

# PHILIPPINES

The KALAHI-CIDSS Impact Evaluation: A Synthesis Report



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### **The World Bank Group**

www.worldbank.org

1818 H. Street, N.W. Washington DC 20433, USA Tel: (202) 473 1000 Fax: (202) 477 6391

#### **World Bank Office Manila**

23rd Floor, The Taipan Place F. Ortigas Jr. Road, Ortigas Center Pasig City, Philippines Tel: (632) 637 5855 to 64 Fax: (632) 6375870 www.worldbank.org.ph

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# **Acronyms**

AFP Armed Forces of the Philippines

ARMM The Autonomous Region of Muslim Mindanao

BSPMC Barangay Subproject Management Committee

CDD Community-Driven Development

CEAC Community Empowerment Activity Cycle

DSWD Department of Social Welfare and Development

FGD focus group discussion

KALAHI-CIDSS Kapit-Bisig Laban Sa Kahirapan-Comprehensive and

Integrated Delivery of Social Services

LGUs Local Government Units

MIBF Municipal Inter-Barangay Forum

MILF Moro Islamic Liberation Frong

NPA New People's Army

# **Executive Summary**

he KALAHI-CIDSS program was set up in 2002 to alleviate rural poverty. The program aims to achieve this by providing resources to poor rural municipalities to invest in public goods and by reviving local institutions to enhance people's participation in governance. KALAHI-CIDSS was originally targeted at the poorest 25 percent of municipalities in 42 of the poorest provinces in the Philippines. As of December 2010, the project had covered 4,583 barangays1 in 200 municipalities and supported 5,645 subprojects, worth Php 5.7 billion and benefiting about 1.26 million households. The program includes a very detailed social mobilization and participatory planning and implementation processes, repeated at least three times in each participating municipality, to secure resources for public investments.

A rigorous program impact evaluation was designed in 2003 to evaluate general impacts on poverty reduction, social capital, empowerment, and governance. Quantitative and qualitative data were collected in 2003, 2006, and 2010 on a broad range of indicators from a sample of KALAHI-CIDSS municipalities, and from comparable municipalities that did not receive project support. This report presents the main results from the final quantitative and qualitative impact evaluations as well as from other studies that were carried out throughout project implementation.

Available data indicate that participation rates in project activities are relatively high, suggesting that households and local elected officials in targeted municipalities see value in the KALAHI-CIDSS approach. About 80 percent of households in treated municipalities indicated being aware of the project, and three in every five expressed satisfaction with the project. Local elected officials also view the project in a positive light, with 75 percent of officials from local government units (LGUs) expressing their satisfaction with the project. Respondents identify infrastructure improvement, better access to services, and community empowerment as key project benefits. Feedback from communities (barangays) that were not prioritized by the Municipal Inter-Barangay Forum (MIBF), and therefore did not receive subproject financing, was more negative.

KALAHI-CIDSS was designed to minimize the risk of elite capture and it appears to have been successful in doing so. At the national level, the program was successful in directing resources to some of the poorest municipalities in the country, identified through a ranking process undertaken by Dr. Arsenio Balisacan at the University of the Philippines School of Economics. At the local level, available evidence indicates that project processes were not subject to elite capture, at least in its most malign form. First, barangay captains do not appear to be a driving force behind proposals put forward in the MIBF. Their preferences and those of community members are equally represented in community proposals. Second, the impact evaluation reveals that, within municipalities, KALAHI-CIDSS targeted the poorest and best-organized villages, suggesting that better-off and connected individuals and villages did not receive a disproportionate share of project benefits.

<sup>1</sup> A barangay is the lowest administrative unit in the Philippines; corresponding to a village.

The project had a positive impact on house-hold consumption. Specifically, per capita consumption increased by about 5 percent as a result of the project. Those impacts are stronger for households that were classified as poor in 2003 and for households living in barangays that received a subproject. This is consistent with the view that long-term impacts will require sustained efforts and both social and physical investment.

Additional survey findings on household employment and marketing suggest how these positive impacts on consumption came about. First, the project led to a 4 percentage-point increase in labor force participation compared to what would have happened otherwise. Second, the survey found that households in KALAHI-CIDSS communities diversified their sources of income: they are now slightly more likely to be working in more than one sector. Third, the positive impacts might come from improved production practices. While farmers are less likely to engage in multi-cropping as a result of the project, they appear more likely to sell their produce.

The project led to improvements in basic service delivery. First, the proportion of households visiting a health facility when sick increased. This change seems to be driven by an increase in the use of public barangay health stations versus private hospitals and clinics. Second, the project had a positive impact on accessibility. Specifically, a 6 percentage-point increase in the proportion of households whose house is accessible year-long can be attributed to the project. Third, the project had a small positive impact on access to level 2 and 3 water systems. However, given the relatively large amount of investment for water subprojects in the sample municipalities, this impact appears limited, apparently due to maintenance problems. The impacts on access to safe drinking water are slightly larger but still limited. Fourth, program implementation appears to have led to an increase in secondary school and college enrollment, but, surprisingly, to a small decline in elementary school enrollment. However, given the relatively small amount of investments in school buildings in the barangays sampled for the impact evaluation, this correlation might not be the result of the project.

Consistent with the project development objective, KALAHI-CIDSS led to an increase in participation in barangay assemblies, associated with greater knowledge about the barangay's income and expenses. This increase in participation in barangay assemblies seems to be associated with a qualitative change in how they are perceived. Prior to project implementation, they were, at best, considered avenues for reporting, while now they tend to be seen as mechanisms for participation, transparency, and accountability. This change seems to be partly driven by a new breed of barangay leaders. Especially in barangays that received a subproject, some of the community volunteers were empowered. This new pool of leaders can effectively engage elected barangay officials. They are considered to be more service-oriented and committed than previous barangay leaders and, in some cases, they have been elected to a barangay office. Ensuring the sustainability of those impacts once project implementation has ended appears more challenging, however.

The project also had positive impacts on a number of social capital outcomes, which have been shown to be important determinants of household welfare. For example, the project led to increased group membership as well as improved trust levels. Surprisingly, the project had a negative impact on the proxy used for collective action, but a positive impact on households' willingness to contribute money to community projects. It is unclear whether this last result is driven by a decrease in households' willingness to contribute to such activities or by a decrease in the need for collective action. It could also capture a shift in the nature of participation in collective action activities. Those impacts are less dependent on the barangay receiving subproject financing, suggesting a greater role for social preparation in determining impacts on local dynamics.

Finally, findings from the evaluation suggest areas for improvement. First, some of the observed impacts—for example, access to level 2 and 3 water systems—are relatively small. In the case of water systems, this appears to be due to the fact that some of the subprojects were unable to reach all community members and some barangays did not manage to adequately maintain the investment. This, in turn, may be the result of project resources being allocated on a per barangay, rather than on a per capita, basis, which in some cases led to limited per capita allocations. The evaluation also showed that