here, the community selects volunteers to be part of the teams that identify subprojects, manage the funds, participate in construction, and perform other functions for the subproject's implementation. Barangay representative teams perform a participatory situation analysis (PSA) and develop a barangay action plan, which outlines the types of poverty and challenges to be addressed by the proposed subproject. The communities gather in several assemblies throughout the process to receive performance updates, provide feedback, approve of the teams' decisions, etc. All barangays within a beneficiary municipality receive this preparation.

2. Subproject identification and conceptualization: Barangays form a team of their own representatives. The team receives technical training to design and package the subproject proposal. The team is tasked to set criteria that will be used to select the proposals to be funded by KC, research and identify the key poverty-related problems in the community, meet with the community through consultations and assemblies to get feedback, and then finally submit the proposal for approval.

3. Subproject prioritization: Once proposals are completed, representative teams from each barangay assemble at the municipal level by holding a Municipal Inter-Barangay Forum (MIBF), during which they prioritize subprojects for the year. Each barangay representative team presents its subproject proposal, and the other teams in the barangay give scores to the subproject according to criteria selected in advance of the MIBF by barangay resident teams. The scores are compiled and the barangays are ranked according to the scores they received. Subprojects are then financed based on the barangays' ranking and the availability of funds. For instance, a large road project from one barangay may not receive funding if the teams at the MIBF decide that they would like to more equally distribute funds across barangays, supporting smaller projects in more barangays. Funding is allocated to prioritized subprojects until annual funds are exhausted. The cost of each subproject varies, but in order to be funded, barangays must contribute at least 30% of subproject costs (in cash and/or in kind).

4. Subproject implementation: After subprojects are selected for funding during the MIBF, funded barangays take responsibility for the implementation of their subprojects, including the construction and maintenance of public infrastructure and/or the provision of public services and investments. KC supports subprojects such as road construction and rehabilitation, and construction of water, post-harvest, education and health infrastructure. These comprise 80% of subprojects. The remaining 20% of subprojects are services, such as skills training or capacity building programs for residents.

5. Transition: At the end of the cycle, the communities wrap up and attempt to gauge the progress made since the beginning of the CEAC process. At the community-based evaluation, barangay resident volunteers are asked to identify and evaluate any changes within the community, especially towards the goal of alleviating poverty. At the barangay level, communities then record the lessons gained and their recommendations for the next cycle. The results of this self-assessment are consolidated at the municipal level along with an assessment of the participation and engagement of the municipal Local government unit (LGU). The findings are then included in the preparation and conduct of activities in the next KC cycle.

Roughly one third of barangays receive subprojects each year, although some barangays may receive multiple subprojects and others none. Most subprojects are programmed to be implemented within six months, thus the stages of preparation, funding and implementation generally take nine to twelve months and are called a cycle. The same process is repeated over three one-year cycles, with cycles two and three

having a condensed social preparation phase since communities have already become familiar with the project and process.

3. LITERATURE REVIEW

As recently as 2006, almost no rigorous evaluations of CDD programs existed (Mansuri and Rao 2007). In the past seven years, however, a number of studies, from different parts of the world, have used rigorous experimental and quasi-experimental designs to assess the impacts of CDD programs on governance, socio-economic welfare, and social capital (see, for example Fearon, Humphreys, and Weinstein 2008 ; Casey, Glennerster, and Miguel 2011; Beath, Christia, and Enikolopov 2012 ; Barron et al. 2009 ; Humphreys, Sanchez de la Sierra, and van der Windt 2012). The findings on the effectiveness of CDD programs have been decidedly mixed.

Within studies, researchers find impacts on some projected outcomes, but not on others. For instance, studying Indonesia's community-driven KDP program focused on local health and education grants, Voss (2008) found substantial gains in per capita consumption and access to outpatient health care as a result of the program, but much smaller or insignificant gains for female-headed households and other disadvantaged groups. Olken, Onishi and Wong (2011) conducted an updated study of KDP (now known as *PNPM-Generasi*) using randomized treatment assignment, finding significant gains in health but not in educational attainment. Unfortunately, neither of these KDP studies captured changes in social dynamics and governance. Meanwhile, Pradhan, Rao and Rosemberg (2010) use a difference-in-difference methodology to study the second Urban Poverty Project's community-driven component in Indonesia, finding significant gains in access to sanitation for the poor but no significant impacts in per capita consumption. Similarly, Arcand and Basole (2007) identified improvements in child malnourishment rates from Senegal's PNIR-CDD program, but did not find significant improvements in overall consumption per capita. A previous study of KC adds to this body of literature and the results show similar discrepant trends. Labonne and Chase (2010) examined the impacts of the first phase of the KC project on a variety of dimensions of local government participation and community characteristics. Strikingly, their results show improvements in participation in barangay assemblies coupled with drops in generalized trust and collective action. Because the study focuses on participation and empowerment outcomes, it does not provide clear evidence on the extent of improvements in Filipino households' material well-being from KC.

Thinking across studies, the findings are also mixed. For example, in relation to economic welfare, Casey et al.'s study in Sierra Leone finds positive results of the GoBifo program, in contrast to studies by Fearon et al. in Liberia and Humphreys et al. in DRC where no economic improvements are found in treatment communities. On the other hand, Fearon et al. find that the CDD program to which communities were randomly assigned did improve social cohesion (as measured via an experimental public goods game and survey reports of intergroup tension), but CDD studies from Sierra Leone, DRC, and Aceh all fail to find positive effects on social cohesion, measured in a variety of ways across the studies. In a recent review of CDD interventions by the World Bank, Wong (2012) finds that in the programs she studies, there is generally robust evidence for improved access to services like education and water. In the (fairly rare) cases where the program expected improvements in economic welfare, Wong found that the evidence of these effects, too, was relatively sound. In contrast, evidence for governance or social capital effects, again fairly rarely included in program goals and evaluations, is mixed or lacking altogether. In a synthetic review of CDD evaluations in conflict-affected contexts, King (2013) writes that "[a]s currently designed, implemented, and evaluated, CDD/R is better at generating more tangible economic outcomes than it is at generating social changes related to governance and social cohesion, although even economic effects are found in just a few studies. Moreover, CDD/R programming is better at producing outcomes directly associated with the project rather than broader changes in routine life".

Despite this growing body of evidence, Mansuri and Rao contend that “the [induced participatory] process is, arguably, still driven more by ideology and optimism than by systematic analysis, either theoretical or empirical” (2012, 3). As Casey et al. put it, “...there is much that we, as outsiders, do not yet know about how to do [CDD] effectively” (Casey, Glennerster, and Miguel 2011b, 46). This impact evaluation of KC thus endeavors to contribute to the literature on the different socio-economic, governance, community empowerment and social capital impacts that CDD programs may have in the communities where they are implemented.

4. EVALUATION DESIGN AND METHODOLOGY

A. Evaluation Purpose and Objectives

The impact evaluation of the KC project aims to provide an independent assessment of the impact of KC generally, and specifically of the returns to MCC’s US\$120 million investment. Furthermore, the impact evaluation aims to contribute to broader research about the impacts of CDD programs. The following section outlines the hypothesized impacts of KC and how the evaluation sets out to measure and understand them.

1. MCC’s Pre-Investment Economic Analysis

MCC’s pre-investment economic analysis suggested that the \$120 million investment in the KC project is expected to generate more than \$150 million in benefits, and have 5.2 million beneficiaries by 2030. At the household level, MCC projected that KC would generate an eight percent change in income.

The small infrastructure project itself can produce economic returns that are dispersed throughout the beneficiary communities. These returns could take the form of future earnings for better educated and or healthier children, more immediate income gains from greater access to markets and inputs for farmers as a result of road improvements, or reduced costs for obtaining public goods such as clean water.

The impact evaluation will assess whether benefits have indeed materialized (or whether the benefits that have accrued by year five are consistent with the ex-ante economic rate of return (ERR) model over 20 years), and whether the subprojects are cost-effective.

2. Key Research Questions

The various research questions guiding the impact evaluation can be segregated into three broad themes organized in collaboration with DSWD.

Socio-Economic Effects

This theme captures the research questions related to the impact of KC on the economic welfare of the communities by measuring consumption, labor force participation, wages, and ownership of assets. Socio-economic effects can be understood as the impact of KC on poverty alleviation and the welfare of the beneficiary communities. To measure the economic impact of KC we collect the following key indicators:

a. Does KC increase household consumption?

The preference for consumption over income as a measure of household welfare in developing countries is justified by two important reasons (Deaton and Zaidi, 2002). One is that consumption does not

fluctuate as much as income making it a better measure of household welfare. Even if there is little evidence for the extreme version of consumption smoothing particularly in rural areas, any partial consumption smoothing using credit and or sale of assets makes consumption more stable than income. It is recognized that consumption also has seasonality because of holidays and festivals but the amplitude of these swings has been found to be smaller compared to the seasonal swings in income. Another important reason cited is the relatively higher difficulty of measuring income in rural and agricultural settings. In rural settings self-employment and own production are much more prevalent. Under these conditions it is much more difficult to measure income as it would require more components to track and more imputations.

b. Does KC increase labor force participation? i.e. increase in wages (primary, secondary, other sources)

Measuring labor force participation complements expenditure data. It also allows us to understand whether KC generates employment in the community, including any gender differences in employment generated.

c. Does KC increase the amount of assets owned by the household?

The asset catalog is an additional, complementary measure of understanding how household income has been affected by KC. Households might not only spend increased income on daily needs, but they could also invest in assets such as motorbikes and land.

Community Empowerment Effects

This theme includes research questions related to the impacts of KC on the linkages and interactions between families and communities, such as collective action and on resident participation in the barangay decision-making process. Components of the project that bring people together, such as participation in KC activities, organization of community volunteers into Barangay Representation Teams, Operations & Maintenance Committees etc. are ways in which social interactions among community members increases. The process of social preparation and subproject implementation should result in projects that address community-identified needs within a barangay. Once the funding is approved, the planning process for KC implementation should ensure that people work together and become aware of the different processes which would otherwise be managed by local government units. These activities include procurements, implementation, monitoring, budget management etc. The impact evaluation focuses on the following indicators to understand how KC impacts community empowerment and also disaggregates them by gender, age and poverty level.

a. Does KC increase collective action and contribution to local public goods?

Since collective action is intrinsically linked with community participation, the evaluation measures trends in community participation in both voluntary areas as well as areas that are mandated by KC.

b. Does KC increase participation in local governance?

According to the theory behind community-driven development, community members will participate in local political activities and planning if they see a direct benefit from it (e.g. if their voices are heard and concerns addressed). The KC process should encourage people to attend barangay assemblies and find other avenues through which they can make their voices heard so that the local government addresses the needs of the community.

Governance Effects

This theme focuses on changes in public servants or perceptions of public servants. It includes research questions associated with the impacts of KC on governance as defined by reduced corruption, transparency, and accountability. An integral goal of KC is to improve governance and make it more transparent and accountable. Various indicators need to be measured in order to assess any overall improvement in local governance. These indicators include:

- a. Does KC increase government leader responsiveness to community needs?*
- b. Does KC reduce corruption and increase transparency?*

The assumption is that better informed citizens would then either prompt those in power to work better (reduced corruption, more transparency) or cause a change in the people elected (therefore, less family legacy in barangay leadership and more merit based elections).

Social Capital Effects

This theme captures social capital questions related to trust and the strengthening of social networks. Durlauf and Fafchamps (2005) demonstrate how trust in addition to reducing costs of transactions is an important factor that augments economic activities through channels like information sharing, group formation and coordination. Trust, specifically with KC, would hopefully build as a result of these continuous interactions and in turn strengthen social cohesion and build a sense of community ownership and goodwill. Since many components of community, especially trust, are largely intangible, they are difficult to quantify and evaluate. Therefore, we have chosen a set of widely tested parameters (indicators) that allow us to describe and compare the nature of trust and social capital within communities.

- a. Does KC enhance trust?*

Trust is the defining factor and is one of the strongest components of social capital. The evaluation intends to measure trust through a number of different means, such as assessing whether people feel safe when they are alone at home and how certain they feel that they can leave their valuable assets, like a bicycle, out at night without it being stolen.

- b. Does KC build networks? In what ways are these networks applied?*

Networks refer to linkages of camaraderie and collaboration that are built among community members as a result of regular interactions on matters that are beneficial for the entire community. CDD theory suggests the benefits accrued from these linkages further strengthen the communities' will to remain engaged both within and beyond the needs of projects like KC. To measure the impacts of KC on the development of community networks we measure how these networks form during KC as well as whether these networks are sustained even after KC. We quantify this measure by asking community members about their willingness to support members of their community in times of adversity.

B. Evaluation Design

While KC is a nationwide project, in order to rigorously isolate the impacts of KC, this evaluation employs a randomized selection of eligible municipalities. Random selection provides fairness and transparency, because the project did not have enough funding for all of the eligible municipalities.

Random selection among eligible municipalities was done through 12 different selection events (public lotteries) implemented throughout the country from May 23rd to June 30th 2011.

1. Power Calculations

As mentioned before, MCC's economic justification for KC was based on an 8% change in income, and MCC wanted to ensure that, at a minimum, the level of income change was detectable at 95% significance and statistical power at 80%¹. This figure largely dominated the power calculations, but other variables, as mentioned below, were also considered. We used a change in 0.2 standard deviations as the minimum detectable effect size for the other variables since this size is generally considered a "small effect size".

Data sources used for the power calculations included the baseline and midline data for KC1, the Family Income and Expenditures Survey (FIES), and the Labor Force Survey (LFS). The means and standard deviations of most household outcome variables were taken from FIES, LFS or survey data for KC1. When variables of interest were both available in the FIES or LFS and the survey data for KC1, the former were used because they have a larger sample and are representative at the national level. Most of the trust and social capital indicators are only available from KC1 surveys. Naturally, the correlation coefficient between baseline and subsequent follow-up can only be generated from the baseline and midline surveys for KC1.

The outcome variables considered in the sample size computation include: From the FIES: total expenditure per capita, family income per capita, distance from main water source, proportion with safe water source. From the LFS: proportion of children 6-17 years attending school and proportion of mothers in the labor force. Household level and individual level outcome indicators were drawn from the KC surveys, such as proportion of households trusting others in the village, trusting local officials, attending village assembly, joining barangay development planning, having difficulty fetching water, located within 30 minutes of the post office, visiting a health professional, and located within 30 minutes of a school.

When determining the number of treatment and control municipalities, we used sample size of 30 households per municipality, ensuring an 8% (positive) change in farmer income would be detectable at 95% significance and 80% power, as mentioned above. We considered the number of municipalities needed for a random draw among all municipalities and a scenario in which municipalities were paired on observables prior to randomization. Under both of these scenarios, we considered one and two-tailed tests. One tailed tests were justified since it was assumed that income would only increase and not decrease. Matched pairing was proposed because DSWD raised concerns that there would be insufficient municipalities meeting poverty eligibility criteria, and the fact that provinces would need to have an excess of eligible municipalities above the number they would receive funding for based on the 50% minus one rule, outlined above. The resulting number of required municipalities was 99 in each pair, so 198 municipalities total.

2. Eligibility for Random Assignment and Municipality Selection Events

¹ The statistical power is the ability of a test to detect an effect, if the effect actually exists.

The impact evaluation focuses on municipalities with between 33-69% poverty incidence.² As determined by DSWD, a province received funding for half of the municipalities in the province minus one municipality. So, for each province, the number of funding slots available for the municipalities entering a random draw to receive KC2 was the number determined by the 50% minus one rule. Thus, the probability of being selected for KC differed by province. Municipalities also did not enter the randomization if they received KC1 funding. Given the combination of the 50% minus one and the poverty criteria, 26 of the 48 provinces targeted by KC were home to municipalities eligible for random selection into the impact evaluation study.³ Within these 26 provinces, 313 municipalities had a poverty incidence between 33-69% and were not part of KC1, so they were invited to participate in the randomization.

The final eligibility criterion for municipalities was the municipal mayors expressing interest, and the mayor or his/her representative being present at the municipal selection event for each province. Out of the 313 municipalities invited to participate in the randomization, 23 either chose not to participate or were disqualified for not sending a mayor representative to the municipal selection event, thus the randomization happened with 290 municipalities.

To recap, a municipality was eligible to participate in the randomization if it had:

1. Between 33-69% poverty incidence
2. Located in a province in which guaranteed municipalities have not been allocated all of KC funding based on the 50% minus one rule
3. Did not receive KC1 funding
4. Mayor or his/her representative present at the public lottery event

A total of 12 municipal selection events happened in 12 provinces, and randomization was done at the provincial level, with several provinces attending the same selection event (but not randomized together). Municipalities within each province were matched on four variables: poverty incidence, population, land area, number of barangays. Municipal poverty incidence was naturally included as this is a key variable in project eligibility. The number of barangay was used to help balance the pairings since this is the unit of intervention (i.e. grants are made at the barangay level). Population and municipality land area were included because they are factors in determining the Internal Revenue Allotment (IRA) of a municipality, which largely determines the financial resources available to the local government unit (LGU), and affects counterpart contributions.

Matched pairing took place at the selection event sites and not beforehand because only municipalities that had mayors or authorized representatives present were eligible for the lottery. During each event, mayors of paired or triplet municipalities were asked to place the names of their municipalities into plastic eggs, of which one was randomly chosen as a treatment municipality and the other as control. The lottery selected 208 municipalities (including treatment and control), including 10 sets of triplets, which meant that there were 10 extra municipalities. Since having a treatment with two controls or a control with two treatments would not serve the evaluation, we decided to drop 10 municipalities using the same matching procedure described above, such that for each triplet the least similar municipality out of the three was eliminated from the sample. This resulted in the final sample of 198 municipalities (99 pairs).

² As mentioned earlier, municipalities with 70% poverty incidence or above automatically receive KC, and municipalities with below 33% poverty incidence automatically do not receive KC.

³ Out of these 26 provinces, 21 participated in KC1.

3. Dropout Municipalities and Randomization Compliance

Of the original 99 pairs selected for the impact evaluation sample, one pair was dropped, but we replaced it with another pair in a manner consistent with the randomized design and in advance of the baseline data collection. Thus, we were able to collect baseline data on 99 pairs. Table 4.1 provides additional details on the dropout pair and its replacement.

As for compliance with the randomization, to date, there have been eight pairs that have not complied with the randomization. Table 4.1 presents details on the nature of their non-compliance. The eight non-compliant pairs were still surveyed at baseline, and we will continue to track them in order to conduct intention to treat analysis.

Table 4.1 Dropout and Non-Compliant Municipalities

Original	Replacement	T/C	Reason for Dropout
Peñarrubia municipality, Abra	Taytay municipality, Palawan	Treatment	Peñarrubia was unable to provide the counterpart funding required by KC, so it was dropped along with its paired control municipality Pidigan. They were properly replaced by Taytay and San Vicente in Palawan province. ⁴
Pidigan municipality, Abra	San Vicente municipality, Palawan	Control	
Province	Municipality	T/C	Nature of Non-Compliance
Leyte	Calubian	Treatment	Calubian was unable to raise the counterpart subproject funding for KC. DSWD replaced this with another eligible municipality, but the method of selection was not random, so the replacement was not accepted by IPA.
	Santa Fe	Control	
Sultan Kudarat	Palimbang	Treatment	The two treatment municipalities in Sultan Kudarat were unable to receive KC funding due to governance-related issues, causing them to leave KC. DSWD gave the funding instead to other municipalities, but these replacements were done purposefully rather than randomly, and so IPA could not include these in the sample.
	Bagumbayan	Control	
Sultan Kudarat	Lambayong	Treatment	
	Esperanza	Control	
Sorsogon	Irosin	Treatment	Municipalities Santa Magdalena and Pinamalayan were originally identified as control municipalities, but successfully appealed the DSWD to receive KC. The RCT design requires each pair to have one municipality that did not receive the program, and so these pairs no longer comply with the requirements.
	Santa Magdalena	Control	
Oriental Mindoro	Roxas	Treatment	
	Pinamalayan	Control	
Abra	Lagangilang	Treatment	Treatment municipality Lagangilang left KC due to a lack of counterpart funding. DSWD decided to replace it by giving funding instead to Luba, the control municipality of another pair. As a result, neither pair fulfills the requirement of having one treatment and one control municipality.
	Villaviciosa	Control	
Abra	La Paz	Treatment	
	Luba	Control	
Abra	Langiden	Treatment	A KC municipality that was not in the sample left KC. DSWD replaced this municipality by giving KC funding to Malibcong, which was a control municipality in the sample. This pair now contains two municipalities that received the program, meaning it no longer complying with the RCT design.
	Malibcong	Control	

⁴ Taytay municipality in Palawan province was originally on the list of municipalities eligible for selection as treatment and control, but had not been included in the evaluation sample because it was the third member of a triplet group (a group of three municipalities in a province with similar characteristics, in which two were randomly chosen as a treatment and control pair for the sample, while the least similar of the three was excluded). Taytay was therefore reintroduced into the sample as a replacement for Peñarrubia. San Vicente, another municipality that attended the selection events but was not drawn during the selection events since DSWD's desired number of treatment municipalities had been reached, was identified as a good match (using matchprov) for Taytay and was thus paired with it as a control municipality.

C. Quantitative Data Collection

The impact evaluation primarily made use of quantitative methods in the form of a household and barangay survey to gather data on the profile of sample communities at the onset of KC.

1. Sample Selection

One barangay within each of the 198 municipalities participating in the evaluation was randomly chosen, with a weighted probability favoring barangays with the highest poverty rates. This was done in order to increase the probability of selecting a sample barangay that would receive a KC subproject (since in theory barangays with the highest poverty were supposed to be more likely to receive a subproject), while still ensuring a representative sample. Poverty rates per barangay were calculated based on household-level poverty data taken from the 2011 National Household Targeting System for Poverty Reduction (NHTS-PR)⁵, a database previously used for national poverty targeting programs such as the government's conditional cash transfer program. NHTS-PR provided IPA with household poverty measures. Households were determined to be poor if their poverty measures were below a threshold determined per province, using provincial thresholds from 2007 national census data. IPA calculated a poverty rate for each barangay using the number of poor households divided by the number of households from the census. Within each municipality, IPA divided barangays into quintiles based on poverty and dropped the quintile with the lowest poverty incidence. For each municipality, the barangay to be surveyed for the sample was then randomly selected from the remaining barangays.⁶

It is worth noting that this sample will not provide a representative estimate of the main variables of interest within each municipality, as we will effectively be looking at one barangay within each municipality. However, the large number of municipalities included in the evaluation will provide a sufficient level of precision to estimate KC's impacts nationwide in municipalities with a poverty incidence between 33-69%.

Within each barangay, 30 households were randomly selected from among all households to comprise the household surveyed sample. Upon entering the barangay, surveyors visited each household and recorded the number of households in the barangay along with details of the household head in each household. This process generally took a team of eight enumerators one full day to complete. The survey teams then entered this list into a spreadsheet that produced a random selection of 30

⁵ NHTS-PR data include both barangays that were "saturated", in which more than 80% of the barangay population was interviewed and "non-saturated" barangays in which the focus was surveying "pockets of poverty". IPA did not restrict the sample to "saturated" barangays, so it is important to note that the poverty incidence estimates of "non-saturated" barangays are likely biased upwards.

⁶ Three of the original randomly selected barangays (barangay Hilabaan in Dolores, Eastern Samar, barangay Laurel in General MacArthur, Eastern Samar, and barangay Miabas in Palanas, Masbate) were all identified as security threats for surveyors in advance of the data collection. IPA performed a new randomized selection of barangays within the three municipalities and replaced them with Barangay 7 Poblacion, Barangay Limbujan, and Barangay Nabangig, respectively. These were the three barangays surveyed at baseline.

households, as well as an additional 20 replacement households⁷ that were used in cases when the originally selected households could not be found or were unwilling to participate in the survey.

Additionally, half of the 30 selected households were randomly assigned a male target respondent and half a female target respondent for the household's surveys questions relating to perceptions and empowerment. This was done to get a mix of gender responses on different modules with questions related to perceptions (since responses could differ for male and female respondents), without having to ask a male and female respondent in each household.

2. Baseline Timing and Barangay and Household Survey Instruments

Baseline survey activities spanned from August 2011 to Dec 2012. MCA-P contracted a local survey firm, Sustainable Development Solutions (SDS), to conduct a quantitative baseline survey. SDS was hired starting in February 2012 and their work finished in December 2012. Field work took place from April to July 2012. During the survey, MCA-P was directly responsible for SDS's implementation oversight and contract management, while IPA worked closely with MCA-P and SDS in instrument development, piloting and external monitoring during the training and actual survey. As detailed above, one barangay was randomly chosen from each municipality, and then 30 households were randomly selected from each barangay. A total of 5,940 households were surveyed across the 198 barangays (30 household per barangay).

The household survey was composed of modules on education, labor income sources, household assets and amenities, expenditures, social networks, and other topics. The social networks, social cohesion and crime and trust modules were supposed to be administered to a household member of the gender target randomly assigned to each household. However, due to a misunderstanding of survey instructions, in most cases enumerators only administered the social networks module to the target gender respondent. Therefore, we can only breakdown the social networks module by male and female target respondents. The household sample's gender split for the social networks module was 46% male and 54% female.⁸

In addition to a household survey, a barangay-level survey was conducted for each of the 198 barangays, with barangay captains⁹ as principal respondents. The barangay-level survey collected data on the barangay's development projects, budget, demographics, the relationship between the existing barangay captain and its previous leadership, and other topics.

3. Data Quality

Various methods were used to ensure the accuracy of data. During data collection, SDS' field supervisors performed back-checks on 10% of interviewed households, re-asking several questions and sending enumerators to redo surveys in cases where over 30% of the answers were incorrect. In

⁷ The final sample of the 5,940 surveyed households included 214 replacement households.

⁸ Although the goal was to get an even gender split there were cases in which some households did not have a household member of the target, or that member was not available. When this occurred and there were still households left to be surveyed, the supervisor switched the gender of a household to be surveyed to try to maintain the gender balance.

⁹ Out of the 198 barangay-level surveys, 179 had a barangay captain as a principal respondent while the remainder had other barangay officials.

addition, IPA hired its own team of survey auditors to observe interviews as they were conducted and to perform similar back-checks of their own.

SDS also performed data entry twice and compared the results of both records. The first data entry was performed in the field by field data editors who entered the data into an online database. The second was performed in the regional offices by data editors using the paper copies of the completed surveys.¹⁰ In cases of discrepancies in the data, the original copy of the survey was reviewed to confirm the correct answer, and in cases where this could not be confirmed, households were called or revisited to obtain the correct data. The cleaning process involved the identification of erroneous and inconsistent data and their correction through checks conducted which involve going back to the pertinent survey questionnaires and verifying data issues with respondents, interviewers or field supervisors.

Upon receipt of raw data, IPA performed data consistency checks, including logic checks in search of contradictory answers, comparisons of sums, and others. Errors were then pointed out and sent back to SDS, which rechecked its data and noted cases where the data was accurately entered despite inconsistencies.

4. Limitations of the Evaluation

Baseline surveying activities were originally scheduled to start in January 2012, but due to unforeseen delays they did not begin until April 2012. This postponement prompted concerns that the timeline for the baseline survey could overlap with DSWD's implementation plan, with the implication that a portion of the survey would occur at the same time as social preparation under KC, and that this would in turn bias how respondents answered certain modules in the survey. This was especially true for those modules describing community empowerment within the barangays. It was agreed, however, that any potential impact of the postponement would be limited for the following reasons:

- The start of KC activities in a small portion of treatment areas (see Section 5: Involvement in KC)
- Survey content negated apprehension of bias: Even if there was a small overlap between the baseline survey and the implementation, many of the questions asked in the baseline were related to things that were not expected to change as a result of the initial stages of social preparation.

To reduce any potential impacts from the postponement, we cut questions that could change as a result of the implementation (most of the perception-related questions). Additionally, to limit the overlap between implementation activities and surveying, treatment barangays were surveyed before the control barangays. However, to limit measurement error from clustering only in the treatment communities, a few control municipalities were also surveyed in the first week of the baseline survey.

After surveying we compared surveying data with DSWD's KC implementation data to determine the extent of the overlap between baseline surveying and the start of KC in treatment barangays. According to the data, 54 out of the 99 treatment barangays had already gone through their first KC barangay assembly when they were surveyed. The first KC barangay assembly is primarily a KC information

¹⁰ Since SDS had several issues with the proper estimation of the error rate, we do not report an error rate here.

session for barangay residents. Only one treatment barangay had any further KC social preparation activities. This barangay had begun the participatory situation analysis the day before the baseline survey team entered the barangay.

D. Qualitative Data Collection

This qualitative component was intended to complement the quantitative one by gathering information via open-ended responses on residents' perceptions, motives, and self-identified issues. This data could then be used to provide insights on the quantitative results. The qualitative component primarily made use of the following instruments:

- Focus group discussions, composed of both mixed (male and female) and separate (female only and male only) groups depending on the topic of discussion.
- Key informant interviews of municipal and barangay officials in the same municipalities and barangays as the focus groups.

1. Sample Selection

The qualitative sample was a sub-sample of 24 municipalities (12 municipality pairs) from the study's 198 municipalities. The qualitative sample covered 12 provinces (one pair per province) spread over the three island groups of Luzon, the Visayas and Mindanao. MCA-P performed the selection of the 12 pairs by first grouping the treatment municipalities according to the major island groups, then using the software OpenStat to group them further into four subgroups, clustered according to their quantitative scores on certain variables: poverty, land area, a series of measures for local government units that includes administrative governance, social governance and valuing fundamentals of good governance, and their scores on the Local Governance Performance Management System (LGPMS). One municipality was then selected from each of these clusters of municipalities with similar characteristics, producing a list of 12 treatment municipalities with their corresponding paired control municipalities. MCA-P contracted the Ateneo Social Science Research Center (ASSRC), to conduct the baseline qualitative component of the evaluation. ASSRC carried out the qualitative data collection from April to May 2012.

2. Barangay Resident Focus Group Discussions (FGDs)

The qualitative study primarily made use of focus group discussions (FGDs) to get residents' opinions on various topics relating to the socio-economic and demographic characteristics of their communities, the quality, and practice of governance, the strength of their social networks and ability to use them to operate in the barangay, and others. For each barangay, there were three FGDs: one with male participants, one with female participants, and one with both male and female participants, for a total of 72 FGDs. Each group had an average of 15 participants.

The survey team called for residents of the barangay to participate in the FGDs, emphasizing that participation was voluntary and that respondents would not be forced to answer particular questions. In order to make the opinions voiced in the FGDs representative, members of the barangay council (elected or appointed), barangay nutrition scholars, barangay health workers, and barangay tanods (civilian volunteer self-defense organizations or barangay police officers) were not allowed to join FGD groups. Participants were also sourced from various existing "puroks" (or zones, political subdivisions of the barangay), and efforts were made to include indigenous peoples (IPs), and to avoid selecting participants from the local elites (rich and highly educated), or participants from the same households. Participants also represented the various economic sectors within the area: farmers

(rice, coconut, corn or others), fishers, housekeepers, carpenters, drivers, vendors, housewives, and people from various other professions.

During the FGDs, the groups were asked to come to a consensus rating on their perception of various subjectively measurable variables, such as local socio-economic conditions, the quality of residents' participation in barangay assemblies, the accessibility of services such as education, perceptions of the competence of their leaders, and others. Each participant gave his or her individual rating, usually on a scale of 1 to 5 with 1 the lowest and 5 the highest. Participants were also asked to state the reason for the rating. The facilitator then asked if the groups could agree that the rating which got the highest number of votes could be adopted as the group rating, and to discuss the reasons for disagreements.

3. Barangay and Municipal Key Informant Interviews

Table 4.2 Key Informant Composition

Number of municipalities	24
Number of municipal officials per municipality	6
Number of barangay officials per municipality	2
Average number of key informants per municipalities	8

The study also made use of key informant interviews (KIIs) to get a sense of the perspectives of existing officials on issues within the communities. A total of eight key informants (KIs), (six municipal and two barangay officials) per municipality or a maximum of 192 KIs (144 municipal and 48 barangay officials) were targeted for interviews. Some KIs could not be interviewed because they were on official travel or vacation leave, hence the actual number of KIs interviewed reached 188. At the municipality level, the KIs were the municipal mayor, vice-mayor, representatives from the Municipal Development Council (MDC), municipal engineer (ME), municipal planning and development officer (MPDO), and municipal social welfare and development officer (MSWDO). At the barangay level, the KIs interviewed were the Barangay Captain (BC), and representatives of Barangay Development Council (BDC). Since 4 barangays did not have a BDC, only 44 barangay officials were interviewed.

The KI interviews were composed of eight topics: socio-economic and demographic characteristics, access to basic social services, participation system and presence of representation of organized sectors, project prioritization and budgeting, development projects, revenue, monitoring and evaluation, and peace and order. These were then allocated to the eight KIs as follows:

Table 4.3 Key Informant Interviewed for Each Question

	Mayor	Vice-mayor	MDC reps	MPDO	MSWDO	BC	BDC reps
Socio-economic and demographic characteristics							
Access to basic social services							
Participation system and presence of representation of organized sectors							
Project prioritization and budgeting							
Development projects							
Revenue							
Monitoring and evaluation							
Peace and order							

5. INVOLVEMENT IN KC

Although none of the sample barangays had begun to receive funding from the KC program at the time of the interview, information dissemination on the program, including general information meetings for barangay residents, began in some sample treatment barangays during data collection due to a delay in the surveying schedule. The KC module of the household survey attempts to capture the effects of the initial stages of the program on the sample.

At the time of the data collection, 929 out of the 2,970 surveyed treatment households (31%) said that they had attended any KC activity, meeting, get together or information session. It is also worth noting that 10 surveyed control households (0.3%) said they attended KC activities as well. There appears to have been no contamination into the control areas at the time of the baseline.

Of the 929 treatment households participating in KC, 87% said that only one member had attended, while 11% said that two household members had attended. Out of the 1,069 household members attending any KC activity, 81% said that they went only once, 15% said that they had attended just twice, and just 4% said that they had attended three or more times. Of those who attended, 62% were women and 38% were men.

As shown in the Table 5.1 below, the vast majority (72%) of these 1,069 household members said that they had attended a general information meeting. A few had already begun to attend events such as proposal preparation and needs assessment meetings, but for the most part these had not yet begun at the

time of the baseline. On average, respondents said that activity/meetings had lasted 169 minutes or almost three hours. Just 22 or about 2% of attendees said that they had contributed funds to KC, with an average contribution of PHP 299.

Table 5.1 Number of Household Members who Attended KC Activities

KC activity attended	Percentage of KC activity attendees who attended¹¹ (Out of 1,069 individuals)
General information meeting (barangay assembly)	72%
Meet and greet	9%
Poverty mapping (Participatory Situation Analysis activities)	10%
Needs assessment (Participatory Situation Analysis activities)	15%
Budget planning	12%
Proposal preparation (Project Preparation Team or Project development committee activities)	16%

Households who said that they did not participate in the program were also asked to give their reasons. Table 5.2 presents the reasons given by treatment households for not participating in KC. The most common reason given by respondents was that they had not been informed of the meeting schedule.

Table 5.2 Reasons Given by Treatment Households for Not Participating in KC

Reasons did not participate in KC	Percentage of households¹²
Not informed of meeting schedule	36%
Not covered by KC (barangay does not have KC)	15%
Lack of time	18%
Not interested	10%
Activities were too far from my home	4%

¹¹ Percentages do not add up to 100 since households could identify more than one event attended.

¹² Percentages do not add up to 100 since households could name more than one reason for not attending.

6. FINDINGS: BASELINE BALANCE OF STUDY GROUPS

For the treatment and control groups, the average values (or mean values) for most variables of interest are statistically the same. This similarity of major demographic indicators and outcomes demonstrates that the randomized assignment to treatment and control has indeed generated balanced treatment and control households and barangays prior to the introduction of KC. The purpose of this section is to show this for different variables of interest. In technical terms, the average value for the treatment group is compared to the average value of the control group, with the hypothesis that the difference between values is zero (treatment group value minus control group value equals zero). Statistically significant difference from zero indicates imbalance. To test this one can use either a single population t-test or a regression of the difference on one¹³. Either method produces identical results. The latter is the one used in the analysis. With single-sided tests, P-values of less than 0.05 will be considered statistically significant, meaning that there is less than a 5% probability that the difference between treatment and control barangays is due to chance. Any indicators showing imbalance at baseline will be controlled for during the actual regression analysis.

A. Balance of Main Demographic Indicators

Table 6.1 presents the main demographic indicators reported in the household and barangay survey. At the household level, treatment and control barangays are balanced along all demographic indicators except for the percentage of individuals age 15 or below. At the barangay level, except for the percentage of residents from the Bicolano ethnic group, treatment and control barangays are balanced along all indicators including number of residents and the percentage of Catholic residents.

¹³ Both of these methods produce the P-values necessary for determining statistically significant differences between treatment and control groups

Table 6.1 Balance of Main Demographic Indicators

Variable	Control Mean	Treatment Mean	P-Value
Household			
% Individuals age 15 or below*	38%	37%	0.05
% Individuals age 15 to 29	24%	25%	0.24
% Individuals age 30 to 44	17%	17%	0.55
% Individuals age 45 to 59	12%	13%	0.21
% Individuals age 60 or above	9%	9%	0.59
% Males	52%	51%	0.15
% Female headed households	14%	16%	0.35
Total number of schooling years completed by household head	6	6	0.26
Barangay			
Number of residents	1,303	1,349	0.69
% Residents from the Aklanon ethnic group	2%	5%	0.15
% Residents from the Bicolano ethnic group*	19%	15%	0.04
% Residents from the Bisayan/Cebuano ethnic group	17%	21%	0.27
% Residents from the Chavacano ethnic group	1%	0%	0.42
% Residents from the Hiligaynon ethnic group	2%	2%	0.61
% Residents from the Ilocano ethnic group	4%	5%	0.40
% Residents from the Ilonggo ethnic group	2%	2%	0.78
% Residents from the Kinaray-a ethnic group	3%	4%	0.34
% Residents from the Maranao ethnic group	1%	0%	0.38
% Residents from the Masbateño ethnic group	1%	1%	0.98
% Residents from the Tagalog ethnic group	8%	10%	0.58
% Residents from the Tausug ethnic group	0%	1%	0.50
% Residents from the Waray ethnic group	10%	13%	0.26
% Catholic residents	79%	77%	0.68
% Barangays with strong mobile phone signal	51%	42%	0.23
* There is a significant difference at the 5% level			

B. Balance of Main Socio-Economic Indicators

Table 6.2 shows that for socioeconomic indicators reported in the household survey, all but two are balanced or the same (not significantly different between treatment and control households.) The balance between treatment and control households is shown in different groupings of household expenditure,

access to education, health, passable roads, public transport, and public market. Access to the municipal poblacion (the municipal town center) shows a significant difference where individuals in treatment barangays reported spending less time traveling to the center compared to control barangays (31 vs. 40 minutes). There is also a small significant difference in unemployment rates between treatment and control barangays, with unemployment levels slightly higher in treatment barangays (16% vs. 14% unemployed). Enrollment among school-age children, availability of piped drinking water, visits to barangay health stations are all shown to be identical for treatment and control households. Barangay-level indicators show no difference.

Table 6.2 Balance of Main Socio-Economic Indicators

Variable	Control Mean	Treatment Mean	P-Value
Household			
Per capita total monthly household consumption (PHP)	2901	2763	0.50
Per capita monthly household food consumption (PHP)	1303	1320	0.75
Per capita monthly household non-food consumption (PHP)	1598	1443	0.37
Travel time to nearest elementary school (mins)	13	13	0.53
Travel time to nearest secondary school (mins)	30	25	0.19
Travel time to nearest public hospital (mins)	68	56	0.29
Travel time to nearest paved road (for 4-wheel vehicles) (mins)	17	15	0.45
Travel time to nearest dirt road (passable by 4-wheel vehicles)	10	7	0.20
Travel time to nearest public transportation (mins)	15	15	0.90
Travel time to nearest public market (mins)	45	41	0.75
Travel time to nearest municipal poblacion (mins)*	40	31	0.04
% Unemployed individuals*	14%	16%	0.01
% Enrolled in school (Ages 6 to 11)	98%	98%	0.19
% Enrolled in school (Ages 12 to 15)	90%	93%	0.10
% Farming households	75%	72%	0.30
% Households with piped drinking water supply	28%	25%	0.44
Household member number of barangay health station visits during the last month ¹	0.4	0.4	0.68
% Households below poverty threshold	40%	42%	0.32
Barangay			
% Barangays with elementary schools	82%	86%	0.42
% Barangays with secondary schools	14%	17%	0.58
% Barangays with barangay health stations	79%	80%	0.85

* There is a significant difference at the 5% level ¹Including households with zero visits

C. Balance of Main Community Empowerment Indicators

As shown in Table 6.3, of the seven household-level community empowerment indicators, five indicators are statistically the same (only two are significantly different). No significant difference is found in the proportion of households attending religious group meetings and women's association meetings, the number of times a household member attended a civic/community group, the number of days contributed to community activities¹⁴ and the proportion of households with a household member who attended a barangay assembly in the past six months. There is a significantly lower proportion of households participating in community activities among treatment households compared to controls (44% vs. 53%). Additionally, there is a significant difference between treatment and controls in the average number of times any household member attended a barangay assembly in the first four months of the last six months¹⁵, however the magnitude of the difference is small (0.6 vs. 0.7). Table 6.3 also shows barangay-level indicators, and neither of the indicators is significantly different.

¹⁴ Participation in community activities refers to any involvement in community efforts to repair, clean, maintain or construct village or neighborhood infrastructure or facilities in the barangay or municipality during the last 12 months.

¹⁵ This measure excludes the last two months of barangay assembly attendance to account for the baseline schedule overlap with the start of KC. At the start of KC, residents are invited to attend a barangay assembly to learn about the program.

Table 6.3 Balance of Main Community Empowerment Indicators

Variable	Control Mean	Treatment Mean	P-Value
Household			
% Households participating in religious groups during the last 12 months	11%	11%	0.86
% Households participating in women's associations during the last 12 months	13%	16%	0.13
Total number of times individual attended a civic/community group in the last 12 months	13	12	0.11
% Households with a household member who participated in community effort/activity in the last 12 months*	53%	44%	0.00
Per household member ¹ total number of days household contributed to community effort activity in the last 12 months	2	2	0.41
% Households with a household member who attended a barangay assembly in the past 6 months	66%	71%	0.06
Number of times any household member attended a barangay assembly during the first 4 months of the past 6 months*	0.6	0.7	0.04
Barangay			
% Barangays with religious groups	65%	67%	0.72
% Barangay with women's associations	63%	66%	0.62

* There is a significant difference at the 5% level; ¹Only household members 15 years and above

D. Balance of Main Governance Indicators

Table 6.4 shows the balance of governance indicators at the barangay level. The results show that the indicators are not significantly different between treatment and control barangays. There is no significant difference in the number of barangay assemblies and barangay council meetings held in the last 12 months. There is also no significant difference in the top two types of projects implemented by barangays in 2011.

Table 6.4 Balance of Main Governance Indicators

Variable	Control Mean	Treatment Mean	P-Value
Barangay			
Number of barangay council meetings held in the last 12 Months ¹	23	24	0.49
Number of barangay assemblies held in the last 12 Months	2	3	0.08
% Barangays that implemented a road project in 2011	60%	61%	0.87
% Barangays that implemented a health and nutrition project in 2011	60%	59%	0.89
* There is a significant difference at the 5% level ¹ Don't have responses for 6 pairs			

E. Balance of Main Social Capital Indicators

Table 6.5 shows the results for the balance of social capital indicators. There is only a significant difference between treatment and controls in the percentage of households who said they know a barangay official closely, one of the two proximity-to-political-leaders indicators. All other household and barangay level social capital indicators are balanced. For example, there is no significant difference in social networks as indicated by the percentage of other households in the barangay known by respondents. In addition, there is no significant difference in trust indicators such as feeling safe when alone or in the expectation that a moderately valuable asset such as a bicycle left outside the house will not be stolen.

Table 6.5 Balance of Main Social Capital Indicators

Variable	Control Mean	Treatment Mean	P-Value
Household			
% Households known by respondent	70%	70%	0.31
% Households said feel very safe when alone	30%	32%	0.11
% Households said feel moderately safe when alone	56%	56%	0.57
% Households said bike will certainly not be stolen if left outside at night	48%	48%	0.93
% Households who said they know a barangay official closely*	89%	86%	0.02
% Households who said they know the barangay captain/spouse closely	41%	39%	0.45
Barangay			
% Barangay respondents who said bike will certainly not be stolen if left outside at night ²	68%	61%	0.31
* There is a significant difference at the 5% level; ¹ Only household members 15 years and above responses for 1 pair ² Don't have			

7. FINDINGS: BASELINE OUTCOMES OF INTEREST

A. Socio-Economic Profile

In this section, we summarize baseline socio-economic indicators including access to basic services, school enrollment, labor force participation, household consumption and assets.

1. Household Consumption/Poverty

The household survey asked each household in the sample about their total monthly consumption.¹⁶ We define total monthly household consumption as the sum of monthly household food and non-food expenditures. Non-food expenditure items include the following: fuel, light, transport, household operations, personal care and effects, communication, housing, clothing, education, recreation, medical, nondurable furnishing, durable furnishing, taxes, house maintenance and repair, household special occasions, gifts, alcohol, tobacco, and other expenses. The definition excludes other disbursements such

¹⁶ As mentioned earlier, we focus on consumption instead of income for two main reasons. First, consumption does not fluctuate as much as income. Second, the prevalence of self-employment and own production in rural settings makes measuring income more difficult since it requires the tracking of more components and more imputations.

as payments of cash loans, installments of purchased item loans to other individuals and purchases or amortizations of real property¹⁷. Table 7.1 summarizes per capita total monthly household consumption for the sample. Average per capita total household consumption was PHP 2,832 (about US\$71). National estimates from the Annual Poverty Indicators Survey (APIS) 2011 show per capita total household consumption at PHP 4,004 (about US\$100). Since KC targets poorer barangays, and we matched the barangays that would get KC (treatment) to similarly poor barangays (control), we should expect and accept as accurate the lower per capita consumption that we found in comparison to national estimates. Consumption results by household head gender reveal higher per capital consumption by female headed households than male headed households (PHP 3,684 vs. PHP 2,682 or US\$92 vs. US\$67). In terms of remoteness, households in barangays close to the municipal poblacion had higher per capita consumption than household farther away from the municipal poblacion (PHP 2,973 vs. PHP 2,623 or US\$74 vs. US\$66).

Table 7.1 Summary of Per Capita Total Monthly Household Consumption

	Baseline Study Sample				APIS 2011 (Covers January to June)	
Monthly Consumption	Average PHP				Average PHP	
	Household Head Gender		Barangay Close to Municipal Poblacion		Full Sample	National Estimate
	Female	Male	Yes	No		
Per Capita Total Household Consumption	3,684	2,682	2,973	2,623	2,832	4,004
Per Capita Non- Food Consumption	2,084	1,421	1,635	1,345	1,520	1,660
Per Capita Food Consumption	1,600	1,261	1,338	1,279	1,312	2,345

We used per capita total household consumption to calculate household poverty incidence using two different poverty lines, the \$1.25 (2005 PPP) poverty threshold and the Philippines' National Statistical Coordination Board (NSCB) regional poverty threshold (based on per capita income) for each region in the treatment and comparison communities. Table 7.2 shows that 22% of households were living on less than \$1.25 a day and 41% of households were below the official regional poverty threshold. In comparison, the national poverty incidence of families (based on per capita income) for the first semester of 2012 was 22% (NSCB 2012) compared to 41% for our sample. Female headed households had a

¹⁷ Expenditures include imputed rent on owner occupied, rent free and official housing.

lower poverty incidence than male headed households (34% vs. 42% according to the regional per capita income poverty threshold and 18% vs. 23% based on the living on less than \$1.25 threshold). Poverty incidence was only slightly lower for households closer to the municipal poblacion than those farther away (40% vs. 42% according to the regional per capita income poverty threshold and 21% vs. 24% based on the living on less than \$1.25 threshold).

Table 7.2 Poverty Incidence

Poverty Thresholds	Percentage of Households				
	Household Head Gender		Barangay Close to Municipal Poblacion		Full Sample
	Female	Male	Yes	No	
Below Official Regional Per Capita Income Poverty Threshold	34%	42%	40%	42%	41%
Living on less than \$1.25 (2005 PPP)	18%	23%	21%	24%	22%

Poverty Levels and Hunger Perceptions

The barangay survey asked barangay officials to rate the poverty level in their barangays on a scale of 1 to 10, with 1 being the least poor and 10 being the poorest. Table 7.3 shows the average rating per island group. Overall, respondents gave an average rating of 6.2. Respondents in the Visayas rated their barangays the poorest, while respondents in Mindanao rated their barangays least poor.

Table 7.3 Barangay Poverty Rating by Barangay Officials

	Average Poverty Rating
Full Sample	6.2
Luzon	6.2
Visayas	6.4
Mindanao	5.9

The household survey also asked households to rate their poverty level, without providing any predetermined definition or scale of poverty. Table 7.4 shows the breakdown of households' ratings of their own poverty level. Overall, most households (69%) reported that they were very or moderately poor. In comparison, SWS 2012 survey data shows that nationwide, 51% of households rated themselves as poor, demonstrating again that KC, and thus the sample, includes poorer communities. Slightly more female headed household said they were very poor than male headed households (24% vs. 21%). Almost twice as many people below the poverty threshold than above the threshold said they were very poor (30% vs. 16%). Compared to less remote households (as indicated by proximity to the municipal poblacion), a greater percentage of more remote households said they were very poor (24% vs. 20%). In terms of island groups, a higher percentage of households in Mindanao (34% compared to 25% in the Visayas and 15% in Luzon) indicated than they were very poor.

Table 7.4 Household Perception of Self-Poverty

Household Poverty Rating Given by the Household	Full Sample	Headed Household Gender		Below Poverty Threshold ¹		Close to Municipal Poblacion		Island		
		Female	Male	Yes	No	Yes	No	Luzon	Visayas	Mindanao
Very poor	22%	24%	21%	30%	16%	20%	24%	15%	25%	34%
Moderately poor	47%	44%	47%	49%	45%	47%	46%	48%	48%	43%
Not very poor	28%	28%	28%	19%	33%	28%	27%	32%	23%	22%
Not poor at all	4%	5%	4%	1%	6%	5%	3%	5%	4%	1%

¹ Households are below the poverty threshold, if their per capita expenditures at baseline (2012) were lower than the official regional poverty line based on per capita income.

More positively, 75% of households reported that they had not experienced hunger within the past three months. Meanwhile, 5% of households indicated that they had experienced hunger often and 14% a few times. Table 7.5 provides more details.

Table 7.5 Frequency of Hunger Experienced by Households

Frequency hunger was experienced	Percentage of Households (n=1,490)
Once	6%
A few times	14%
Often	5%
Always	0%
Never	75%

Focus group participants' concept of poverty included a wider range of factors than just consumption. FGDs asked participants to explain the characteristics of poor, middle-class and rich individuals or families. Participants said that the poor were those who lacked the following:

- Regular income
- Non-agricultural income sources such as stores, piggeries, poultry, fishponds
- Surplus money
- Productive assets (such as land to till, farming tools, cages to grow fish, livestock, etc.)
- Consistent meals
- Access to basic services (such as education, health,) clothing, house and land
- Personal and household assets

According to participants, the rich were those who possessed all of these, while those in the middle-class may possess some but not all of these. Barangay residents' definition of poverty then is not based on a pre-determined poverty line, but on people's norms and expectations of a certain standard of living, which include factors such as their ability to access public services, their ability to produce a regular income, and others.

FGD groups formed within barangays with mixed male and female participants asked participants to estimate the proportion of poor, middle and rich individuals in the barangay, providing another indicator of perceptions of poverty. Table 7.6 below summarizes the estimates. In contrast to the household survey (with Mindanao the highest), among sample barangays, groups in the Visayas gave the highest estimates of the proportion of poor families living in their areas, at 88%. Groups in Luzon followed with an estimate of 78%, and Mindanao was the lowest with 68%. Notably, these figures roughly coincide with the findings from the household survey, in which 68% of household respondents perceive themselves as ‘very poor’ or ‘moderately poor’. The estimates collected in FGDs differ significantly, however, from the poverty incidence calculated using the per capita total household consumption, which was 22% using the \$1.25 a day threshold and 41% official regional poverty threshold. This quite dramatic difference likely reflects the differences in definitions of poverty, as well as a subjective sense of privation that is not measured in government statistics.

Table 7.6 Perceived Proportion of Poor Families in Barangay

Island Group	Poor	Middle	Rich
Luzon	78%	16%	6%
Visayas	88%	10%	2%
Mindanao	68%	30%	4%
All	78%	18%	4%

Perceived Barangay Poverty Trends by Barangay Officials

A total of 44 barangay officials KIs, including the barangay captain and members of the barangay development council, were asked about the perceived trend of poverty incidence in barangays. Of these, 15 said poverty was increasing, 17 said it was staying the same, and the remaining 12 said it was decreasing.

Perceived Poverty in Municipality by Municipal Officials

A total of 48 municipal-level officials (the MSWDO and vice-mayor) were asked the same question as barangay officials about poverty trends. Of these, 25 said that poverty incidence was increasing, a slight majority. Another 12 said it was unchanging and the remaining 11 said it was decreasing. Municipal KIs who said that poverty was increasing generally blamed the local government’s lack of direct anti-poverty programs or the failure of various existing poverty alleviation programs such as the conditional cash transfer program, an interest-free loan program, credit and livelihood assistance, and others. On the other hand, Municipal KIs who said that poverty had decreased claimed the opposite: that government programs such as the cash transfer program and the Mindanao Rural Development Project (MRDP), a program that generates local livelihood opportunities and facilitates the marketing of products from the barangays, had been effective. This is curious, considering that the objective of these programs is generally to make broad, long-term gains rather than produce immediate benefits. It is possible that these views reflect the popularity of the programs in these areas rather than an accurate view of their effectiveness.

While roughly the same proportion of barangay and municipal officials felt that poverty was decreasing, municipal KIs seemed more pessimistic than barangay KIs about increasing poverty. There are a number of possible explanations. Municipal officials are reflecting upon a broader range of barangays in their estimates including barangays outside of the sample. In addition, municipal officials generally have access to broader poverty data than barangay officials, and also interact with different constituents or

interest groups, which could affect their perceptions. Barangay officials might also feel more directly responsible for individuals in their barangay and may self-report more success at poverty reduction.

2. Labor Force Participation

Lacking a regular income was identified in FGDs as a key factor of poverty. The household survey collected information on household member labor force participation pertaining to week prior to the survey. We define individuals as labor force participants if they are age 15 years and above, and working (employed within the past week, rent earners, working without pay) or unemployed (looking for work). Our definition excludes individuals who are unable or who choose not to work. As Table 7.7 indicates, there were 17,544 individuals of working age 15 years and above in the sample, 9,078 of which were male and 8,466 females. Out of these 17,544 individuals, 68% were in the labor force. As expected, a higher proportion of men were in the labor force (87%) compared to women (47%). It is important to note that the sample's labor force participation rate (68%) may be higher than the national rate (64%) because unlike the household survey, the LFS definition, excludes individuals from the labor force who were unemployed and were not available in the last week. The sample's unemployment rate was more than twice (15% vs. 7%) the national unemployment rate reported by the Philippine's Labor Force Survey (LFS). The employment rate was much higher for men in the sample (89%) than for women (77%). Women report a slightly higher average monthly income¹⁸ (PHP 3,892 PHP or about US\$97) than men (PHP 3,769 or about US\$94). In the Philippines, the National Statistics Office (NSO) conducts the Family Income and Expenditures Survey (FIES) every three years. The 2009 FIES survey showed that families run by female household heads had higher incomes than families run by males.

Table 7.7 Labor Market Outcomes

	Baseline Study Sample			LFS July 2012 (covers April-June)
Labor Market Outcomes	Males	Females	Total	Total
Number of Working Age Individuals in Sample (15 Years and Above)	9,078	8,466	17,544	
Labor Force Participation Rate	87%	47%	68%	64%
Employment rate (as % of labor force)	89%	77%	85%	93%
Unemployed (as % of labor force)	11%	23%	15%	7%
Average Monthly Labor Income from Primary Job (PHP)	3,769	3,892	3,805	

Table 7.8 below classifies employed workers according to their type of work. A majority of employed workers in the sample were self-employed (49%), followed by employees (45%). Only a small proportion (6%), were unpaid family workers. At the national level, there were fewer self-employed workers (32%) and more employees (59%).

¹⁸ This is the average over all working individuals, but it excludes the wage for unpaid family workers.

Table 7.8 Employment by Class of Worker

	Baseline Study Sample			LFS July 2012 (covers April-June)
Employment by Class of Worker	Males	Females	Total	Total
Employee	45%	45%	45%	59%
Self-Employed	52%	46%	49%	32%
Unpaid Family Worker	5%	9%	6%	9%

Table 7.9 presents information on hours worked per week. The sample had a smaller percentage of individuals who worked 40 hours or more (61%) compared to national estimates (66%). On average, men in the sample barangays also worked more hours per week in their primary jobs (41%) compared to women (40). Similarly, the proportion of men employed full-time working at least 40 hours per week was higher (62%) than that of women (58%).

Table 7.9 Hours Worked per Week

	Baseline Study Sample			LFS July 2012 (covers April-June)
Hours Worked per Week	Males	Females	Total	Total
Average hours worked in primary job	41	40	41	42
Worked less than 40 hours	38%	42%	39%	34%
Worked 40 hours or more	62%	58%	61%	66%

3. Farming Households and Yield of Paddy Rice

We define a farming household as a household engaged in crop farming, gardening or livestock/poultry raising in the past 12 months. According to the household survey, out of the 5,940 households in the sample 4,369 were farming households (74%).

The household survey asked each household that grew palay (rice) in the last 12 months about the area of land planted with palay by the household and the quantity harvested. We define palay yield per hectare as the quantity of palay harvested (in kilos) divided by the area of land planted with palay (in hectares). Table 7.10 presents the average palay yield per hectare. The average palay yield per hectare for households growing palay in the past 12 months was 2,300 kilos per hectare. In comparison, the national average reported by the International Rice Research Institute (IRRI) was 3,500 kilos per hectare.

Table 7.10 Yield of Paddy Rice in the Last 12 Months

	Total Number of Households	Kilos Harvested/Hectares Planted ¹	
		Mean	S.D.
Palay Yield Per Hectare	666	2,300	1,846
¹ Exclude outlier observations with per hectare yields above 7,500 based on field experiments results in (Sebastian, Alviola, Francisco, 2005; http://www.fao.org/docrep/003/x6905e/x6905e0b.htm)			

4. Education

The barangay survey asked barangay officials about the availability of educational services and facilities in the barangay. About 84% of respondents reported that their barangay had an elementary school, while 16% reported that their barangay had a secondary school. Secondary schools are usually not within the barangay but near the municipal poblacion.

The household survey asked about the school enrollment status of individuals ages 0 to 18. We consider an individual enrolled if he/she was currently enrolled, intended to enroll¹⁹ or was enrolled during the past 1 months. Table 7.11 shows the percentage of individuals enrolled in day care and school. The age ranges in the figure reflect those typically used by the Department of Education in the Philippines when measuring school enrollment. Out of 28,308 individuals in the sample, 2,128 were ages 3 to 5 and 1,282 (60%) were enrolled in day care. The day care enrollment rate may be higher than national rates because it includes individuals who intended to enroll. There were 4,098 individuals ages 6 to 11 in the sample and 4,007 (98%) of them were enrolled in school. Additionally, there were 2,825 individuals ages 12 to 15 in the sample and 2,583 (91%) of them were enrolled in school.

Table 7.11 Percentage of Household Members Enrolled in Day Care and School

Type of Facility	Baseline Study Sample			NSO APIS 2011
	Total Number in Sample	Number Enrolled	Percentage Enrolled	Percentage Enrolled
Day Care (Ages 3-5)	2,128	1,282	60%	48%
School (Ages 6-11)	4,098	4,007	98%	97%
School (Ages 12-15)	2,825	2,583	91%	92%

Table 7.12 presents the travel time and cost of a one way trip to education facilities for those enrolled in day care, primary or secondary school. The household survey collected travel time information for 9,488

¹⁹ The definition included individuals who intended to enroll because the survey was administered during the summer when school was not in session.

household members attending day care, primary or secondary school. On average, household members enrolled in school spent 18 minutes traveling, usually by foot, one way to their education facilities. During the rainy and dry season the average travel cost of a one way trip was PHP 4 PHP (about US\$0.10).

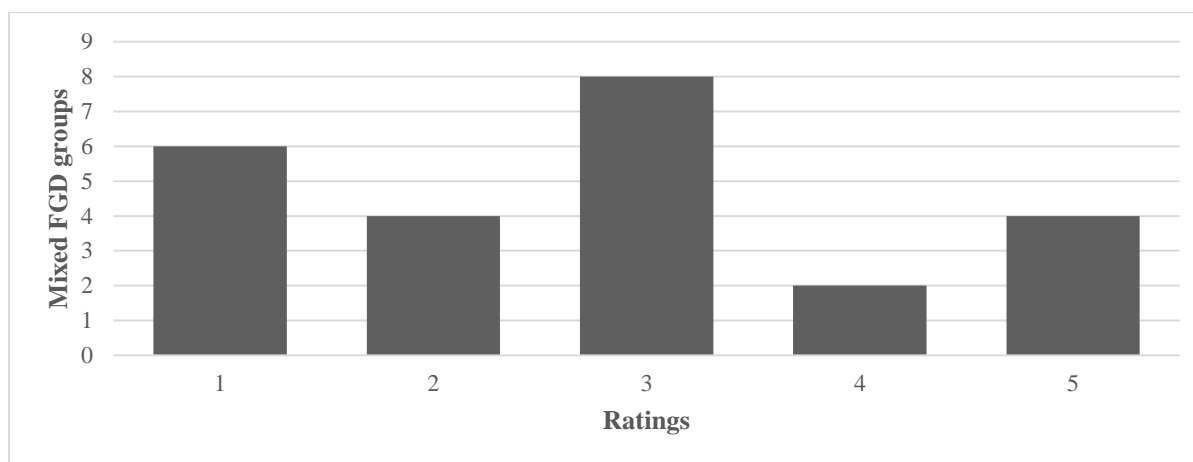
Table 7.12 Travel Time and Cost of a One Way Trip to Education Facilities

One Way Trip to the Education Facility	Number of Household Members	Mean	S.D.
Minutes Spent Traveling ¹	9,488	18	22
Dry Season: Travel Cost (PHP) ²	9,445	4	15
Rainy Season: Travel Cost (PHP) ²	9,446	4	15
¹ Excludes travel times above 300 minutes considered outliers		² Excludes travel costs above 500 PHP considered outliers	

Perceptions on Access to Basic Education

In the mixed FGD groups (meaning focus groups with both male and female members), participants were asked to rate their level of access to basic education; Figure 7.1 presents the results. FGD groups gave an average rating of 2.75 where 1 is the lowest and 5 is the highest. This is an unusually low rating in comparison to their responses to other questions. A quarter of the FGD groups gave ratings of 1. In explaining low ratings, FGD participants mentioned factors such as physical distance, the absence of a high school, dilapidated classrooms/buildings, a lack of teachers, a lack of facilities, multi-grade classes, frequent class suspension, poor teaching, and the general unaffordability of schooling, illustrating that their understandings of “access” extend much further than mere physical access to a school in the barangay.

Figure 7.1 Accessibility of Basic Education (24 mixed FGDs)²⁰



Similarly, in interviews, MPDO and MSWDO key informants were asked to define their municipality's access to education according to the following factors:

²⁰ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

- The physical presence of schools (day care, elementary, secondary and tertiary) in the municipality
- Physical proximity to school
- The provision of Supervised Neighborhood Programs (SNP) and Alternative Learning Schools (ALS)
- The availability of scholarship programs
- Affordability
- Quality of teachers
- Sufficiency of textbooks and classrooms
- Facilities for the disadvantaged such as persons with disabilities.

Even with this fairly expansive definition, respondents on the whole gave higher ratings than FGD groups, with a majority of the KIs (25 out of 48) giving access to education a rating of 4. Respondents mentioned positive developments such as the availability of public elementary schools in nearly all barangays, an increased number of students in daycare and high school because of the cash transfer program, proper implementation of the ALS program, educational subsidies to schools, scholarships to high school and college students, and others. But KIs reported that problems still exist: access is still difficult for students from the upland areas, there is still a need to decrease the number of out-of-school youths and drop-outs, universities only offer a limited number of courses; satellite schools need to be established to decongest the high schools, and students still need more textbooks. KIs from 11 areas gave ratings of 5, saying that there were a sufficient number of daycare centers and elementary schools. One KI gave his municipality a rating of 1 due to the absence of facilities for persons with disabilities, reminding us that different individuals consider different factors in their assessments.

The responses of FGD groups and the KIs, here and below might not be directly comparable since municipal KIs were describing the conditions for the entire municipality and not an individual barangay's. Nevertheless, this suggests a difference in perceptions between residents and officials, a difference in conditions between the municipal center and the individual barangays', or some combination of both.

5. Access to Basic Services

Focus group participants also identified lack of access to other basic services, beyond education, as central parts of poverty. Likewise, the household survey asked sample households about their access to various types of basic services including schools, health facilities, paved and dirt roads, public transport, public markets, and the municipality poblacion. Table 7.13 shows the most common mode of transport used to travel to each type of basic service. The most common mode of transport to the majority of basic services was on foot. The household survey also asked how long it takes to travel one way to each basic service from the household's residence. Table 7.13 summarizes the average one way travel time to the nearest basic services measured in minutes. The average one way travel time was 8 minutes to the nearest dirt road (passable by 4-wheel vehicles) and 61 minutes to the nearest public hospital.

Table 7.13 Travel Time (One Way Trip) by Type of Basic Service

Type of Basic Service	Number of Households	Most Common Mode of Transport Used by Households	One Way Trip Travel Time (Minutes)	
-	-	-	<u>Mean</u>	<u>S.D.</u>
Public Hospital	5,194	Mixed (Foot+Vehicle or Vehicle+Vehicle)	61	95
Private Health Clinic	4,686	Motorcycle	55	108
Public Market	5,455	Motorcycle	42	89
Municipal Poblacion	5,494	Motorcycle	34	41
Secondary School	5,627	Foot	27	35
Paved Road (for 4-wheel vehicles)	5,616	Foot	16	27
Barangay Health Center	5,545	Foot	15	20
Nearest Public Transportation	5,601	Foot	15	34
Elementary School	5,802	Foot	13	16
Dirt Road (Passable by 2-wheel vehicles)	5,081	Foot	9	19
Dirt Road (Passable by 4-wheel vehicles)	4,808	Foot	8	19

Table 7.14 presents the one way travel cost to the nearest different types of basic services. The average one way travel cost was PHP 1 (US\$0.03) to the nearest elementary school and PHP 56 PHP (US\$1.40) to the nearest public hospital. Average travel costs do not seem to vary much between dry and rainy seasons. Comparing Table 7.13 to Table 7.14, in most instances the longer the average travel time to a basic service the higher the average trip cost.

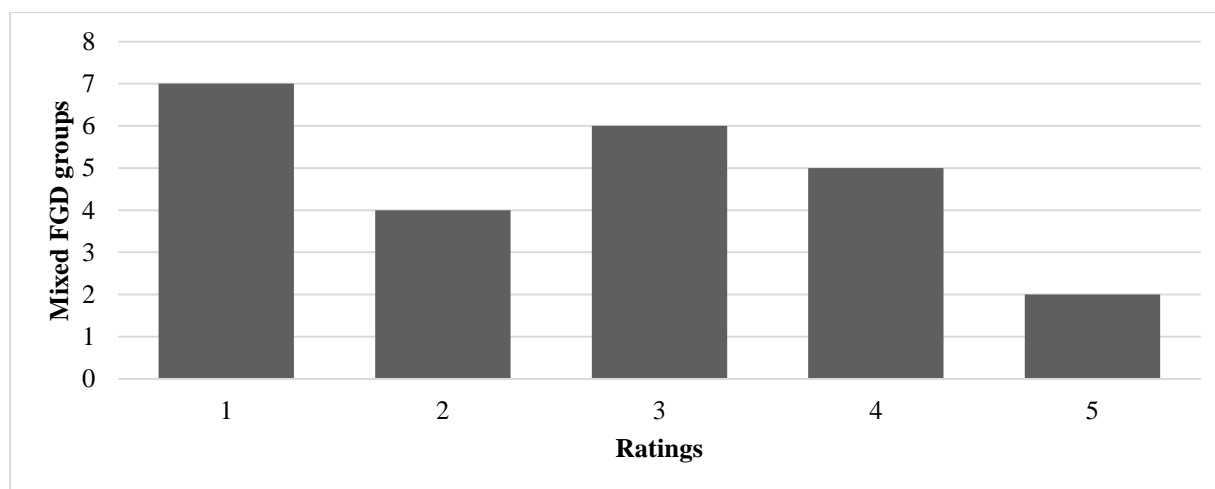
Table 7.14 Travel Cost (One Way Trip) by Type of Basic Service

Type of Basic Service	Dry Season		Rainy Season	
	One Way Trip Travel Cost (PHP)		One Way Trip Travel Cost (PHP)	
	Mean	S.D.	Mean	S.D.
Public Hospital	56	121	56	122
Private Health Clinic	48	119	48	118
Public Market	33	93	32	93
Municipal Poblacion	27	34	26	34
Secondary School	12	19	12	20
Paved Road (for 4-wheel vehicles)	8	20	8	23
Nearest Public Transportation	8	35	8	34
Barangay Health Center	4	42	4	68
Dirt Road (passable by 2-wheel vehicles)	2	10	2	9
Dirt Road (passable by 4-wheel vehicles)	2	10	2	9
Elementary School	2	6	1	6

Perceptions of access to basic infrastructure facilities

Barangay residents participating in FGDs gave low ratings to their accessibility to farm-to-market roads (FMRs), as shown in Figure 7.2, with FGD groups in 17 of 24 barangays giving ratings below 3 out of 5. FGD participants mentioned problems such as poor existing roads, roads with a tendency to flood during strong rains, or simply the absence of an FMR.

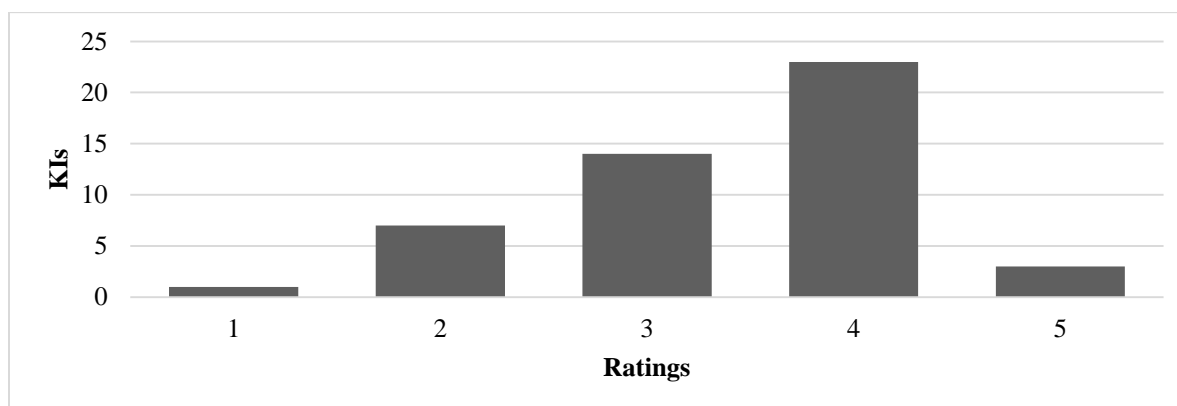
Figure 7.2 Accessibility of FMRs (24 mixed FGDs)²¹



The MSWDO and MPDO KIs, in turn, were asked to rate their municipalities' accessibility to basic infrastructure such as farm-to-market roads and bridges. Although this question is not identical to the FGD question since it does not just include FMRs, it is nonetheless worth noting that municipal officials gave much higher ratings to their accessibility than FGD groups. Close to half (23 out of 48) of all KIs gave their municipalities' accessibility to basic infrastructure a rating of 4 out of 5, with 5 being the highest rating (see Figure 7.3). This is a curious result, considering the high number of KC subproject proposals for road or access trail projects, as well the fact that respondents from both the household level and barangay level surveys indicated that this was their priority project (see subsection 10. Barangay Development Activities). Various respondents mentioned the improvement of bridges and the paving of existing roads, the existence of toll-free passable roads, and other planned road improvement projects. However, respondents admitted that more infrastructure improvements needed to be made, mentioning the need for projects such as landfills for garbage disposal, daycare centers, indoor sports and cultural centers, barangay health centers, improved water supply systems, training centers, ports, bridges, and more paving.

²¹ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

Figure 7.3 Accessibility of Basic Infrastructure (FMRs and Bridges) (48 KIs - MPDO and MSWDO)²²



Access to Drinking Water Supply Systems

The household survey collected information on the types of drinking water supply systems used by households. Water supply service in the country is classified into 3 levels, with level 3 being the best service. Level 1 (point source) entails having a protected well or a developed spring with an outlet but without a distribution system, and is designed to serve sparsely populated rural areas. Level 1 systems supply an average of 15 households with people having to fetch water from up to 250 meters distance. Level 2 (communal faucet system or stand post) involves a piped system with communal or public faucets usually serving 4-6 households within 25 meters distance. Level 3 (waterworks system) has a fully reticulated system with individual house connections based on a daily water demand of more than 100 liters per person. According to household survey data, 55% of households had no access to level 1, 2 or 3 drinking water supply systems. One quarter (25%) of sample households had access to a level 1 system, 11% to a level 2 and 9% to a level 3.

Table 7.15 presents information on the time household respondents said it takes them to fetch drinking water. On average, households said they take 7 minutes to travel to the drinking water source and return.

Table 7.15 Time Spent Fetching Drinking Water

	Mean	S.D.
Time Spent Fetching Drinking Water (Minutes) ¹	7	17

¹Includes time spent going to collect water and back.

Table 7.16 compares the percentage of households who listed all male household members as the most common household members (up to three) responsible for collecting drinking water, and the percentage of households who listed all female household members. Out of 4,885 households fetching water, 40% of households listed all male household members and 23% of households listed all female household members.

²² On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

Table 7.16 Household Members Most Commonly Responsible for Fetching Drinking Water

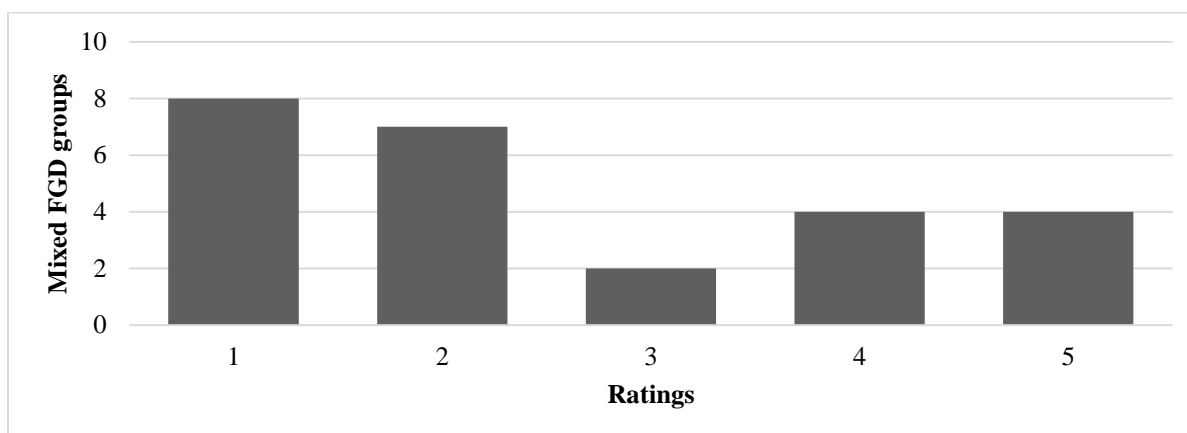
Household members most commonly responsible for fetching drinking water were:	Percentage of Households (n= 4,884)
All Males	40%
All Females	23%

The household survey also asked households about the type of toilet facility used by household members. Findings indicate that 28% of households did not use a sanitary toilet facility. The standard definition of sanitary toilet facilities includes water sealed or German toilets. The standard definition of unsanitary toilet facilities includes: pit privy, open pit, open land and open water source facilities.

Perceptions of Access to Potable Water

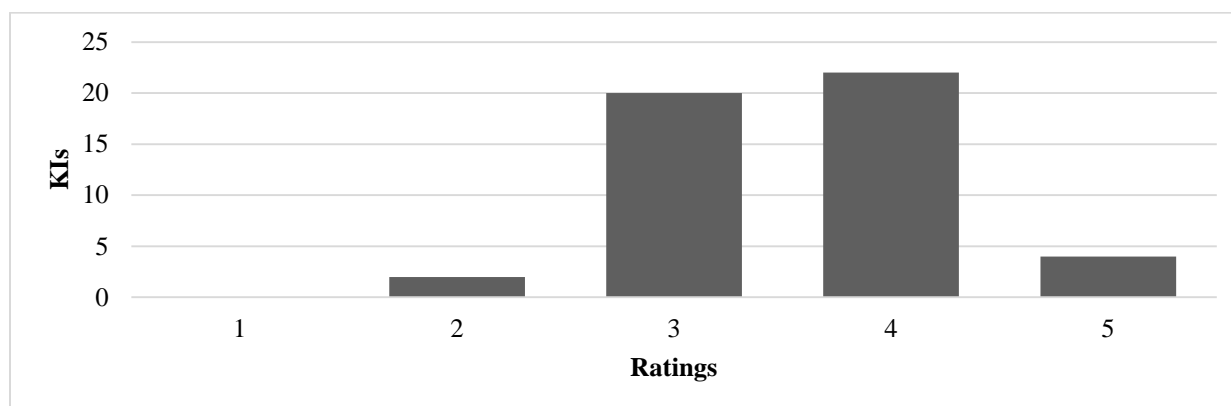
Similarly, when FGD participants were asked to rate their barangay's access to potable water, 15 of 24 FGD groups gave ratings of 1 or 2, as shown in Figure 7.4. They said that access is difficult either because their barangay has no source of water, or because water is not potable, or because water availability is irregular. These discussions particularly help us interpret the situation of those households, the majority in our survey, who do not have access to levels 1, 2, or 3 water supply services. Moreover, they illustrate that oftentimes measuring the number of water sources available is only one important factor; although in some barangays water pumps are available, each of these is often shared by an average of about 20 households, or located far from some of residents who have to wake up early in the morning and walk or even sail long distances to fetch or buy water.

Figure 7.4 Accessibility of Clean Water (24 mixed FGDs)²³



When asked to rate their municipality's access to potable water, and similar to findings on other accessibility questions, Municipal KIs gave comparatively higher ratings than FGD groups. Most MPDO and MSWDO KIs (42 of 48) gave ratings of 3 or 4 out of 5 as shown in Figure 7.5 below. KIs who gave answers of 3 or 4 said existing problems such as the lack of a universally accessible water system outside of the *poblacion* or town area, or the fact that potable water is only available in areas with electricity, prevented them from giving their municipalities the highest rating.

Figure 7.5 Accessibility of Clean Water (48 KIs - MPDO and MSWDO)²⁴



6. Health Facilities and Services

The barangay survey also asked barangay officials about the availability of different types of health facilities and services. Table 7.17 shows the proportion of barangays with each different type of health facility and service. The majority of barangays had a barangay health station (79%) and a traditional

²³ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

²⁴ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

healer (73%). Only 2% of barangays had a public hospital. No barangay had a NGO clinic or private hospital.

Table 7.17 Proportion of Barangays with Health Facility/Service by Type

Health Facility/Service Type	Proportion of Barangays with Health Facility/Service
Health Center/Barangay Health Station	79%
Traditional Healer	73%
Botica sa Barangay	41%
Birthing Center	14%
Maternity Clinic	5%
Pharmacy	4%
Private Medical Clinic	3%
Public Hospital	2%
NGO Clinic	0%
Private Hospital	0%

¹ Government-run barangay drugstores primarily selling low-priced generic over-the-counter drugs.

The household survey asked households about their visits to different types of health practitioners and facilities. Out of the 5,940 households in the sample, 55% had at least one household member who saw a medical professional or any other person for medical care in the last month²⁵. Households also reported the number of times any household member had gone to a particular health facility or been visited by a health officer from the facility for medical treatment during the last month. Table 7.18 summarizes household member health visits. If we include households with zero visits, the average number of health visits ranged from .02 (Mother Child Welfare Service or Government Birthing Center) to .4 (Barangay Health Stations). If we exclude households with zero visits, average health visits ranged from 1.6 (Mother Child Welfare Service or Government Birthing Center) to 2.2 (Traditional Healer, Alternative Healer, Medicine Man).

²⁵ We do not know how many households had household members who were in need of medical services in the last month.

Table 7.18 Number of Household Member Visits During the Last Month

	Number of Household Member Visits During the Last Month ¹			
	Including Households with Zero Visits		Excluding Households with Zero Visits	
Health Facility/Practitioner	Mean	S.D.	Mean	S.D.
Barangay Health Worker	0.3	0.9	1.6	1.5
Barangay Health Station	0.4	1.1	1.8	1.8
Rural Health Unit	0.2	0.7	1.7	1.7
Municipal Hospital/District Hospital/Provincial Hospital/Regional Hospital/Public Medical Center/Private Hospital	0.2	1.1	1.9	2.6
Private Clinic	0.1	0.8	1.8	2.3
Mother Child Welfare Service or Government Birthing Center	0.02	0.2	1.6	1.3
Registered Midwife/Midwife with License to Practice	0.1	0.5	2.0	2.0
Traditional Healer, Alternative Healer, Medicine Man	0.3	1.3	2.2	2.8
Medical Mission	0.1	0.6	1.7	2.1

¹ 55% had at least one household member who saw a medical professional or any other person for medical care in the last month

Maternal and Child Health

According to the household survey, 64% of the 5,940 households in the sample had a woman who had a full term pregnancy in the last four years. Table 7.19 provides information on the types of birth locations used by women in the sample. Respondent's own homes and government hospitals were the top two birth locations. Out of the 2,124 women who provided information about where they gave birth during their most recent pregnancy, 55% gave birth in their own home and 24% in a government hospital.

Table 7.19 Birth Locations

Birth Locations	Percentage of Women who Gave Birth in the Location	
	Most Recent Pregnancy (n=2124)	Second Most Recent Pregnancy (n=576)
Own Home	55%	66%
Government Hospital	24%	17%
Government Clinic/Health Care Center	11%	7%
Other Person's Home	5%	6%
Private Hospital	2%	1%
Private Maternity Home/Birthing Center	2%	2%
Private Health Clinic	1%	1%
Other	1%	0%

Table 7.20 shows whether women who had a full term pregnancy in the last four years received delivery assistance from a doctor or nurse. Out of 2,124 women, 37% did not receive assistance from a doctor or nurse during their most recent pregnancy.

Table 7.20 Percentage of Pregnant Women Receiving Delivery Assistance from a Doctor or Nurse

Type of Person Assisting with the Baby's Delivery	Percentage of Women	
	Most Recent Pregnancy (n=2124)	Second Most Recent Pregnancy (n=575)
Doctor	23%	18%
Nurse	40%	37%
No Doctor or Nurse	37%	46%

The household survey also asked women with a full term pregnancy in the last four years whether they visited a practitioner for prenatal care. Baseline findings are high, with 91% out of 2,125 women, indicating they visited a practitioner for prenatal care during their most recent pregnancy and received prenatal care an average of 6 times during the pregnancy.

The barangay survey asked barangays with barangay health workers to provide information about 2011 mortality rates among children aged 0 – 4 based on their records. Table 7.21 shows that in 2011 there

were an average of 4 child deaths per barangay, but the high standard deviation (13) indicates wide variation across barangays.

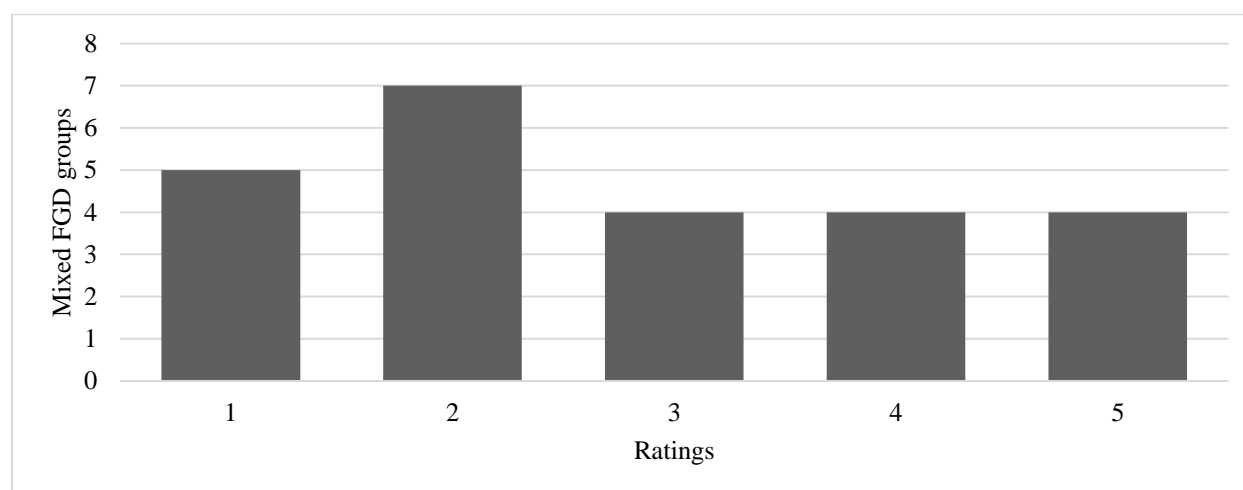
Table 7.21 2011 Barangay Children Mortality Rates

	Mean	S.D.	Number of Barangays
Total Live Births in 2011	19	20	152
Number of Deaths Among Children Age 0-4	4	13	55
Number of Children Age 0-4	99	125	133

Perceptions of access to health and nutrition services

FGD groups were asked to assess their barangay's access to health and nutrition services. A majority gave ratings lower than 4, with a notable number of 1s and 2s (see Figure 7.6). The reasons given for their ratings on health services were similar to those mentioned in relation to other services above: barangays lack medicines, equipment, and health centers, or that existing health centers were in need of repair or were situated too far from most residents. The barangay survey's findings support these low ratings, since a majority of barangay respondents indicated they had none of the health facilities mentioned to them.

Figure 7.6 Accessibility to Health and Nutrition (24 mixed FGDs)²⁶



MPDO and MSWDO KIs again gave higher ratings than FGD participants. Municipal KIs said they assessed the municipality's access to health and nutrition services according to the following standards:

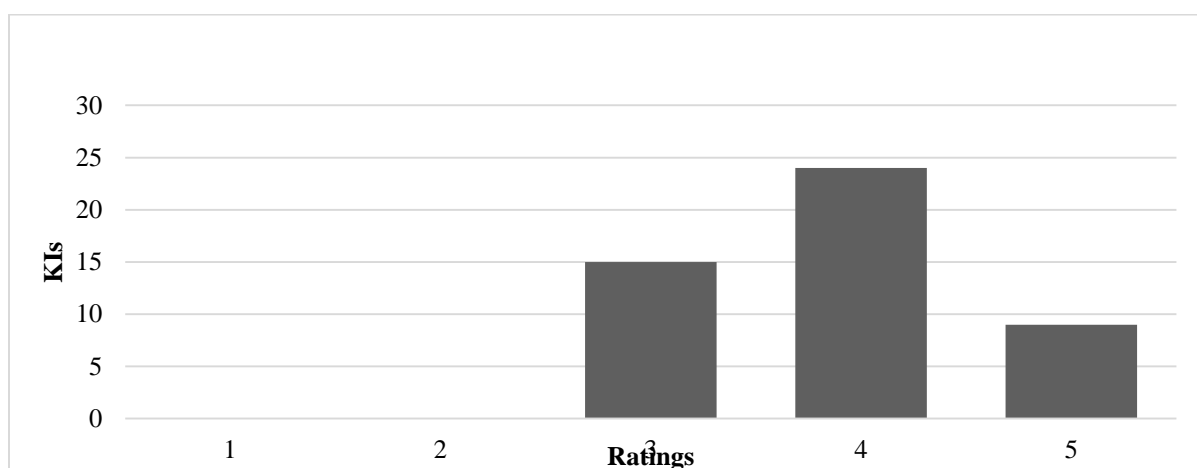
- The availability and use of facilities such as barangay health stations
- Presence of birthing facilities and services
- Availability of medicines and health personnel such as municipal doctors, nurses and midwives

²⁶ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

- Frequency of medical visits to homes
- Performance on health outcomes
- Regularity of check-ups of mothers and children
- Peoples' attitudes to health
- The frequency of medical emergencies and disease outbreaks, especially of dengue fever
- Distance to facilities
- The provision of free medicines
- Coverage of Philhealth (subsidized health insurance) beneficiaries
- The presence of outreach/medical missions
- Implementation of supplemental feeding programs.

Half of the KIs rated the accessibility of health and nutrition a 4 (see Figure 7.7) and in stark contrast to focus group participants, none gave ratings of 1 or 2. Respondents that gave 4s or 5s said that their areas generally had easy access to health services, especially during epidemics, excellent maternal health, sufficient doctors and registered nurses, available medicines, widespread health stations, frequent check-ups for mothers and children, fewer emergencies and outbreaks of dengue fever, free birthing facilities and sufficient visits to upland areas. According to municipal KIs, problems still exist, however. Those that gave relatively low ratings mentioned issues such as staff members being unable to visit all areas, excessively clustered health centers, and a lack of midwives, medical doctors and other staff. Accessibility of health services for people from coastal and upland areas was highlighted as a particular problem. Some respondents also said that people in some areas appeared uninterested in seeking health services.

Figure 7.7 Accessibility to Health and Nutrition (48 KIs - MPDO and MSWDO)²⁷



7. Recipients of Social Programs

The barangay survey asked barangay officials about the presence of different social welfare programs in the barangay. By far the most prevalent project being implemented was the Pantawid Pamilyang Pilipino Program (4Ps), taking place in over 98% of the barangays. 4Ps is a government program in which cash

²⁷ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

assistance is given to the poor if they meet certain conditions, such as required attendance in health education seminars and school enrollment. This was followed by the PhilHealth Indigent Program (72%). Also, 21% of barangay officials indicated that KC was currently taking place in their barangays, these were the treatment barangays surveyed as they were starting the first cycle of KC.²⁸ The PhilHealth Indigent Program gives health insurance to selected families in poor provinces. Table 7.22 shows more detailed results.

Table 7.22 Implementation Status of Social Welfare Programs in the Barangays

Social Welfare Program	Percentage of barangays			
	Currently taking place	Program hasn't started	Took place here but stopped	No program or respondents haven't heard of program
Pantawid Pamilya Pilipino Program (4Ps)	98%	0%	0%	2%
PhilHealth Indigent Program	72%	2%	16%	11%
Healthy Start Feeding Program	44%	1%	14%	40%
Any form of Congressman's/Governor's/Mayor's programs	37%	6%	9%	48%
Waste Management project	35%	4%	8%	54%
Food for School Program	29%	2%	22%	47%
Cash for Work Project	27%	2%	37%	34%
Scholarship program	22%	1%	4%	73%
KC (KC)	21%	19%	2%	59%
Any other health insurance plan from Philhealth	14%	1%	1%	85%
Food for Work Project	13%	2%	21%	64%
Self-Employment Assistance Kaunlaran (SEA-K)	11%	5%	10%	75%
PODER	0%	1%	1%	98%

The household survey also asked respondents whether they were aware of certain social welfare programs or activities. Table 7.23 displays the percentage of households who have heard of different social community programs and/or activities. Overall, a very large majority of households knew of the 4Ps (96%), followed by the PhilHealth Indigent Program (76%), and the Food for School Project (FSP) (49%). The high awareness of the PhilHealth Indigent Program is not surprising considering the high awareness of 4Ps because coverage in PhilHealth Indigent Program is now included in the package of benefits for 4Ps beneficiaries. The FSP provides food for students from poor families. We also carried

²⁸ As mentioned earlier, unforeseen delays resulted in an overlap between the baseline survey schedule and the beginning of KC.

out subgroup analysis of awareness of certain social welfare programs by poverty status, household head gender, island and proximity to barangay government officials. In regards to poverty status, compared to households above the poverty threshold, a higher percentage of households below it had heard about different social welfare programs. Additionally, the percentage of households that had heard of different social welfare programs was higher for those with male household heads. Compared to the Visayas and Mindanao, a higher percentage of households in Luzon had heard of most of the different social welfare programs. A total of 762 households out of 5,939 (13%) said that they did not know anyone in the barangay government (except for the captain or spouse) closely and compared to most other subgroups, a lower percentage of these household said that they had heard about the different social welfare programs.

Table 7.23 Percentage of Households that Have Heard of Different Social Welfare Programs

Community Program/Activity	Percentage of households who have heard of this program									
	Full Sample	Below Poverty Threshold ¹		Household Head Gender		Island			Household Knows Anyone in the Barangay Government (except for the captain or spouse)	
		Yes	No	Female	Male	Luzon	Visayas	Mindanao	Yes	No
4Ps: Pantawid Pamilyang Pilipino Program	96%	96%	97%	94%	97%	96%	94%	94%	97%	94%
PhilHealth Indigent Program	76%	77%	75%	73%	77%	72%	76%	76%	78%	65%
Healthy Start Feeding Project (HSFP)	54%	56%	50%	52%	54%	52%	48%	48%	55%	44%
Food for School Project	49%	51%	46%	47%	49%	46%	47%	47%	50%	43%
Any scholarship program	47%	51%	41%	44%	48%	52%	36%	36%	49%	38%
Any form of Congressman/Governor's./Mayor programs	46%	51%	39%	43%	47%	49%	38%	38%	47%	38%
Cash for Work Project	39%	41%	37%	36%	40%	34%	40%	40%	41%	26%
Any other health insurance plan of PhilHealth	38%	42%	32%	37%	38%	43%	31%	31%	38%	34%
Food for Work Project	32%	34%	29%	30%	33%	32%	30%	30%	33%	24%
SEA-K: Self-Employment Assistance Kaunlaran	21%	23%	20%	21%	22%	22%	18%	18%	22%	16%

¹ Households are below the poverty threshold, if their per capita expenditures at baseline (2012) were lower than the official regional poverty line based on per capita income.

Additionally, the household survey asked respondents if anyone in their household was a beneficiary of a social community program/activity. The 4Ps program with 35%, had the most beneficiaries, followed by the PhilHealth Indigent Program (23%). Table 7.24 shows percentage of households that are beneficiaries of different social programs/activities. Overall, compared to male headed households, a lower percentage of female headed household were beneficiaries of different social programs. For example, 20% of female headed households versus 36% of male headed households indicated that they were currently receiving 4Ps benefits. Also, for almost all of the different social programs mentioned, a larger percentage of female headed households than male headed households indicated that no one in the household was a beneficiary.

Table 7.24 Percentage of Households that Received Benefits from Social Welfare Programs

Social Welfare Program	Yes, currently receiving benefits			Yes, but have not received benefits (yet) ¹			Yes, but stopped receiving benefits			No one in the households is a beneficiary		
	All	Household Head Gender		All	Household Head Gender		All	Household Head Gender		All	Household Head Gender	
		Fem.	Male		Fem.	Male		Fem.	Male		Fem.	Male
4Ps: Pantawid Pamilyang Pilipino Program	34%	20%	36%	3%	2%	3%	2%	2%	2%	58%	71%	56%
PhilHealth Indigent Program	18%	13%	19%	14%	11%	15%	7%	7%	7%	37%	41%	36%
Healthy Start Feeding Project (HSFP)	12%	7%	12%	2%	1%	2%	7%	5%	7%	33%	39%	33%
Food for School Project	9%	6%	9%	2%	1%	2%	8%	6%	8%	31%	34%	30%
Cash for Work Project	7%	4%	7%	2%	2%	2%	6%	5%	7%	25%	26%	25%
Any other health insurance plan of PhilHealth	6%	5%	6%	5%	5%	5%	2%	2%	2%	25%	26%	25%
Food for Work Project	4%	3%	4%	1%	1%	1%	6%	6%	6%	21%	21%	21%
Any form of Congressman/Gov/Mayor/Alcalde's program	6%	5%	6%	2%	1%	2%	2%	2%	2%	36%	35%	36%
Any scholarship program	4%	3%	4%	2%	1%	2%	2%	2%	2%	41%	38%	41%
SEA-K: Self-Employment Assistance Kaunlaran	1%	1%	1%	1%	1%	1%	1%	1%	1%	19%	18%	19%

¹ This column indicates that the respondent has qualified to receive said social welfare program but has yet to obtain any benefits. For example, a respondent is eligible to receive the in-kind transfers from the 'Food for School Project' however the school year has yet to begin and therefore has yet to collect any transfers.

8. Dwelling Descriptive

The household survey asked respondents to describe the various types of construction materials their house was made out of. Only 3% of households had a makeshift roof or outer walls. The survey also asked about the types of amenities that were available in the household. Tables 7.25 and 7.26 summarize what kind of construction materials the roof, outer walls, and the house floor were made out of. Most households report that their roof was made out of strong materials (46%), their outer walls were made out of light materials (36%), and their floors out of cement plaster/brick masonry (42%). Strong materials consist of galvanized iron, aluminum, tile, concrete, brick stone, and asbestos while light materials are predominately cogon, nipa, and anahaw, which are local, relatively soft wood.

Table 7.25 Dwelling Descriptive: Housing Unit Roof/Outer Walls Construction Materials

Dwelling Descriptive	Percentage of Households						Other
	Strong materials	Light materials	Salvaged/makeshift materials	Mixed but predominantly strong materials	Mixed but predominantly light materials	Mixed but predominantly salvaged materials	
Roof	46%	37%	0.8%	9%	6%	0.4%	0.6%
Outer walls	26%	36%	2%	13%	15%	1%	7%

Table 7.26 Dwelling Descriptive: Housing Unit Floor Construction Materials

Dwelling Descriptive	Percentage of Households							
	Marble/ceramic/terrazzo	Tile/flag	Cement plaster/brick masonry	High quality wood	Low quality wood	Bamboo/thatch	Earth	Other
Floor	1%	3%	42%	4%	8%	26%	14%	2%

Table 7.27 displays the percentage of households that possessed electricity in the house and if they had a separate space for a kitchen. The majority of household respondents (69%) reported having electricity in the house, and 50% also reported that they do not have a separate kitchen space in their house.

Table 7.27 Household Amenities

Type of Amenity	Percentage of Households (n=5,940)	
	Yes	No
Electricity in the house	69%	31%
With separate kitchen	50%	50%

Table 7.28 describes the ownership status of the households in the sample. Out of the 5,940 households in the sample, 47% reported that they own or have “ownership-like possession” of the house and lot. “Owner-like possession” means that for all intents and purposes, the household members own the land and the house even if they do not hold a formal deed. For example, the household members may be living on ancestral land where the government has permitted members of certain ethnic groups to stay

permanently, although the household members do not have actual deeds or titles to the land. In these cases, for general purposes the ethnic group possesses the land since private buyers cannot purchase it.

Table 7.28 Tenure Status of House and Lot

Tenure status of house & lot	Percentage of Households (n=5,940)
Own or owner-like possession of house & lot	47%
Own house, rent-free lot with consent of owner	40%
Rent-free house & lot with consent of owner	9%
Own house/rent lot	2%
Own house, rent-free lot without consent of owner (squatter)	0.2%
Rent house/room including lot	1%
Rent-free house & lot w/out consent of owner	0.1%

9. Assets Owned: Land and other Physical Assets

Focus groups identified household and personal assets as important parts of moving away from poverty. The household survey also collected information about the net assets owned by households in the sample. Table 7.29 displays the percentage of households owning land by land type. Land for housing was the type of land most commonly owned by households, with 34% of households reporting ownership. Land for housing refers to primary housing, or the property that the household members themselves live on. Land for other agricultural purposes apart from rice came in second with 16% of household reporting ownership. Table 7.29 also shows land ownership by household head gender. Out of the 888 female headed households in the sample, 41% owned land for housing and 17% owned land for other agricultural purposes. In comparison, 33% of the 5,052 male headed households in the sample owned land for housing and 16% owned land for other agricultural purposes.

Table 7.29 Household Land Ownership by Land Type

Type of Land Owned	Percentage of Households Owning Land		
	All (n=5,940)	Female Headed Household (n=888)	Male Headed Household (n=5,052)
Land for housing	34%	41%	33%
Land for other agricultural purposes	16%	17%	16%
Rainfed rice field	9%	11%	8%
Irrigated rice field	5%	5%	6%
Land for other housing and/or business	1%	2%	1%

Table 7.30 disaggregates land ownership by gender. For all land types, a higher percentage of households owning land had at least one male sole or joint owner than at least one female sole or joint owner. For

example, 47% of households with land for housing had at least one female sole or joint owner while 71% had at least one male sole or joint owner.

Table 7.30 Land Ownership by Gender

Type of Land Owned	Percentage of Households	
	Solely or jointly owned by at least one female	Solely or jointly owned by at least one male
Land for housing (n=2,017)	47%	71%
Land for other agricultural purposes (n=936)	41%	77%
Rainfed rice field (n=520)	42%	73%
Irrigated rice field (n=321)	41%	74%
Land for other housing and/or business (n=71)	58%	65%

Table 7.31 presents the average hectares of land owned by households. Households on average owned 0.1 hectares of land for housing, but the standard deviation of 0.6 indicates significant variation across households. As for the second most common type of land owned, households on average owned 1.6 hectares of land for other agricultural purposes apart from rice.

Table 7.31 Hectares of Land Owned by Land Type

Type of Land Owned	Area of Land Owned (Hectares) ¹	
	Mean	S.D.
Land for housing	0.1	0.6
Land for other agricultural purposes	1.6	2.7
Rainfed rice field	0.7	1.2
Irrigated rice field	0.8	1.4
Land for other housing and/or business	0.7	2.2
¹ Excludes zeroes and outlier observations with 30 or more hectares of land		

Table 7.32 presents information about the different types of physical assets owned by households in the sample. The most commonly owned physical assets included cell phones (owned by 66% of households), radio/stereos (owned by 50% of households) and television sets (owned by 50% of households). For each type of asset, the average number owned was less than two. The household survey also asked respondents to estimate the value of the following physical assets owned: motorcycles, tricycles, threshers, hand tractors, aquariums, motorboats, cars, jeeps, bancas (boats) not motorized, and generators, inverters of any power backup machines. Of these valued assets, motorcycles or tricycles were the ones owned by the most households with 17% owning them and the average estimated value of a motorcycle or tricycle was PH 50,534 (about US\$1,263).

Table 7.32 Household Physical Assets

Type of Physical Asset	Percentage of HHs Owning Asset	Number Owned		Number Owned that Are Usable		Estimated Value (PHP)	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
Cell Phone	66%	1	1	1	0.4	-	-
Radio/Stereo	50%	1	0.5	1	0.3	-	-
Television Set	50%	1	0.2	1	0.1	-	-
Electric Fan	35%	2	6	2	5	-	-
VHS/VCD/DVD	32%	1	0.3	1	0.3	-	-
Electric Flat Iron	21%	1	0.3	1	0.2	-	-
Refrigerator	17%	1	0.1	1	0.1	-	-
Motorcycle or Tricycle	17%	1	1	1	0.7	50,534	42,455
Bicycle	15%	1	0.4	1	0.4	-	-
Gas Stove/ Gas Range	13%	1	0.3	1	0.2	-	-
Rice Cooker	10%	1	0.1	1	0.1	-	-
Washing Machine	8%	1	0.2	1	0.1	-	-
Banca, not motorized	6%	1	0.3	1	0.3	3,660	5,657
Satellite Dish	6%	1	0.2	1	0.2	-	-
Sewing Machine	6%	1	0.3	1	0.3	-	-
Motorboat	5%	1	0.4	1	0.4	28,873	40,926
Camera	5%	2	1	2	1	-	-
Water Pump	4%	1	1	1	1	-	-
Computer/Laptop	4%	1	0.4	1	0.4	-	-
Toaster	3%	1	0.4	1	0.4	-	-
Thresher	2%	1	0.2	1	0.2	14,871	24,418
Hand Tractor	2%	1	0.4	1	0.3	34,141	32,321
Generator, Inverter/Power	2%	1	0.2	1	0.2	14,322	22,647
Microwave	1%	1	0.5	1	0.5	-	-
Car, Jeep	1%	1	0.7	1	1	278,385	518,308
Air Conditioner	1%	1	0.2	1	0.3	-	-
Aquarium	0.4%	1	0.3	1	0.2	900	728

10. Barangay Development Activities

Predominant Types of Barangay Development Projects in 2011

The barangay survey asked barangay official respondents about the 2011 budget allocation toward development activities in the barangay. Table 7.33 displays the various sources of funding for development activities. The largest budget allocation came from the barangay fund's Internal Revenue Allotment (IRA)²⁹ with an average of PHP 941,349 (about US\$23,534). The standard deviation of internally generated revenue and official development assistance from NGOs indicates that there is significant variation in funding amounts across barangays.

Table 7.33 Barangay Government Budget Allocation Towards Development Activities

Types of Funding from Barangay Fund	Amount (PHP)		Types of Funding from Barangay Fund
	Mean	S.D.	Number of Barangays
IRA from Barangay Fund	941,349	582,878	197
Internally Generated Revenue	44,482	275,966	194
Official Development Assistance From NGO's	33,967	90,781	197

Table 7.34 lists and defines the different types of development projects most commonly implemented by barangays.

²⁹ The Internal Revenue allotment (IRA) is a local government's share of revenues from the national government.

Table 7.34 List and Definition of Different Types of Barangay Development Projects

Type of Development Project	Definition
Roads	Any kind of road construction, maintenance, renovation or expansion project.
Health and Nutrition	The construction, maintenance, renovation or expansion of clinics, hospitals or other health facilities in the barangay.
Waste Management	Projects to improve the barangay's waste disposal system or to clean up the barangay itself.
Electrification	Installation of power cables, power plants or other sources to give the barangay access to electricity. This should also include projects which provide electricity through installation of solar panels etc.
Water Supply	Projects to install or expand the barangay's water system. This could mean digging new wells, installing pipes to households, or repairing existing water systems.
Education	The construction, maintenance, renovation or expansion of schools in the barangay. This could also mean short-term education programs managed or funded by the government.
Disaster Relief & Mgt.	This refers to disaster relief, including food aid, emergency medical treatment, the maintenance of relief facilities, etc.
Agriculture	This includes projects which provide methods/machinery or training to increase or improve methods of agriculture used by the barangay residents.
Livelihood	Any sort of project to improve the economic livelihood of residents of the barangay.
Public Toilets	The installation or renovation of public toilet facilities in the barangay.

Table 7.35 shows the percentage of barangays that implemented the different types of development projects over 2011 within their communities. Roads and health and nutrition projects were the predominant type of development projects, implemented by some 60% of barangays.

Table 7.35 2011 Types of Development Projects/Activities Implemented in Barangays with Average Annual Cost

Development Project/ Activity	Percentage of Barangays that Implemented the Project	Annual Cost of Project in 2011	
		Mean (in PHP)	S.D. (in PHP)
Roads	60%	344,489	1,132,125
Health and Nutrition	59%	31,668	102,319
Waste Management	41%	20,217	24,313
Electrification	40%	111,818	255,590
Water Supply	37%	89,934	168,713
Education	32%	244,168	715,806
Disaster Relief & Mgt.	27%	35,232	42,422
Agriculture	23%	37,452	50,260
Livelihood	19%	60,459	100,984
Public Toilets	19%	32,136	39,718

Development Project Preferred by Households and Barangay Officials versus KC Subproject (SP) Proposals

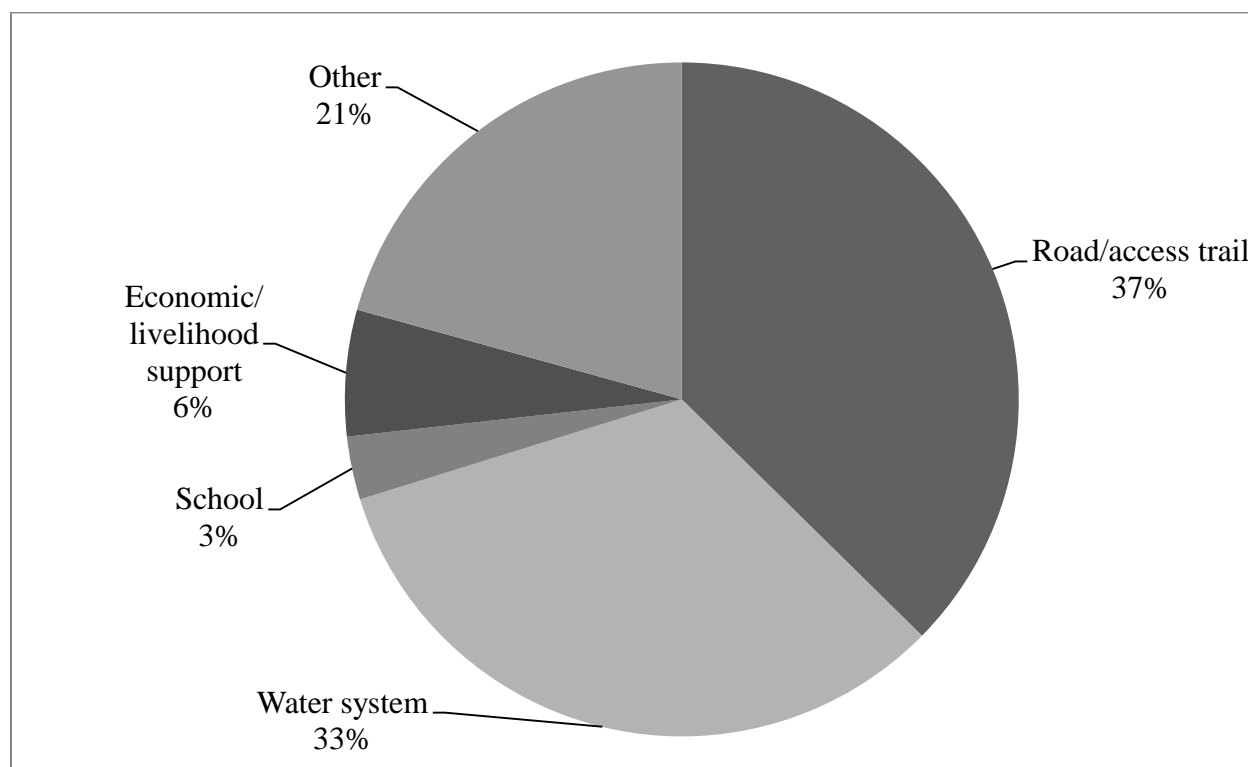
An important element of KC is the delegation of the role of subproject selection to community representatives. The primary objective of the impact evaluation is to measure the effects of KC, but it is interesting to compare the development projects preferred by households and barangay officials to the KC subproject proposal.³⁰

Household survey respondents were asked to identify the subproject they would choose to prioritize if the barangay were given funding.³¹ Figure 7.8 below shows the proportion of the 198 barangays that prioritized certain subprojects. By far the most popular subprojects among household residents were roads/access trails and water systems, at 37% and 33%, respectively.

³⁰ The baseline survey asks households and barangay officials about their current priorities (the survey was implemented from April to July 2012), and the subproject proposals data, is from the first KC cycle that began in the Spring/Summer of 2012.

³¹ To identify households' priorities, the top subproject choice of each sample household was tallied, and the project that received the greatest number of households identifying it as their favorite was determined to be the barangay's top choice.

Figure 7.8 Household Development Project Priorities (198 Barangays)



The barangay surveys posed the same question to barangay officials, Figure 7.9 shows the results. In general, the answers of both groups were consistent, but with different proportions. While roads/access trails and water systems were still the most frequently chosen, water systems seemed to be the more popular. Economic/livelihood projects were noticeably more popular for barangay captains than for households as well.

Figure 7.9 Barangay Captain Development Project Priorities (198 Barangays)

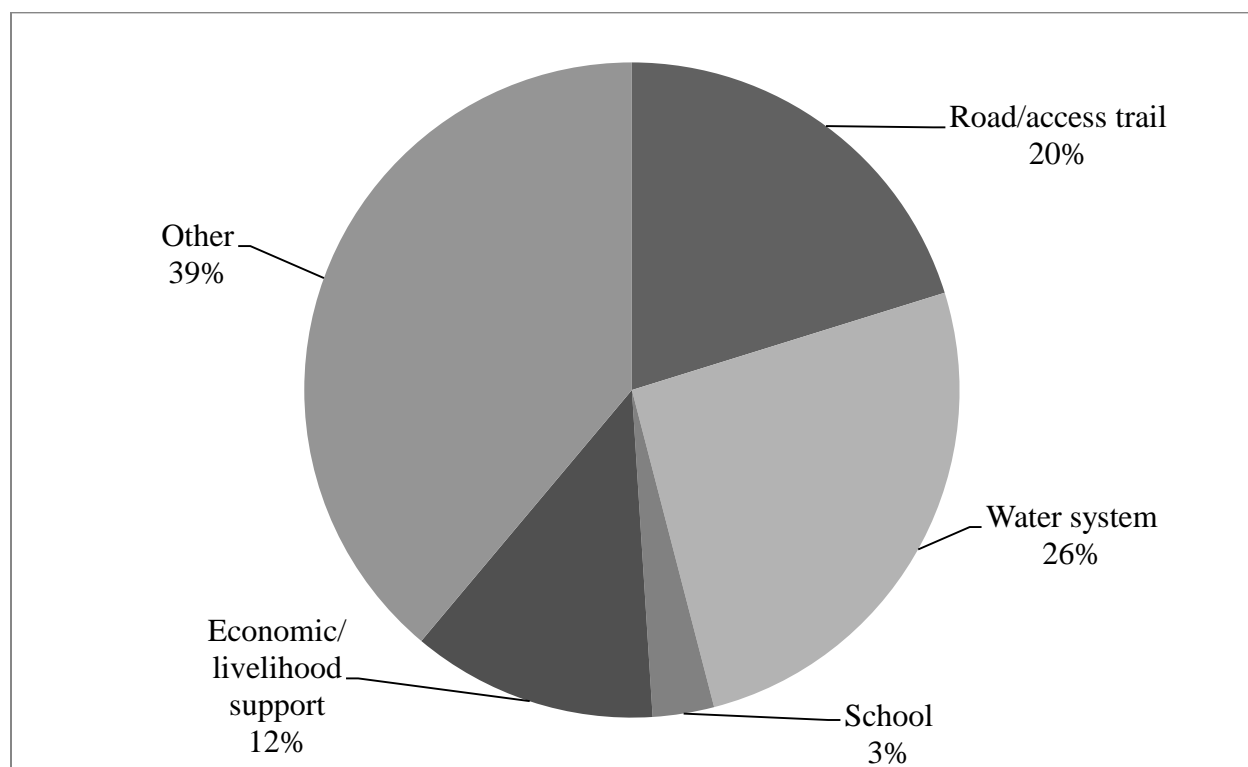
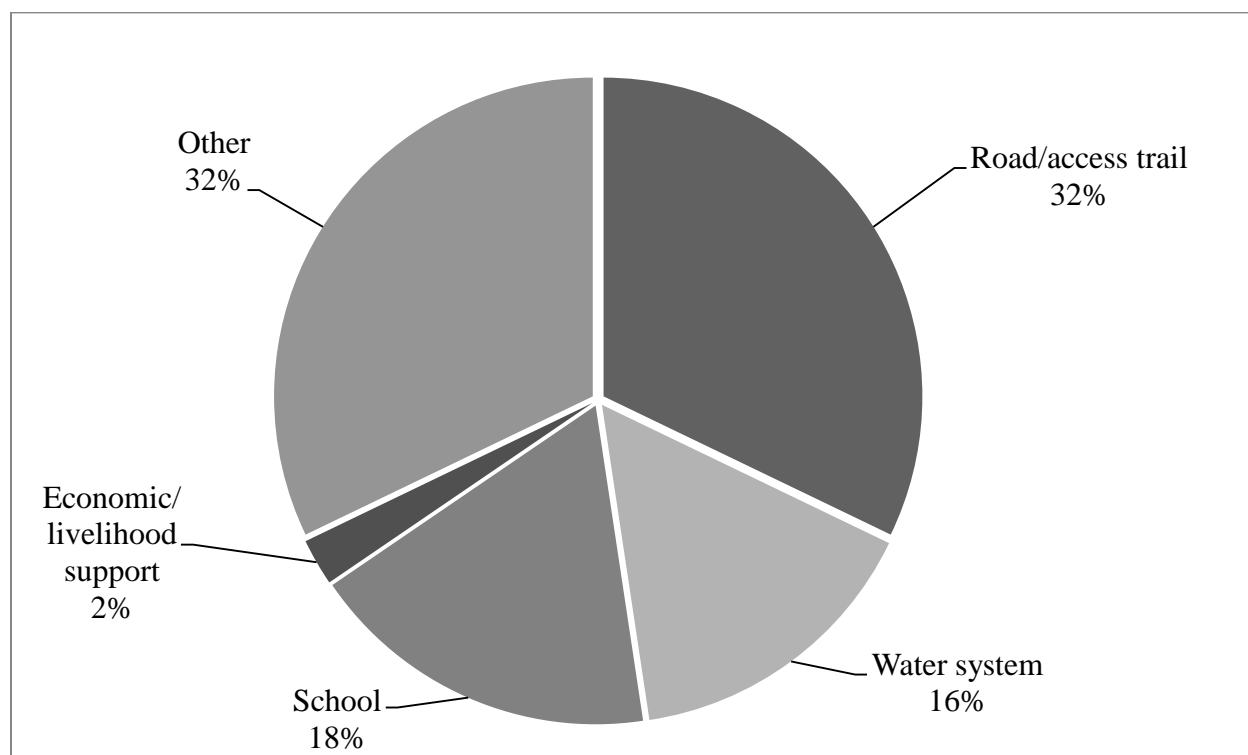


Figure 7.10 shows the subprojects that were actually proposed during the first KC cycle MIBFs. The sample includes only respondents from 84 out of the 91 treatment municipalities for which MIBF data was available. Roads/access trails and water systems were still popular, but schools were the second-most proposed project, with economic/livelihood support programs relatively infrequently proposed. It is important to emphasize that SP proposals cannot directly mirror the priorities of surveyed households because in the process of identifying subprojects prior to the MIBF, barangay project preparation teams must consider other factors that may have been ignored by individual respondents, such as feasibility, cost, availability of counterpart funding. For instance, schools generally require only construction materials and available land, whereas subprojects such as water systems are subject to the availability of an existing water source. Economic/livelihood support programs reflect the universal demand for employment, but could be subject to factors such as the education and training levels of residents, the accessibility of markets, etc. Lastly, it is possible that respondents' answers primarily reflected individual needs, while project preparation teams identified different projects based on the needs of the community as a whole.

Figure 7.10 Subproject Proposals (84 Treatment Barangays)



B. Community Empowerment

In this section, we summarize baseline community empowerment indicators related to participation in civic and community groups, and community and political activities.

1. Participation in Civic and Community Groups

In order to explore the kinds of opportunities for community interactions prior to KC, the barangay survey asked barangay officials about the different types of groups, institutions, associations, organization, or other activities present in the barangay. The list of groups included religious groups such as the Barangay Pastoral Council, cause-oriented groups like Akbayan, production groups such as food cooperatives, recreational groups such as sports clubs, and governmental groups including membership in the barangay council. Table 7.36 reports the 10 barangay community activities and programs present in the largest percentage of barangays. The percentage of barangays participating in each of the top 10 community activities ranged from 9% to 86% of barangays. Youth Groups, Senior Citizen's Groups and Parent-Teacher-Community Associations (PTCAs) were present in over 80% of barangays.

Table 7.36 The 10 Barangay Civic and Community Groups Present in the Most Barangays

Type of Civic/Community Group	Percentage of Barangays with Civic/Community Group (n=198)
Youth Groups	86%
Senior Citizen's Group	85%
Parent-Teacher-Community Association	83%
Women's Association	66%
Religious Groups	64%
Production Groups or Institutions	34%
Credit/Finance Group	31%
Governmental Groups ¹	26%
Irrigator's Association	20%
Natural Resource Management Groups	9%

¹ An organization forwarding or addressing various community issues, including citizen's assemblies

The household survey also asked each household about the types of groups, institutions, associations, organization, or other activities in the barangay that any members of the household age 15 or over was currently participating in or participated in during the last 12 months. Table 7.37 presents the number of times individuals attended the top 10 groups in the last 12 months and the value of cash and goods contributions. Except for sports club, which arose in the household survey but not the barangay official interviews, the household survey's top 10 groups matched the barangay survey's top 10 groups. Attendance in the top 10 groups ranged from an average of 4 to 27 times in the last 12 months. The PTCA was the top group at the household level, with 26% of households from the sample involved in PTCAs and individuals participating in PTCAs an average of 4 times in the last 12 months. Given so many respondents were a part of PTCAs, this finding speaks to the importance of henceforth collecting data not only on membership in civic groups, but on level and type of participation.

According to the household survey, individuals participated the highest average number of times (27 times) in credit/finance groups, such as credit cooperatives and savings groups, including groups formed to receive loans from microcredit institutions. Such a high participation frequency makes sense since credit group participants may be required to attend a certain number of meetings to get a loan and or may attend meetings for financial transactions such as savings deposits and loan repayments. Disaggregation by gender shows few differences in participation frequencies between males and females. In regards to the value of cash and good contributions, individuals on average contributed the most to credit/finance groups (PHP 1,673 or US\$42) and the least to women's associations (PHP 83 or US\$2).

Table 7.37 Participation Frequency and Cash and Goods Contributions to the Top 10 Civic and Community Groups during the Last 12 Months

Top 10 Groups	Percentage of Households Involved	Average Number of Times Individuals Participated in Last 12 Months	Average Value of Cash and Good Contribution by Individuals During Last 12 Months (PHP)
Parent-Teacher-Community Association	26%	4	187
Senior Citizen's Group	18%	5	124
Governmental Group or Institution	18%	8	250
Women's Association	15%	4	83
Religious Groups	11%	15	304
Credit/Finance Group	8%	27	1,673
Production Group or Institution	6%	6	622
Youth Group	5%	5	375
Sports Club	2%	7	403
Irrigator's Association	2%	4	525

Table 7.38 displays the number of times individuals participated in the top civic and community groups during the last 12 months by gender, age and poverty status subgroups.³² Females participated in credit/finance groups more times than males (29 vs. 16 times) while males participated more frequently in sports clubs (8 vs. 5 times). There were no large differences in participation frequency between different age groups, except older individuals participate less frequently in credit/finance groups compared to younger individuals. In regards to poverty status, individuals above the poverty threshold participated slightly more times in religious groups (16 vs. 13 times) and credit/finance groups (24 vs. 29 times) than those below the poverty threshold.

³² Households are below the poverty threshold, if their per capita expenditures at baseline (2012) were lower than the official regional poverty line based on per capita income.

Table 7.38 Number of Times Individuals Participated in the Top 10 Civic and Community Groups during the Last 12 Months by Gender, Age and Poverty Threshold

Top 10 Groups	Average Times Participated Last 12 Months							
	Gender		Age Groups				Below Poverty Threshold	
	Male	Female	Age 15 to 29	Age 30 to 44	Age 45 to 59	Age 60 and Above	Yes	No
Parent-Teacher-Community Association	4	4	4	4	4	4	4	4
Senior Citizen's Group	4	5	-	-	4	5	4	5
Governmental Group or Institution	9	8	8	8	9	8	8	9
Women's Association	-	4	4	5	4	5	4	5
Religious Groups	16	14	15	12	16	14	13	16
Credit/Finance Group	16	29	31	29	25	20	24	29
Production Group or Institution	5	7	4	7	6	5	6	6
Youth Group	5	5	5	-	-	-	6	5
Sports Club	8	5	8	7	-	-	9	7
Irrigators Association	4	-	-	4	4	3	4	3

To examine what types of contact barangay residents have outside their households, and as a further measure of the type of participation in activities, the household survey collected information regarding the residence location of group members. Table 7.39 shows the percentage of individuals who said all group members live in the same barangay but different purok, by group type. As the table below indicates, for most of the top groups the majority of individuals said that all group members reside in the same barangay but different purok.

Table 7.39 Percentage of Individuals Who Said All Group Members Live in the Same Barangay But Different Purok

Group	Percentage of individuals who said all group members live in the same barangay but a different purok
Parent-Teacher-Community Association	61%
Senior Citizen's Group	67%
Government Group or Institution	35%
Women's Association	74%
Religious Groups	58%
Credit/Finance Group	53%
Production Group or Institution	64%
Youth Group	78%
Sports Club	66%
Irrigator's Association	67%

2. Contributions to Local Public Good Activities

The household survey asked each household if members contributed time, money or in-kind to the maintenance or construction of public goods such as schools, health care centers in the last 12 months. Out of the 5,940 households surveyed, 2,893 (49%) had at least one household member participate in a community or private effort to repair, clean, maintain or construct village or neighborhood infrastructure or facilities in the barangay or municipality. Table 7.40 shows, for the 49% that did participate, the community activities with the highest percentage of households involved as well as the per household member total days and cash and goods contributed by the household in the last 12 months. Roads, bridges or access trail, environment-related community activities and day care center projects ranked the highest with 24%, 11% and 9% of households participating, respectively. On average, the per-household member contribution by a household to road and channel drainage projects was 2 days and for other top community activities 1 day. There were no significant differences in days contributed by gender, although males on average did contribute 2 more days than females to channel projects (3 days vs. 1 day). In terms of cash and goods contributions, average per household member contribution by a household was highest for road projects (PHP 386 or US\$10) and lowest for public market or other public spaces project (PHP 1 or US\$ 0.03).

Table 7.40 Total Days and Cash and Goods Contributions by Households to the Top Community Activities

Top Community Activities	Percentage of Households that Participated	Average Within Household Total Days Contributed by Household Members in Last 12 Months			Average Value of Cash and Good Contributed during the Last 12 Months (PHP)
		<u>All</u>	<u>Males</u>	<u>Females</u>	
Roads, bridges or access trail	24%	2	3	2	386
Environment	11%	1	2	2	80
Day care center, school and/or health center	9%	1	1	2	44
Water or sanitation systems	6%	1	2	2	53
Municipal/Barangay/Multipurpose Hall	5%	1	2	2	22
Channel, drainage or irrigation structure	4%	2	3	1	35
House or yard	2%	1	2	2	16
Basketball court	2%	1	2	2	8
Public market or other public spaces	2%	0.4	1	1	1

3. Meaning of Collective Action

The focus groups used the concept of *bayanihan* to assess the social cohesion of barangay residents. *Bayanihan* is a term often used to describe a spirit of communitarianism, or actions performed by the community to produce a benefit, whether of some individuals or the community as a whole. In order to get a sense of the importance of collective action among barangay residents, facilitators of mixed FGDs asked participants to explain their understanding and significance of *bayanihan* and offer examples of activities and socio-cultural events demonstrating it.

For many, *bayanihan* means helping others without asking or expecting anything in return. The concept suggests unity, volunteerism, cooperation, inclusivity, and being together in good times and in bad times. Participants associate the concept of *bayanihan* with the image of people holding hands in times of emergency (*kapit-bisig sa panahong emergency*). Activities that illustrate *bayanihan* include: helping someone carry a house to a new place (*pagdayong sa balay*); cleaning streets and canals; helping another family plow their fields without pay; volunteering to help repair roads; building a house; helping a mother deliver a baby; bringing the sick to the hospital; making coffins for the dead and carrying hearses to the cemetery; and joining collective clean-up activities. While the household survey captures many dimensions of participation and community life, the focus groups remind us of wider understandings of empowerment and collective action.

FGD participants generally attributed very high value to *bayanihan* and suggested that there was strong social connectedness among barangay residents. According to focus groups, social connectedness is enhanced by community activities. Residents said they volunteered their time and resources for community activities that improve their lives, such as fixing roads, which was the most popular community activity according to our survey findings. Respondents said that developing social

infrastructure facilitates social cohesion and enables the barangays to be safe and healthy. According to participants, friendship, mutual aid for progress, smooth interpersonal relationships, good camaraderie, trust, understanding, love, communication, respect, sharing, cooperation, faith, volunteerism, adherence to rules and regulations, unity, inclusivity, and linking arms in times of crisis-emergency are shared values that could facilitate coordinated actions for a better society.

4. Attendance in Government Meetings

In the Philippines, formal government structures extend all the way to the barangay level. Barangay residents have the opportunity to participate in different formal government structures at the barangay level. Residents can be elected to serve on the Barangay Council which manages the operations of the barangay government, including enacting ordinances, creating and implementing budgets and managing public works. All barangay residents are invited to participate in barangay assemblies, a formal barangay meeting organized by the Barangay Council to discuss the activities, finances and problems affecting the barangay. Barangay Councils must organize at least two barangay assemblies a year on a scheduled date. Barangay residents can also call for a barangay assembly (BA) with the written petition of at least five percent of residents. Barangay assemblies are the most important formal structures for community participation at the barangay level. To measure participation in barangay assemblies, the barangay survey asked barangay captains/council members about the barangay assemblies held in the past 12 months.

It is also required by law that barangays have a Barangay Development Council (BDC), an organization that forwards barangay development plans, approves the budget and monitors the implementation of local programs and projects. It is typically composed of the Barangay Captain, Barangay Council members, representatives of local non-governmental organizations (NGOs) and a representative of the local congressman or congresswoman. In the sample, 20% of barangays said they did not have a BDC. In these barangays it may be the case that the Barangay Council has decided to carry out the responsibilities of the BDC, which would make the BDC less representative than it should be. Additionally, 8% of households had a household member who was part of the BDC. BDCs usually meet about twice a year. At the municipal level, there is the Municipal Council and Municipal Development Council, which coordinates with government agencies and NGOs to use available funds for the promotion and development of culture and the arts.

Government Meeting Attendance According to Barangay Officials

The barangay survey also asked barangay officials about attendance during the last government meetings held. Table 7.41 shows that on average more females attended BAs than males (182 vs. 84). However, more males attended Barangay Council and Barangay Development Council meetings.

Table 7.41 Average Attendance in the Last Government Meetings Held

	Last Barangay Assembly	Last Barangay Council Meeting	Last Barangay Development Council Meeting ¹
	Mean	Mean	Mean
Number of Males ²	84	7	12
Number of Females ²	182	3	7
Total ²	275	10	21
¹ Only 158 barangay had BDC meetings ² Re-weighted by barangay population size			

Government Meeting Attendance According to Households

The household survey asked sample households whether any household members attended a barangay assembly in past 6 months. Table 7.42 shows that 68% of households reported having a household member who attended a BA in the past 6 months. In comparison to the entire sample, 70% of households below the poverty threshold and 63% of female headed households attended BAs.

Table 7.42 Percentage of Households with a Household Member Who Attended a Barangay Assembly in the Past 6 Months

Type of Meeting	Percentage of Households with a Household Member that Attended Meeting		
	Entire Sample	Household Below the Poverty Threshold	Female Headed Households
Barangay Assembly	68%	70%	63%

Table 7.43 summarizes the average number of times households said a household member attended a barangay assembly in the past 6 months. In the last 6 months households reported having a household member attend a barangay assembly an average of 2 times, attending at least the minimum number of barangay assemblies held each year.

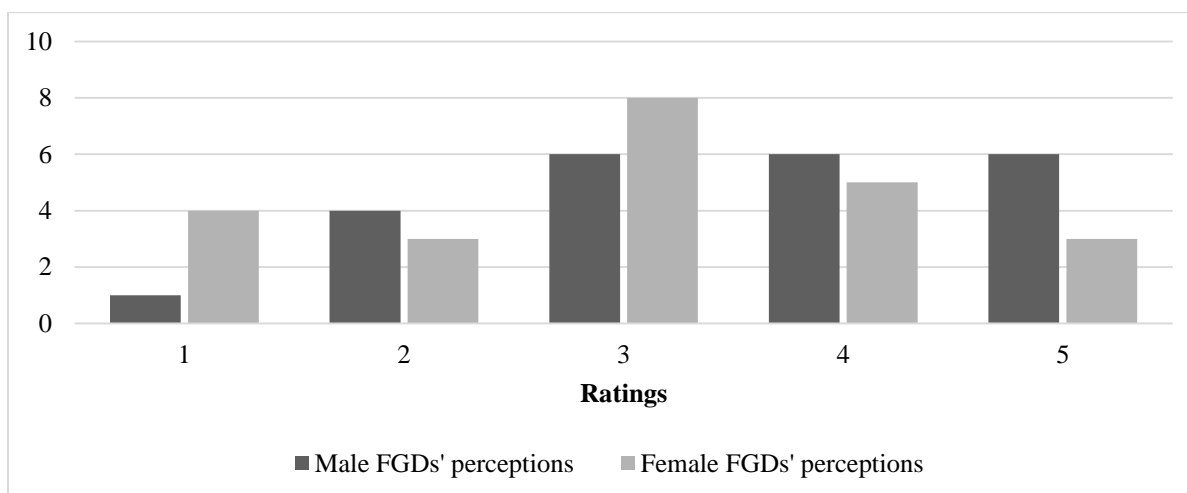
Table 7.43 Number of Times Households Attended Barangay Assemblies in the Past 6 Months

Type of Meeting	Times Participated Last 6 Months	
	Mean	S.D.
Barangay Assembly	2	2

Perceptions on Male and Female Attendance in Barangay Assemblies

Male and female FGD groups were asked to qualitatively rate the level of men's participation in barangay assemblies on a 1 to 5 scale, with 1 being the lowest and 5 being the highest. As Figure 7.11 shows, male FGDs rated men's participation higher (average of 3.5) than female FGDs (who rated men's participation an average of 3).

Figure 7.11 Perceptions of Men's Participation in Barangay Assemblies (23 male and 23 female FGDs)³³

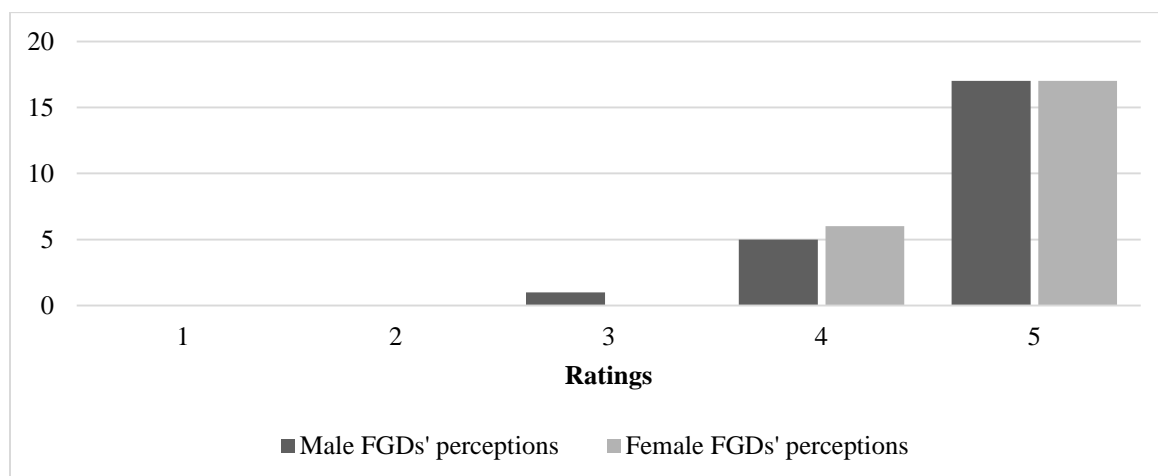


According to FGDs, most men do not take part in barangay meetings, assemblies and activities because they are at work. A few are simply not interested in these activities, saying they have more ‘interesting’ things to do like rest, watch television, gamble, etc. A small minority of men do participate in barangay activities, especially if barangay leaders call for their participation and when the activity requires manual labor (e.g. tree planting, digging/cleaning of canals, grass cutting, construction of facilities, etc.). The ratings thus appear somewhat high in comparison to the comments generated in the discussion. Overall, these findings support the barangay survey findings, which also showed greater female attendance during the last barangay assembly.

Women’s participation in barangay assemblies and activities received high ratings in all regions. Male and female focus groups gave an average rating of 4.7 on the five point scale (see Figure 7.12). In this case both men-only and women-only focus groups gave consistent ratings.

³³ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

Figure 7.12 Perceptions of Women's Participation in Barangay Assemblies (23 male and 23 female FGDs)³⁴



The main reason cited for women's high level of attendance is that women generally stay at home and are not engaged in paid work, which allows them to join barangay activities. Consequently, participants note that women who are engaged in paid work tend not to attend activities, as was the case with men. Respondents also said that some women are unable to participate in activities because they are taking care of children.

This high level of women's attendance is a notable finding, considering that many CDD programs in other countries specifically include women as marginalized groups and try to incorporate them into the development process. The National Solidarity Programme in Afghanistan, for instance, makes it a goal to increase women's participation in governance. This program, along with the *Tuungane* program in the Democratic Republic of Congo and an International Rescue Committee (IRC)-implemented CDD program in Liberia, included specific quotas for women on councils (see King 2013). The findings presented above, however, speak to the quantity of women's participation, rather than the quality. These programs include specific governance roles for women, not just attendance. It will be important to distinguish mere quantity from type of participation. Barangay survey data already indicates that women are under-represented as leaders since only 23 out of the 179 barangay captains interviewed were women.

Barangay Captain and BDC Member Perceptions on BA Attendance

KIIs asked barangay captains and members of the BDC to rate BA attendance rates according to a 1 to 5 scale, with 1 indicating that attendance in BAs was very low and 5 indicating that attendance was very high. The majority of KIs (14 out of 24) gave attendance a rating of 4. KIs supported this rating with comments such as: "residents always participate," "residents attending are more than those not attending," "attendance is as high as 80%-85%," "majority of the people attend," "residents are keen to know how the IRA is spent," but also noted various problems, such as: "residents from faraway puroks do not attend," "not perfect attendance but many attend." KIs said a number of factors influence attendance. Residents will tend to attend BAs if they have a concern or a need that they would like the assembly to address. The

³⁴ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

BA agenda also influences attendance, with residents particularly interested in barangay financial status reports and updates on ongoing new projects. Residents are more likely to attend when these items are on the BA agenda. KIs also said that the presence of government programs such as 4Ps has positively impacted BA attendance. Barangays further incentivize residents to attend by offering snacks, organizing raffle drawings, and giving penalties such as small fines or threatening not to issue barangay clearances. In general, attendance tends to be high, with only those working, indisposed or residing in less accessible areas not attending. However, issues such as political differences or enmity between opposing camps or alliances of residents and barangay leaders could cause poor attendance in assemblies. It appears that in these assessments, in contrast to the FGDs, men's relatively poor attendance is not identified as a problem.

Municipal Assembly Resident Attendance as Perceived by MPDO and LDC Members

To examine participation in municipal assemblies, the study included KIIs with the MPDO and members of the MDC. Although municipalities do not have formal municipal assemblies, municipal officials hold public assemblies to discuss important issues and update residents on the state of the municipality. Some municipalities do not hold assemblies. Instead, municipal officials visit barangays during their barangay assemblies to dialogue with constituents. Municipalities that hold assemblies only require barangay officials or representatives to attend. In some cases, municipal governments schedule assemblies at times that coincide with town fiestas when people are in town. According to municipal KIs, when residents are affected by a specific proposed program, project, or policy, they are more likely to attend. Beneficiaries of programs like 4Ps and victims of calamities are also believed to attend more when they are hoping for government relief. Overall, nearly half of municipal level KIs (23 out of 48) gave resident *attendance* a high rating (4 to 5), suggesting that these KIs believe that resident attendance is quite good.

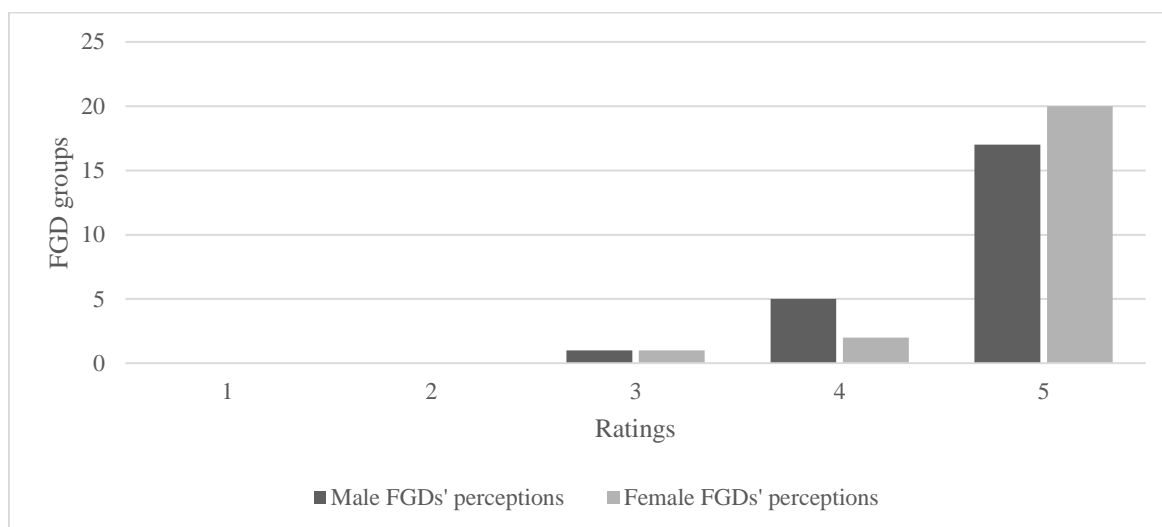
5. Quality of Participation in Meetings

Barangay Resident Perceptions on Participation and Influence in Barangay Assemblies

It is important to contrast opinions of barangay officials and those of barangay residents on governance-related questions. In doing so, we may not only need to remember officials' potential incentives to present themselves and their work in the barangay in positive light, we need also consider how a social desirability bias (resident's saying what they believe facilitator's want to hear) on the part of residents may be particularly strong on governance-related questions.

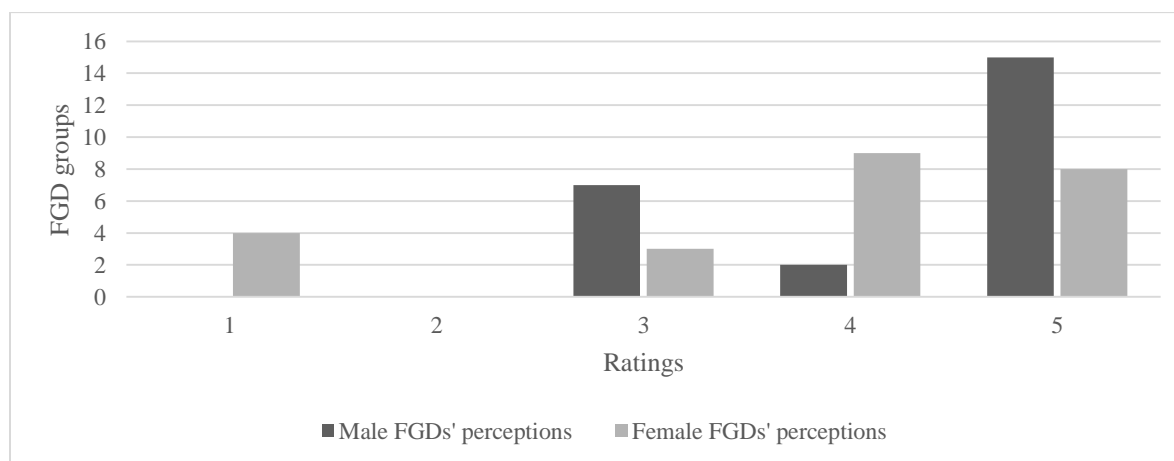
FGD participants were asked to rate how *important* they felt their participation in BAs was, according to a 1 to 5 scale. Among residents participating in FGDs, there was a strong consensus regarding the importance of BA participation, with 37 of 48 FGDs giving a rating of 5 (see Figure 7.13). FGDs from all major islands, male and female, gave high ratings. The household survey supports these findings since a large percentage, 68% of sample households, indicated that a household member attended a BA in the past six months. Some of the reasons focus groups gave for the importance of their participation in BAs included the desire to know: what's happening in their community and what projects will be implemented, how funds are being spent, what their local officials are up to, what issues and problems are facing the community and in what ways they can be of help.

Figure 7.13 Importance of Participating in BAs (24 male and 24 female FGDs)³⁵



In addition to questions about the importance of participating, barangay resident focus groups were also asked to rate how confident they felt in their *ability* to take part in local decision-making (in Tagalog, *ano ang lebel ng pag-impluwensya ninyo sa pagdedesisyon dito sa barangay*, or “what is the level of your influence in decision-making in the barangay?”) again according to a 1 to 5 scale. Male FGD groups gave higher average scores than female FGD groups (4.3 vs. 3.7) (see Figure 7.14).

Figure 7.14 Confidence to Participate in Decision-Making (24 male and 24 female FGDs)³⁶



Female groups with a lower confidence rating than their male counterparts cited a number of reasons for their lower ratings: a follow-the-leader attitude in residents; lack of education; lack of confidence to speak

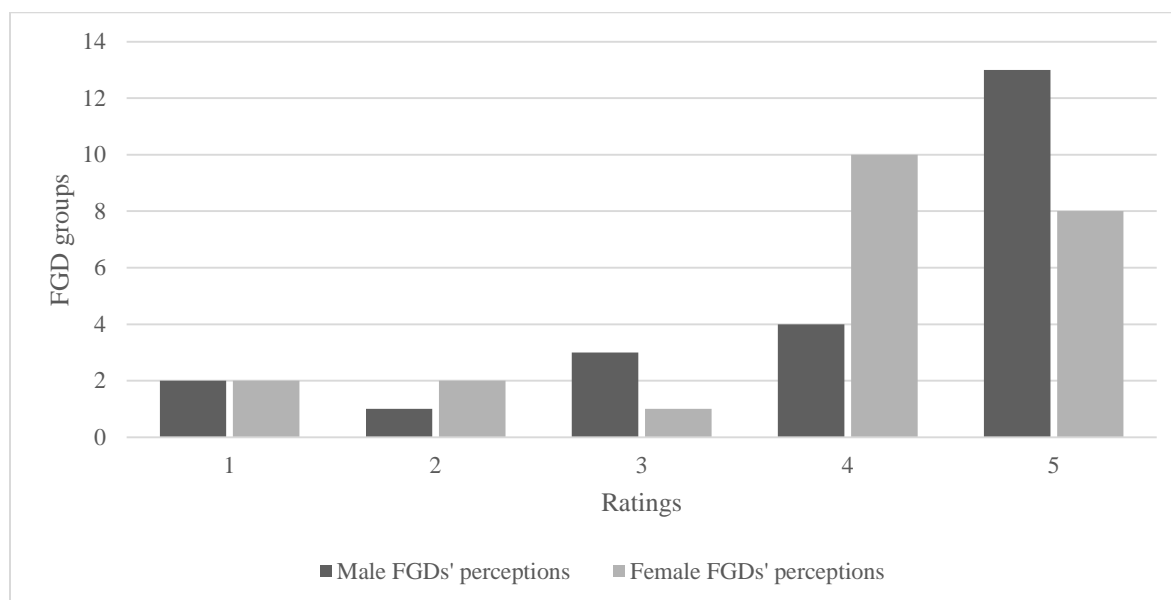
³⁵ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

³⁶ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

up; low self-confidence when it comes to decision making; and a perception that their views are often not respected by barangay officials.

Barangay resident focus groups were also asked to rate their *perceptions of their influence* on the decisions reached during BAs according to a 1 to 5 scale. FGD findings again show that barangay residents are reporting high levels of influence in the local decision making process. As Figure 7.15 below shows, FGDs gave an average rating of 4 with males giving slightly higher ratings than females (4.1 versus 3.9). Nonetheless, constraints were again highlighted: groups mentioned that factors such as illiteracy, a lack of education on the part of residents; a general perception that “not all voices are heard” or that “only barangay officials decide”; a tendency to simply follow the leader; a lack of unity among residents; and a lack of pertinent information on issues being discussed (e.g. projects, budget), prevented them from being more influential. Given these constraints, it is somewhat surprising that groups rated their level of influence (or what some studies might call self-efficacy) so highly, again asking us to consider a potential social desirability bias. We may also consider if and how the difference between a 4 and a 5 on governance questions may signal something particularly important.

Figure 7.15 Level of Influence (23 male and 23 female FGDs)³⁷



Barangay Captain and BDC Member Perceptions on Participation in Barangay Assemblies

Barangay Captain and BDC member KIs also rated participation levels among attendees of BAs. Again, the majority of KIs (14 out of 24) gave BA participation a rating of 4. KIs said attendees used BAs to discuss their concerns, make suggestions and ask questions about barangay activities and finances. However, those KIs who gave lower ratings said that “only a few speak up,” “most do not participate,” “they talk only if they see something wrong”, or that “some participants discuss issues that are not related

³⁷ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

to the agenda”, suggesting that the difference of interpretation between a 3 and 4 rating was significant. One informant gave a rating of 2, describing residents as dependent on the Barangay Council. Another informant gave the lowest rating of 1, indicating that residents simply do not participate.

Barangay captains in 11 of the 24 qualitative sample barangays indicated the presence of indigenous people (IP) in their areas. These included Cagayanon and Cuyonin groups in Palawan; Tinguians in Abra; Tabihanon in Negros Oriental; Ata, Dibabawon and Mandaya in Davao del Norte; Subanen in Misamis Occidental; and Maguindanaoan, Tausug and Maranao in Zamboanga del Sur. Respondents said the IPs are generally less vocal than the rest of the residents during BAs, with most of the informants interviewed giving IPs low participation ratings, ranging from 1 to 3. Four gave a rating of 3 on this aspect, with informants stating that “they participate only if it concerns them,” “only a few speak up and very seldom,” “they are not very vocal”, they are “shy and afraid to express their views, except the chieftain who serves as spokesperson,” and “they are shy but slowly beginning to express their views.” In contrast, KIs in two barangays gave IP participation during BAs a rating of 4, explaining that IP “share their thoughts during discussions and show respect for ideas of others” and that “they really participate in the discussion”. KIs in 5 barangays cited examples of IPs initiating or influencing projects or decisions, including the Gulpe Mano volunteer barangay cleaning project in Batang-batang, Palawan; a cultural presentation during a municipal fiesta in Mamacao, Davao del Norte; a farming project in Cartagena, Misamis Occidental, although this was not completed; a municipal ordinance in Sonlon, Davao del Norte which reminds barangay officials to respect the IP; and a commitment not to abuse the IP, especially the women, in Pugwan, Zamboanga del Sur. Since many of these policies directly affect how the communities as a whole treat the IP groups, it is possible that IPs are more likely to involve themselves in projects that directly affect them as a group.

Participation in Municipal Assemblies as Perceived by MPDO and LDC Members

Municipal KIs also discussed the *quality* of resident participation during municipal assemblies. Only two cases, (Negros Oriental, Aklan and Camarines Sur) had active participation by ordinary residents. More typically, leaders and organization representatives are the ones that speak up and interact with local officials during assemblies. KIs said there were a number of reasons that ordinary residents do not participate actively. They believe that most residents do not have enough confidence to voice their opinions during assemblies. Additionally, KIs explained that the predetermined agenda discourages people from raising other issues and concerns, but residents who are affected by proposed programs, projects or policies are more likely to raise concerns. The level of trust and confidence people have in their municipal leaders influences participation levels as well; municipal officials believed that their popularity, transparency and openness to input from ordinary residents encourages greater participation.

C. Governance Profile

In this section, we present indicators related to governance as defined by transparency, and accountability.

1. Number of Government Meetings Held

The barangay survey asked barangay officials about the number of BAs, Barangay Council meetings, and BDC meetings held in the last 12 months. Table 7.44 shows that barangays on average held 3 BAs, 23 Barangay Council meetings and 5 BDC meetings in the last 12 months. Some barangay officials reported holding government meetings more frequently, for example the maximum number of BAs held was 36. Since it is rare for barangays to hold so many meetings, it may just be the case that some barangay officials over-reported the number of government meetings held.

Table 7.44 Number of Government Meetings Held in the Last 12 Months

Type of Government Meeting	Number of Meetings Held in the Last 12 Months				
	Number of Barangay	Mean	S.D.	Minimum	Maximum
Barangay Assembly	190	3	4	1	36
Barangay Council	198	23	7	2	48
Barangay Development Council	158	5	7	1	36

2. Barangay Leadership

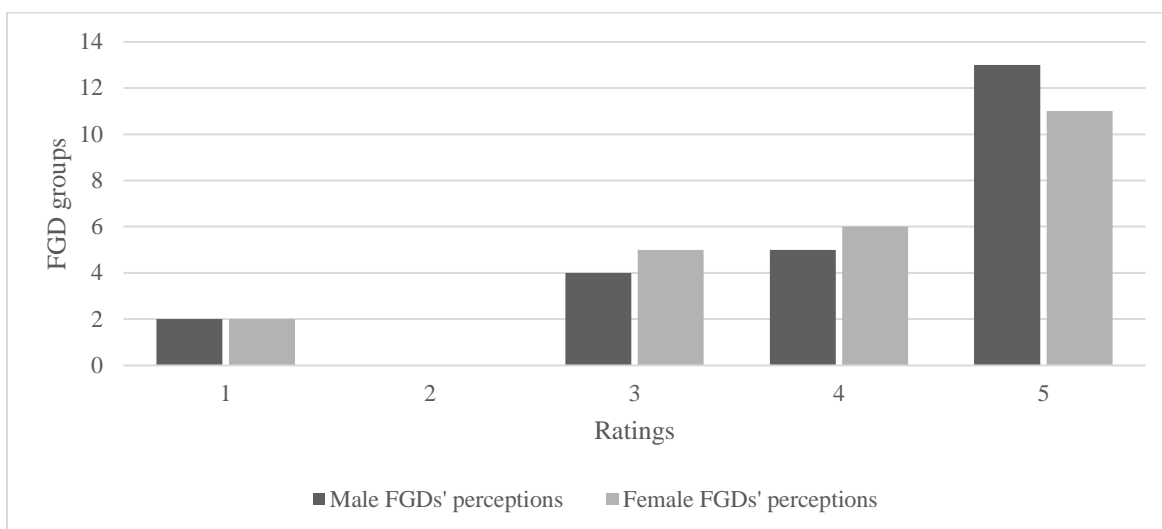
The barangay survey also asked barangay officials about the re-election of barangay captains and family legacy in barangay leadership. According to barangay survey data, 54% of current barangay captains were re-elected from the last term. Additionally, in 39% of cases, the barangay captain preceding the current captain was a family member of the current captain.

3. Trust in Leaders and their Decision-Making

Trust in the Barangay Government

Barangay resident FGDs rated participants' trust in the barangay government a 4.1 on a 1 to 5 scale, again with 1 being the lowest rating and 5 the highest. The majority of groups in Luzon, the Visayas and Mindanao gave a trust rating of 5 (see Figure 7.16).

Figure 7.16 Trust in Barangay Government (24 male and 24 female FGDs)³⁸



The FGD results suggest that the barangay government is a highly trusted institution that plays a central role in barangay life. High trust in the barangay government appears to be based on related and reinforcing factors—the physical proximity of the institution to its constituents, the important role it plays in the lives of people in the community, and a strong sense of responsibility on the part of barangay residents for electing officials into office, which fosters trust and loyalty towards them. These factors may or may not be undermined by the performance of local leaders in fulfilling their responsibilities, such as settling conflicts, keeping the peace, bringing in projects that improve people’s lives, attending to emergencies, and being on good terms with everyone. Given the range of factors in selecting or favoring leaders, performance of their duties may not be the key driver of trust in barangay councils. That is not to say that there are no poor-performing barangays; the focus groups that gave their governments a rating of 1 cited reasons such as poor project implementation, political divisions, repeatedly failing to call a barangay assembly, and rising social problems. Nonetheless, the quality of residents’ personal relationship to their leader might be one of the prime determinants of trust.

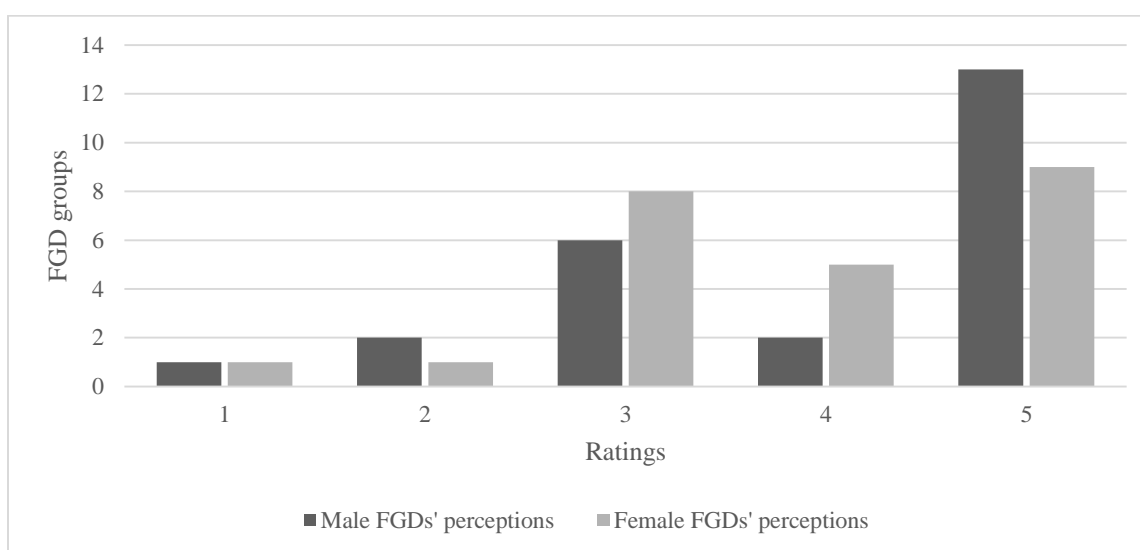
According to FGDs, the barangay captain remains the most popular and trusted local leader. The household survey also revealed that 87% of sample households knew the barangay captain or his/her spouse closely. The attributes valued by respondents in a barangay captain include the following: knowledge of the local governance code; participatory barangay planning and budgeting skills; and negotiation, communication, project development and resource mobilization skills. Groups said they respect authorities when they are able to prevent, resolve or address conflicts immediately. Actions or traits that decrease confidence and trust in authorities include: participation in drinking sprees or gambling, an inability to adequately explain offenses to the public and disobedience of the community’s rules and regulations. That the FGD rated officials so highly suggests that these are infrequent occurrences.

³⁸ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

Trust in the Municipal Government

Focus groups were also asked to rate their trust in the municipal government. Compared with the barangay government, the municipal government received slightly lower trust ratings (an average of 3.9) from groups. As Figure 7.17 shows, male-only focus groups gave higher trust ratings to the municipal government than female only focus groups (4 vs. 3.8).

Figure 7.17 Trust in Municipal Government (24 male and 24 female FGDs)³⁹



In response to a question about the factors affecting their trust rating, FGD participants indicated that people's trust in their municipal government is influenced by such factors as the leader's governance skills as well as the government's capacity to provide assistance to individuals in a timely manner. Groups also said they place great trust in a leader who is frequently visible, has a good rapport with the people, is not aloof, is always ready to lend a hand, is approachable, goes out of his way to find solutions to the day-to-day problems of the poor, and is not seen as corrupt. The municipal government's ability to mobilize resources and implement development projects at the municipal and barangay levels was another important trust factor. According to FGDs, people from remote barangays appreciate improvements in the town center, especially public facilities such as the plaza, sports complexes, terminals and ports. Participants said trust is eroded by signs of partisanship or favoritism towards political supporters when giving aid, or when help is given only during election season. Promises made by politicians during the campaign period are not easily forgotten, especially when it comes to barangay projects.

Unlike the barangay government, to which respondents felt close, participants in the FGDs generally see the municipal government as a distant entity. Similarly, less than half of the 5,940 household survey respondents said they knew the municipal mayor or anyone else in the municipal government closely. That the FGD trust ratings of the municipal government are comparatively high is thus somewhat perplexing. FGD groups said that the town center where the seat of government is located is far from

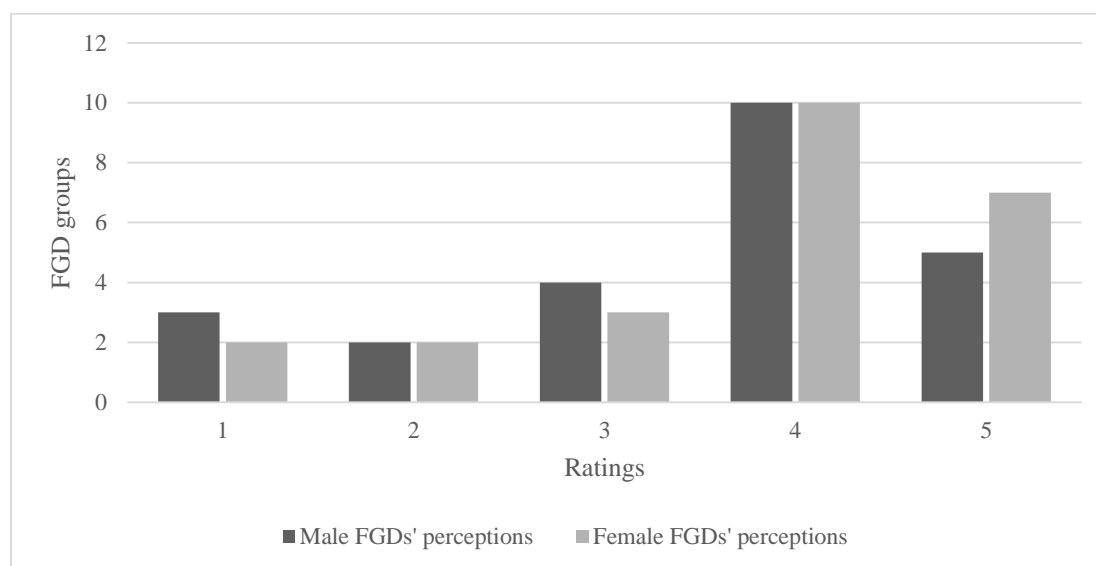
³⁹ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

barangays. Due to the distance between the town center and barangays, FGD respondents felt that the needs of barangay residents are rarely noticed. Some respondents commented that the mayor and congressman were good, but located far away. Respondents believe the municipal government is unable to respond in a timely manner to the concerns of people in more remote areas. People do not get to know their municipal leaders, let alone learn how the government works. Officials seldom visit them, and there is little communication between the barangay and municipal government.

Confidence in Ability to Hold Leaders and Representatives Accountable

FGD participants generally gave high ratings to their ability to hold their leaders or representatives accountable (see Figure 7.18), with 20 of 48 focus groups giving ratings of 4, and another 12 giving ratings of 5 on a scale of 1 to 5. Focus groups gave different definitions for the concept of accountability: keeping promises made during elections, standing by one's word, taking responsibility for the failure or slow implementation of projects, disclosing the use of project funds, giving regular reports to residents, and officials being open to questions and criticisms from residents.

Figure 7.18 Confidence in Ability to Hold Leaders/Representatives Accountable (24 male and 24 female FGDs)⁴⁰



D. Social Capital Profile

This section presents baseline social capital findings related to social networks and trust.

⁴⁰ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

1. Willingness to Seek Support from Others in Times of Adversity

The household survey asked each household about the support they received from others during different types of adversity experienced in the last 12 months to give us a sense of the willingness of people to seek support from others. Table 7.45 shows the percentage of households that sought financial and/or moral support from others in the event of different types of adversity. During home burglaries/vandalisms and harvest failures most households, 65% and 60% respectively, did not turn to anyone outside the household for support. In contrast, during loss of employment or business failures and grave illnesses almost 50% of household turned to family for support. During calamities, households turned most to local government leaders, which may be due to that a lot of calamity relief efforts are funneled through the government.

Table 7.45 Percentage of Households that Sought Financial and/or Moral Support from Others during Different Types of Adversity

	Num. HHs out of 5,940	Did not turn to anyone outside HH for support	Family	Friend/ neighbour /workmate /business partner	Local government leader	Other community leader	Congress Person
Home burglarized or vandalized	273	65%	12%	4%	3%	3%	-
Harvest failure or low harvest production	1012	60%	22%	9%	3%	1%	-
Loss of employment or business failure among household members	507	34%	48%	12%	2%	1%	-
Grave illness of household members or other relatives who required hospitalization or continuous medical treatment	1325	29%	45%	11%	11%	4%	1%
Death of household members or other relatives	1532	32%	34%	14%	15%	5%	1%
Losses due to fire, earthquake, flood, typhoon, other disasters	598	40%	17%	7%	28%	5%	1%

Table 7.46 presents the value of cash and in-kind contributions given by non-household members as a donation or loan to help households during times of adversity, as reported by those who received this assistance. The value of cash and in-kind contributions ranged from PHP 1,417 to 9,251 (about US\$35 to US\$231). Households received the most money during times of grave illness and the least during calamities, although we don't know if household simply asked for the most money during these particular types of adversities.

Table 7.46 Value of Cash and In-Kind Contributions (PHP) Received by Household as Donation or Loan for Support during Different Types of Adversity

Type of Adversity	Value of Cash and In-Kind Contributions Received as Donation or Loan (PHP)		Number of Households
	Mean	S.D.	
Death of household members or other relatives	8,514	29,617	715
Grave illness of household members or other relatives who required hospitalization or continuous medical treatment	9,251	33,103	789
Loss of employment or business failure among household members	3,782	9,350	266
Losses due to fire, earthquake, flood, typhoon, other disasters	1,417	3,850	260
Harvest failure or low harvest production	3,529	10,158	283
Home burglarized or vandalized	2,132	3,773	32

2. Connectedness

The impact evaluation will measure how social interaction opportunities offered by KC impact social networks. In particular, we are interested in understanding who community members know and interact with as well as how they rely on each other. The household survey collected information on existing social networks from each household by asking a respondent of a predetermined gender (the sample was randomly split into male and female respondents) to give details on his/her relationship with the households of 10 randomly selected people also living in the barangay (the list of 10 was different for each household). Table 7.47 below summarizes the social network baseline findings. Results indicate that on average, respondents knew 71% of barangay households and had at least one relative in 23% of barangay households. The high value given to *bayanihan* by FGD participants supports these strong social connectedness findings. Additionally, in the last 12 months respondents borrowed or lent a motorbike/thresher/banca (traditional Filipino boat)/carabao (water buffalo found in the Philippines) from/to less than 1% of barangay households. Respondents, on average, borrowed or lent cash to/from 2% of barangay households. This indicator is not meant to be a proxy for trust within a barangay, since it refers to lending/borrowing cash to/from random households within the barangay, instead we intend to use it to identify less connected households for subgroup analysis later on. The trust indicator presented earlier already showed that households do receive cash and in-kind contribution as donations or loans during different types of adversities from family and friends within the barangay.

Table 7.47 Social Networks Summary

Out of 10 Cases	Average Percentage of Barangay Households
Respondent knew someone in the individual's household	71%
Respondent knew everyone in the individual's household	44%
Respondent had at least one relative in the individual's household	23%
In past 12 months, respondent borrowed/lent motorbike/thresher/banca/carabao from someone in the individual's household	0.6%
In past 12 months, respondent borrowed/lent money from/to someone in the individual's household	2%

3. Perceptions of Security, Safety and Trust in the Barangay

Trust reflects the strength of the networks of individuals within the community and is thus an important component of overall community empowerment. The barangay and household survey collected information on barangay officials' and households' perceptions of crime and trust in the barangay by asking respondents how certain they feel that they can leave a valuable asset, like a bicycle, out at night without it being stolen. Table 7.48 compares barangay official and household perceptions of the presence of crime in the barangay and the community's overall sense of trust. A greater share of barangay official respondents (64%), were very confident that the bicycle "will certainly not be stolen" than household respondents (48%).

Table 7.48 Barangay Official and Household Perceptions of Crime and Trust: Likelihood Bicycle will be Stolen if Left Outside House at Night

Response Option	Percentage of Barangays (n=197)	Percentage of Households (n=5,898)
Will certainly be stolen	11%	10%
Might be stolen	19%	19%
Unlikely will be stolen	6%	23%
Will certainly not be stolen	64%	48%

Additionally, the household survey asked household members about their perceptions of the frequency of crime and whether they feel safe when they are alone at home. Table 7.49 summarizes the three different indicators used to assess a household's sense of security and safety in the barangay. Regarding crime, 25% and 58% of 5,920 respondents said that crime is never and rarely committed, respectively, in the barangay. In terms of safety, 31% felt very safe and 56% of 5,915 respondents said they feel moderately safe when alone.

Table 7.49 Household Respondent's Perception of Security and Safety in the Barangay

Perception of frequency crime is committed (n=5920)	
Response Option	Percentage of Households%
Very often	0%
Often	2%
Sometimes	15%
Rarely	58%
Never	25%
Perception of safety when alone (n=5915)	
Response Option	Percentage of Households%
Very safe	31%
Moderately safe	56%
Neither safe nor unsafe	8%
Moderately unsafe	4%
Very unsafe	1%

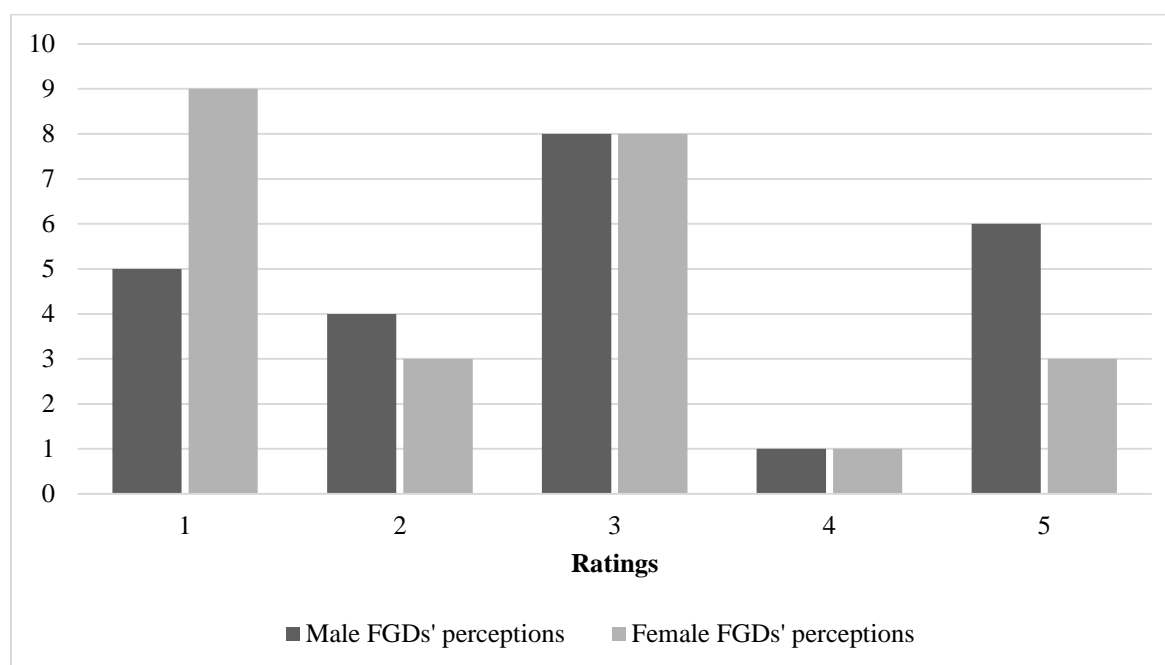
Peace and Order

Similar to the survey findings, where participants were asked specific peace and order questions, most barangay captains participating in KIIs and barangay resident FGD groups rated the peace and order in their communities a 4 out of 5. Additionally, though, the focus groups were particularly helpful in showing how the terms “peace”, “order” and “trust” mean different things to different people, again offering wider definitions of the concepts. For some residents, peace and order means support for the provision of day-to-day needs of residents, so that programs, projects or ordinances that protect or enhance people’s livelihoods have a good chance at succeeding. For others, peace and order is related to political or economic stability. Participants of the mixed FGDs associated a poor peace and order situation with physical conflict, loss of property due to theft and burglary, family conflicts, political divisions, destruction of plants by animals, and substance abuse. They said that although conflicts are inevitable, these generally take the form of physical fights among residents under the influence of alcohol on special occasions and are easily resolved by the barangay captain. Conflicts between husband and wife and thieves breaking into houses are seen by some as normal occurrences in the barangay (a statement that goes against quantitative survey findings in which 83% of respondents said that crime rarely or never happens in the barangays).

Trust in Strangers

Male and female FGD groups were asked to rate their trust in strangers on a one to five scale where 1 is the lowest rating and 5 is the highest. Respondent scores averaged 2.7 (see Figure 7.19). Female participants gave lower ratings than male participants. Those who put little trust in strangers typically cited a lack of familiarity with the person’s character, background or intentions. Previous bad experiences with strangers or outsiders in the past were also cited as reasons for mistrust. Negative news or rumors, (e.g. the presence of Abu Sayyaf Group, an Islamist separatist group, in a neighboring barangay, rumors of child kidnapping and trade in body organs, etc.) were also said to add to an atmosphere of mistrust. However, strangers who have the approval of municipal or barangay authorities to enter the barangay are less suspect.

Figure 7.19 Perceptions of Trust in Strangers (24 male and 24 female FGDs)⁴¹



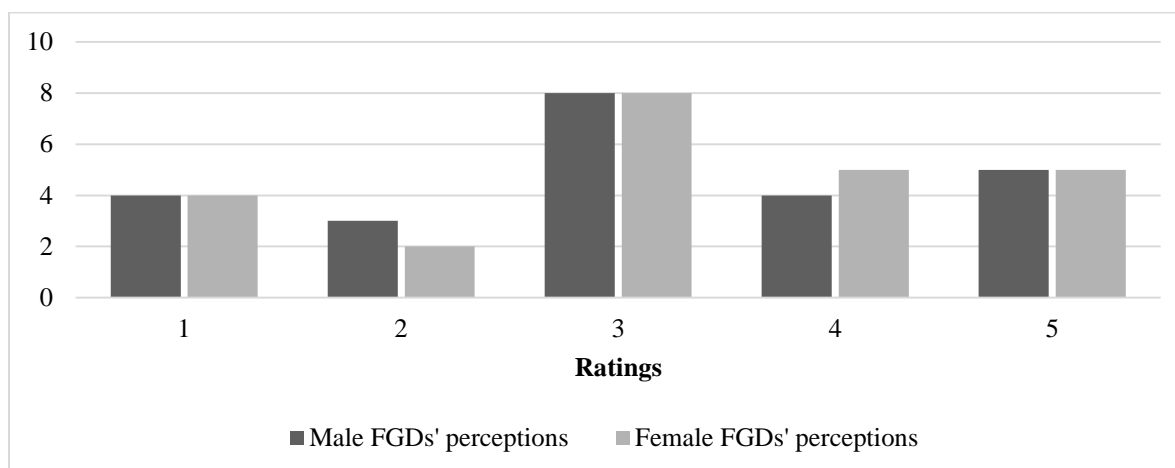
People with high trust ratings for strangers had good experiences dealing with strangers in the past. They may have been beneficiaries of the good will of strangers or projects brought by outsiders, including NGOs, aid institutions or researchers. The highest ratings came from groups or individuals who conduct business with strangers who buy their products or who visit their place as tourists. It appears that FGD participants generally interpreted the question about “strangers” as meaning individuals from outside the barangay.

Trust in Neighboring Barangays

Male and female FGDs were asked about their degree of trust in neighboring barangays. On average, people rated their trust a 3.2 (see Figure 7.20). This is only slightly higher than the same focus groups’ average trust rating for strangers.

⁴¹ On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

Figure 7.20 Perceptions of Trust in Neighboring Barangays (24 male and 24 female FGDs)⁴²



FGD participants said they generally view people from neighboring barangays as outsiders. The presence of friends, acquaintances, and relatives in neighboring barangays makes people more trusting of residents in these barangays. Participants also indicated that demonstrated actions or positive traits such as hospitality, fairness in dealing with people, and being invited by their neighbors during fiestas produce trust. Trade between barangays, as well as the presence of common resources or facilities (such as a road passing through adjacent barangays, children going to school in the next barangay, a health facility opening its doors to non-residents, water systems servicing two barangays) are said to foster bonds if these are managed properly; otherwise they become a source of conflict. Contact during fiestas and other social events is also reported to strengthen trust between barangays, but can also raise mistrust if fights/brawls breakout among intoxicated men. On the other hand, differences in language, religion and culture produce the opposite effect; a history of conflict in the neighboring barangay, or even a lack of contact between barangays, also foster distrust.

4. Proximity to Government Leaders

The household survey gathered information on the percentage of households that know their local government officials closely (see Table 7.50). The household survey left it up to the household respondents to decide what “knowing closely” meant and if the household was close to the official. Out of the 5,940 household surveyed, 87% said they knew a barangay government official or the barangay captain or his/her spouse closely. More than half of household respondents also said they knew the 4P leader mother closely (55%). The 4P leader mother or parent leader is the individual who presides in meetings during 4Ps assemblies, spreads information and updates, and follows-up on 4P commitments.

⁴² On a 1 to 5 scale, where 1 is the lowest rating and 5 is the highest.

Table 7.50 Percentage of Households that Know Government Officials Closely by Type of Government Officials

Type of Government Official	Percentage of Households that Know Official Closely
Municipal Mayor or Spouse	49%
Anyone Else in the Municipal Government	47%
Barangay Captain or Spouse	87%
Anyone Else in the Barangay Government	87%
Anyone on the Barangay Development Council	45%
4P Leader Mother	55%

8. CONCLUSION, RECOMMENDATIONS AND NEXT STEPS

A. Summary

The goal of community-driven development programs is not just to produce immediate welfare improvements, but to spur residents in communities to become more active participants in governance in the long-term. The KC project, funded by a \$120 million grant from MCC and \$59 million in loan funding from the World Bank, gives funding to communities to select and implement their own public projects. Residents must form representative teams to identify their communities' needs, contribute 30% of the project cost, and construct the public facilities or implement the public services themselves.

MCC has contracted IPA to perform an impact evaluation of KC, starting with baseline data collection in 2012. The evaluation makes use of the randomized-controlled-trial methodology to isolate the impacts of the program on treatment communities. It will present the effects of KC according to four major themes: socio-economic, community empowerment, governance and social capital. This report presents the findings from our analysis of baseline data collected.

By and large, the characteristics of treatment and control municipalities matched, showing that the randomized selection process successfully identified comparable areas for treatment and control. The average monthly per capita consumption of sample households was PHP 2,832 (about US\$71), lower than national estimates of PHP4,004 (about US\$100). Unemployment was 15%, also higher than the national average of 7%. The data reflects the fact that KC was initially targeted towards poorer provinces, with the greatest need for infrastructure projects.

While people typically had easy access to public transportation and basic facilities located within their barangays, such as elementary schools and barangay health centers, high-end facilities such as public hospitals and private clinics averaged close to an hour's travel away from sample households using the most common modes of transport, while public markets averaged about 42 minutes away. Over half of sample households did not have piped water systems. Unsurprisingly then, sample households and barangay officials interviewed said that if their communities were given funding for public infrastructure or services, they would most prefer to have roads and water systems. These two facilities were also among the projects most frequently proposed by sample barangays at the first cycle of KC funding, along with school buildings.

Barangay social networks are tightly bound, and familial ties between households are common. Crime in general is perceived to be low. Trust is generally much higher for barangay captains, whom close to 90% of households said they knew closely, than for municipal officials, who are viewed as far removed from the issues barangay residents face daily. For this reason, policies devolving power from the municipal

level to the barangay level are likely to be popular. But this does not guarantee the effectiveness of such policies; this evaluation is being performed precisely to measure if transferring responsibility for the implementation of public infrastructure has significant positive effects.

Participation in barangay assemblies was high at the baseline, with some 68% of households reporting that a household member had attended a meeting in the past six months. It is possible then that the impact of KC will be most visible in measures of the quality, rather than the quantity, of participation.

B. Upcoming Plans for Future Analysis

As of October 2013, IPA is preparing an interim data collection to gather a greater amount of data on empowerment and social capital measures. While a number of these measures were included in the baseline, several questions on respondents' perceptions of governance and participation in decision-making processes were removed from the surveys due to space constraints. The interim survey data collection is intended to target these specific areas, and also to get new data on residents' participation in KC activities and the program's initial effects now that the program has begun.

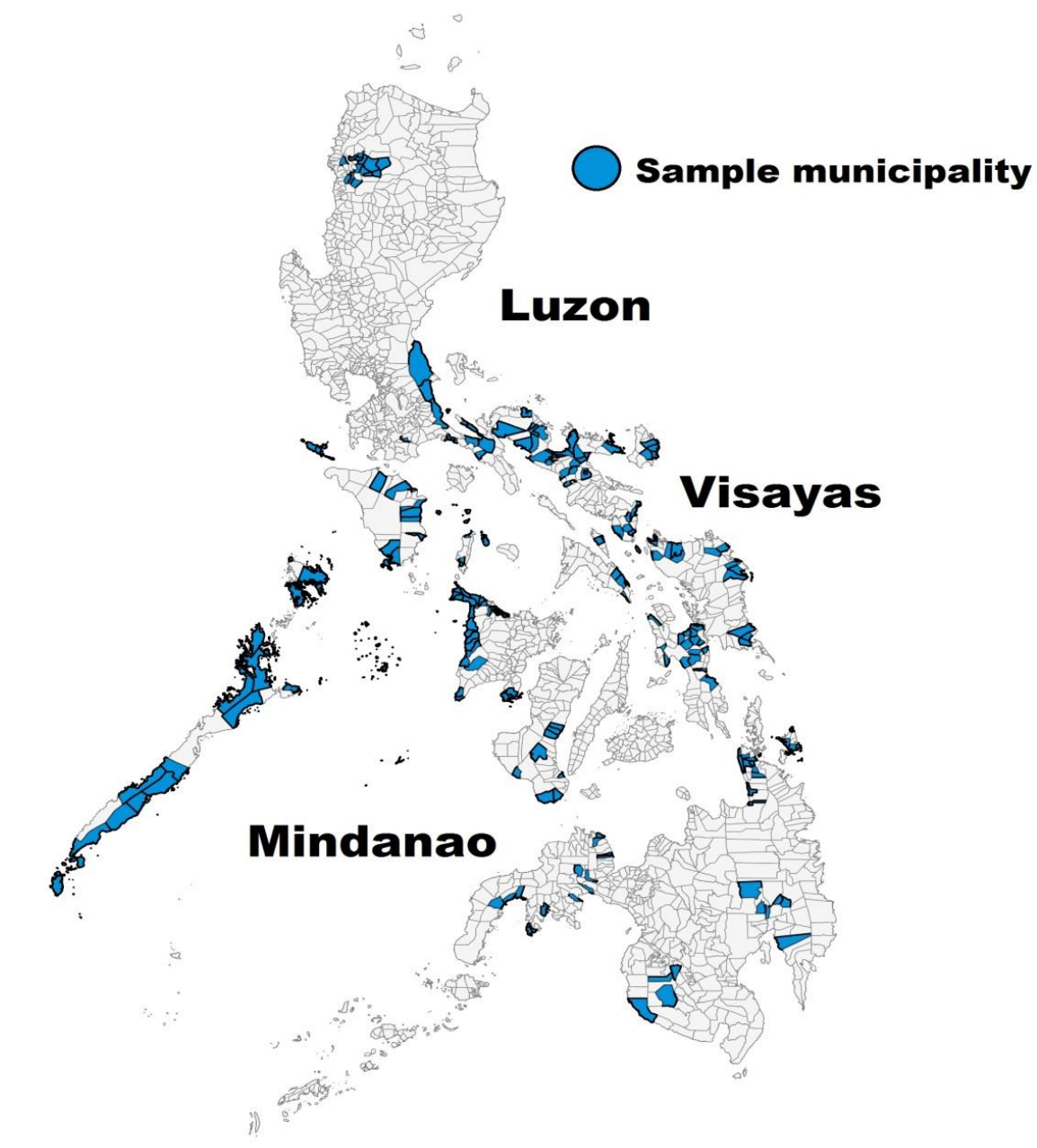
The data collection is scheduled to take place in early 2014, and will include a household survey, a barangay captain survey, observations of mandatory barangay assemblies, and a structured community activity (SCA). The surveys will include the additional variables mentioned above. The two new instruments, observing the BAs and the SCAs are designed to look at citizen participation in formal (BAs) and informal (SCA) decision making arenas.

9. REFERENCES

- Barron, Patrick, Macartan Humphreys, Laura Paler, and Harvey M. Weinstein. 2009. Community-Based Reintegration in Aceh: Assessing the Impacts of BRA-KDP In *Indonesian Social Development Paper No. 12* edited by P. Barron. Jakarta: The World Bank.
- Beath, Andrew, Fotini Christia, and Ruben Enikolopov. 2012 Randomized Impact Evaluation of Afghanistan's National Solidarity Programme - Final report (Pre-Analysis Plan: Hypotheses, Methodology and Specifications).
- Casey, Katherine, Rachel Glennerster, and Edward Miguel. 2011. The GoBifo Project Evaluation Report: Assessing the Impacts of Community Driven Development in Sierra Leone.
- Durlauf, Steven N. and Marcel Fafchamps. 2004. Social Capital. National Bureau of Economic Research (NBER Working Paper No. 10485).
- Deaton, Angus and Salman Zaidi. 2002. Guidelines for Constructing Consumption Aggregates for Welfare Analysis. (World Bank LSMS Working Paper 135).
- Fearon, James, Macartan Humphreys, and Jeremy Weinstein. 2008 Community-Driven Reconstruction in Lofa County - Impact Assessment.
- Humphreys, Macartan, Raul Sanchez de la Sierra, and Peter van der Windt. 2012. Social and Economic Impacts of Tuungane: Final Report on the Effects of a Community Driven Reconstruction Program in Eastern Democratic Republic of Congo.
- Innovations for Poverty Action. 2013. Analytical Plan: Impact Evaluation Of Kalahi-CIDSS.
- Innovations for Poverty Action. Kalahi-CIDSS impact evaluation: Detailed Evaluation Plan.
- Labonne, Julien. 2013. The KALAH-CIDSS Impact Evaluation: A Revised Synthesis Report. Philippines. The World Bank.
- Lim, Cristina P. and Clarence G. Pascual. 2012. Analytical and Field Report: Qualitative Baseline Study of the Kalahi-CIDSS Project. Ateneo Social Science Research Center.
- Mansuri, Ghazala, and Vijayendra Rao. 2012. Localizing Development: Does Participation Really Work? Washington DC: World Bank.
- Millennium Challenge Corporation. 2009. Guidelines for Economic and Beneficiary Analysis.
- Republic of the Philippines Department of Social Welfare and Development. March 2012. Sub-Manual: CEAC Field Guide for Kalahi-CIDSS Area Coordinating Teams.
- Sustainable Development Solutions. 2012. Quantitative Baseline Study For Kalahi-CIDSS: Final Report.
- Wong, Susan. 2012. What Have Been the Impacts of World Bank Community-Driven Development Programs? CDD Impact Evaluation Review and Operational & Research Implications. The World Bank.

ANNEXES

Annex A: Map of 198 Sample Municipalities



Annex B: MCA-P M&E and KC-AF Indicators Covered by the KC Baseline Study

MCA-P & KC-AF M&E Indicators			Indicators Available in the KC Baseline Survey			
Indicator Name	Definition	Unit	Indicator Name	Definition	Unit	Baseline Report Figure
Percentage of members from marginalized groups that attend barangay assemblies	Percentage of members from marginalized groups that attend barangay assemblies	A Percentage	Percentage of members from households below the poverty threshold that attend barangay assemblies	Percentage of members from households below the official regional poverty threshold who attend barangay assemblies in the last 6 months.	Percentage	70
			Percentage of members from female headed households who attend barangay assemblies	Percentage of members from female headed households who attend barangay assemblies in the last 6 months.		63
Percentage of households that report increase in confidence to participate collectively in community development activities compared to project initiation	Percentage of households that report increase in confidence to participate collectively in community development activities compared to project initiation	Percentage	Baseline data does not cover this indicator, but it will be covered during the interim data collection.			

MCA-P & KC-AF M&E Indicators			Indicators Available in the KC Baseline Survey			
Indicator Name	Definition	Unit	Indicator Name	Definition	Unit	Baseline Report Figure
Percentage of households reporting better access to basic services	Percentage of households reporting better access to basic services	Percentage	Percentage of households with better access to basic services	<p>An access to basic services index created using household survey data on the travel time to the following basic services: elementary school, high school, barangay health center, private health clinic, public hospital, paved road, dirt road, public transport, public market and municipality poblacion.</p> <p>Will compare the baseline and follow-up index values to then calculate the percentage.</p>	Percentage	Calculated during the impact analysis
Percentage of legislated municipal budgets with at least 10% increase in allocation for community identified priorities compared to pre project.	Percentage of legislated municipal budgets with at least 10% increase in allocation for community identified priorities compared to pre project.	Percentage	Baseline data does not cover this indicator			

MCA-P M&E Indicators			Indicators Available in the KC Baseline Survey			
Indicator Name	Definition	Unit	Indicator Name	Definition	Unit	Baseline Report Figure
Change in household income of beneficiaries of subprojects due to subproject ⁴³	Change in household income of beneficiaries of subprojects due to subproject ⁴⁴	Percentage	Mean per capita household consumption	Define household consumption as the sum of household food and non-food expenditures.	Philippine Pesos	2,832
Time savings	Change in travel time (road subprojects)	Minutes	Average household travel time to municipal poblacion	Average one-way travel time to the municipal poblacion.	Minutes	34
Labor force participation ⁴⁵	Number of people working divided by number of people of working age either employed or seeking employment	Percentage	Labor force participation rate	Unlike the LFS definition, the baseline survey definition does not exclude individuals from the labor force who were unemployed but were not available in the last week.	Percentage	68

⁴³ For now we can only report baseline household income, but will measure changes when we have the endline data.

⁴⁴ The impact evaluation cannot attribute changes to the subproject alone but to the entire KC package.

⁴⁵ Unfortunately, the impact evaluation design was not powered to see changes in labor force participation. Therefore, we may not be able to detect a change in this indicator.

MCA-P M&E Indicators			Indicators Available in the KC Baseline Survey			
Indicator Name	Definition	Unit	Indicator Name	Definition	Unit	Baseline Report Figure
School enrollment ⁴⁶	Number of students enrolled in school (school subprojects)	Number	School Enrollment Rate	Percentage of individuals currently enrolled or intend to enroll in school or were enrolled in school during the past 12 months	Percentage	Ages 3 to 5: 60% Ages 6 to 11: 98% Ages 12 to 15: 91%
Number of beneficiary farming households	Number of farming households that benefit from agriculture subprojects	Number	Number of farming households	Number of households engaged in crop farming, gardening, or livestock/poultry raising in the past 12 months.	Number	4,369
Yield of paddy rice	Dollar value of yield of paddy rice due to agriculture projects.	US Dollars	Average palay yield per hectare	The quantity of palay harvested (in kilos) divided by the area of land palay (in hectares).	Kilos/Hectare	2,299
Post-harvest losses	Dollar value of volume of produce lost post-harvest (agriculture subprojects)	US Dollars	Baseline data does not cover this indicator.			

⁴⁶ Unfortunately, the impact evaluation design was not powered to see changes in school enrollment. Therefore, we may not be able to detect a change in this indicator. If school-related subprojects are the majority of the subprojects chosen, we will add education-related indicators to the final survey.

MCA-P M&E Indicators			Indicators Available in the KC Baseline Survey			
Indicator Name	Definition	Unit	Indicator Name	Definition	Unit	Baseline Report Figure
Volume of water consumption from Improved sources	Household volume of water consumption from improved sources (water subprojects)	Volume	Percentage of households with access to level 1, level 2 or level 3 drinking water supply systems	Use official level 1, level 2, and level 3 drinking water supply system definitions	Percentage	45%
Number of visits to Barangay health facilities (health subprojects) ⁴⁷	Number of visits to Barangay health facilities (health subprojects)	Number	Average number of visits to barangay health station by household member (including HHs with zero visits)	Number of times any household member has gone to the barangay health station or been visited by a health officer from the barangay health station for medical treatment during the last month. (Note if different household members visited the facility each will count as one visit).	Number	0.4
			Average number of visits to barangay health station by household member (excluding HHs with zero visits)			1.8

⁴⁷ We can also include visits to the following: rural health unit, municipal hospital/district hospital/provincial hospital/regional hospital/public medical center/private hospital, private clinic, mother child welfare service or government birthing center.

Annex C: Additional Descriptive Statistics of Selected Key Variables

Table A.1 Per Capita Total Monthly Household Consumption (PHP)

Percentile			
1%	363	Min	0
5%	610	Max	185303
10%	767	Obs	5940
25%	1133	Sum of Wgt.	5940
50%	1780	Mean	2832
		S.D.	5395
75%	2926		
90%	5153	Variance	29100000
95%	7705	Skewness	18
99%	19302	Kurtosis	494

Table A.2 Travel Time (One Way Trip in Mins) to Basic Services: Elementary School

Percentiles			
1%	0	Min	0
5%	1	Max	240
10%	2	Obs	5802
25%	5	Sum of Wgt.	5802
50%	8	Mean	13
		Std. Dev.	16
75%	15		
90%	30	Variance	270
95%	40	Skewness	4
99%	60	Kurtosis	34

Table A.3 Travel Time (One Way Trip in Mins) to Basic Services: Secondary School

Percentiles			
1%	1	Min	0
5%	3	Max	480
10%	5	Obs	5627
25%	10	Sum of Wgt.	5627
50%	15	Mean	27
		S.D.	35
75%	30		
90%	60	Variance	1245
95%	90	Skewness	5
99%	150	Kurtosis	50

Table A.4 Travel Time (One Way Trip in Mins) to Basic Services: Barangay Health Center

Percentiles			
1%	0	Min	0
5%	1	Max	240
10%	2	Obs	5545
25%	5	Sum of Wgt.	5545
50%	10	Mean	15
		S.D.	20
75%	20		
90%	30	Variance	405
95%	60	Skewness	4
99%	120	Kurtosis	23

Table A.5 Travel Time (One Way Trip in Mins) to Basic Services: Private Health Clinic

Percentiles			
1%	2	Min	0
5%	5	Max	1800
10%	10	Obs	4686
25%	15	Sum of Wgt.	4686
50%	30	Mean	55
		S.D.	108
75%	60		
90%	120	Variance	11656
95%	180	Skewness	8
99%	540	Kurtosis	81

Table A.6 Travel Time (One Way Trip in Mins) to Basic Services: Public Hospital

Percentiles			
1%	3	Min	0
5%	6	Max	1800
10%	10	Obs	5194
25%	20	Sum of Wgt.	5194
50%	30	Mean	61
		S.D.	95
75%	60		
90%	120	Variance	9116
95%	180	Skewness	7
99%	540	Kurtosis	84

Table A.7 Travel Time (One Way Trip in Mins) to Basic Services: Paved Road (for 4-wheel vehicles)

Percentiles			
1%	0	Min	0
5%	0	Max	540
10%	1	Obs	5616
25%	1	Sum of Wgt.	5616
50%	5	Mean	16
		S.D.	27
75%	20		
90%	40	Variance	715
95%	60	Skewness	5
99%	120	Kurtosis	47

Table A.8 Travel Time (One Way Trip in Mins) to Basic Services: Dirt Road (for 2-wheel vehicles)

Percentiles			
1%	0	Min	0
5%	0	Max	360
10%	0	Obs	5081
25%	1	Sum of Wgt.	5081
50%	3	Mean	9
		S.D.	19
75%	10		
90%	20	Variance	355
95%	30	Skewness	6
99%	90	Kurtosis	66

Table A.9 Travel Time (One Way Trip in Mins) to Basic Services: Dirt Road (for 4-wheel vehicles)

Percentiles			
1%	0	Min	0
5%	0	Max	360
10%	0	Obs	4808
25%	1	Sum of Wgt.	4808
50%	2	Mean	8
		S.D.	19
75%	5		
90%	20	Variance	365
95%	30	Skewness	6
99%	90	Kurtosis	66

Table A.10 Travel Time (One Way Trip in Mins) to Basic Services: Public Transportation

Percentiles			
1%	0	Min	0
5%	0	Max	1800
10%	1	Obs	5601
25%	1	Sum of Wgt.	5601
50%	5	Mean	15
		S.D.	34
75%	15		
90%	30	Variance	1172
95%	60	Skewness	27
99%	120	Kurtosis	1335

Table A.11 Travel Time (One Way Trip in Mins) to Basic Services: Public Market

Percentiles			
1%	2	Min	0
5%	5	Max	1800
10%	5	Obs	5455
25%	10	Sum of Wgt.	5455
50%	20	Mean	42
		S.D.	89
75%	40		
90%	90	Variance	7967
95%	120	Skewness	9
99%	300	Kurtosis	119

Table A.12 Travel Time (One Way Trip in Mins) to Basic Services: Municipal Poblacion

Percentiles			
1%	2	Min	0
5%	5	Max	603
10%	5	Obs	5494
25%	10	Sum of Wgt.	5494
50%	20	Mean	34
		S.D.	41
75%	40		
90%	65	Variance	1693
95%	120	Skewness	4
99%	225	Kurtosis	28

Table A.13 Number of Times Individual Participated in Group in the Last 12 Months: Parent-Teacher-Community Association

Percentiles			
1%	0	Min	0
5%	1	Max	39
10%	1	Obs	1593
25%	2	Sum of Wgt.	1593
50%	3	Mean	4
		S.D.	4
75%	5		
90%	10	Variance	12
95%	12	Skewness	3
99%	15	Kurtosis	17

Table A.14 Number of Times Individual Participated in Group in the Last 12 Months: Senior Citizen's Group

Percentiles			
1%	0	Min	0
5%	0	Max	180
10%	0	Obs	1352
25%	1	Sum of Wgt.	1352
50%	2	Mean	5
		S.D.	8
75%	10		
90%	12	Variance	71
95%	12	Skewness	11
99%	24	Kurtosis	190

Table A.15 Number of Times Individual Participated in Group in the Last 12 Months: Governmental Group or Institution

Percentiles			
1%	0	Min	0
5%	1	Max	336
10%	1	Obs	1112
25%	2	Sum of Wgt.	1112
50%	6	Mean	8
		S.D.	13
75%	12		
90%	12	Variance	167
95%	24	Skewness	16
99%	48	Kurtosis	376

Table A.16 Number of Times Individual Participated in Group in the Last 12 Months: Women's Association

Percentiles			
1%	0	Min	0
5%	0	Max	48
10%	1	Obs	892
25%	1	Sum of Wgt.	892
50%	2	Mean	4
		S.D.	6
75%	5		
90%	12	Variance	32
95%	12	Skewness	3
99%	24	Kurtosis	23

Table A.17 Number of Times Individual Participated in Group in the Last 12 Months: Religious Group

Percentiles			
1%	0	Min	0
5%	1	Max	96
10%	1	Obs	760
25%	2	Sum of Wgt.	760
50%	7	Mean	15
		S.D.	24
75%	12		
90%	48	Variance	581
95%	48	Skewness	4
99%	96	Kurtosis	27

Table A.18 Number of Times Individual Participated in Group in the Last 12 Months: Credit/Finance Group

Percentiles			
1%	0	Min	0
5%	0	Max	384
10%	1	Obs	510
25%	2	Sum of Wgt.	510
50%	12	Mean	27
		S.D.	35
75%	48		
90%	48	Variance	1195
95%	50	Skewness	4
99%	192	Kurtosis	31

Table A.19 Number of Times Individual Participated in Group in the Last 12 Months: Production Group or Institution

Percentiles			
1%	0	Min	0
5%	0	Max	120
10%	1	Obs	406
25%	1	Sum of Wgt.	406
50%	3	Mean	6
		S.D.	10
75%	10		
90%	12	Variance	103
95%	12	Skewness	6
99%	48	Kurtosis	59

Table A.20 Number of Times Individual Participated in Group in the Last 12 Months: Youth Group

Percentiles			
1%	0	Min	0
5%	0	Max	48
10%	0	Obs	298
25%	1	Sum of Wgt.	298
50%	2	Mean	5
		S.D.	7
75%	6		
90%	12	Variance	52
95%	24	Skewness	3
99%	42	Kurtosis	13

Table A.21 Number of Times Individual Participated in Group in the Last 12 Months: Sports Club

Percentiles			
1%	0	Min	0
5%	0	Max	200
10%	1	Obs	155
25%	1	Sum of Wgt.	155
50%	2	Mean	7
		S.D.	22
75%	4		
90%	12	Variance	475
95%	24	Skewness	7
99%	144	Kurtosis	51

Table A.22 Number of Times Individual Participated in Group in the Last 12 Months: Irrigator's Association

Percentiles			
1%	0	Min	0
5%	0	Max	24
10%	1	Obs	139
25%	1	Sum of Wgt.	139
50%	2	Mean	4
		S.D.	4
75%	4		
90%	10	Variance	18
95%	12	Skewness	3
99%	24	Kurtosis	11

Table A.23 Number of Times a Household Member Attended a Barangay Assembly in the Last 6 Months

Percentiles			
1%	0	Min	0
5%	1	Max	21
10%	1	Obs	4051
25%	1	Sum of Wgt.	4051
50%	1	Mean	2
		Std. Dev.	2
75%	2		
90%	3	Variance	2
95%	6	Skewness	4
99%	6	Kurtosis	22

Table A.24 Number of Barangay Assemblies Held in the Last 12 Months

Percentiles			
1%	1	Min	1
5%	1	Max	36
10%	2	Obs	190
25%	2	Sum of Wgt.	190
50%	2	Mean	3
		S.D.	4
75%	2		
90%	4	Variance	14
95%	5	Skewness	6
99%	25	Kurtosis	48

Table A.25 Number of Barangay Council Meetings Held in the Last 12 Months

Percentiles			
1%	2	Min	2
5%	12	Max	48
10%	12	Obs	198
25%	24	Sum of Wgt.	198
50%	24	Mean	23
		S.D.	7
75%	25		
90%	30	Variance	48
95%	34	Skewness	-1
99%	48	Kurtosis	6

Table A.26 Number of Barangay Development Council Meetings Held in the Last 12 Months

Percentiles			
1%	1	Min	1
5%	1	Max	30
10%	1	Obs	158
25%	1	Sum of Wgt.	158
50%	2	Mean	5
		S.D.	7
75%	4		
90%	12	Variance	51
95%	24	Skewness	2
99%	30	Kurtosis	7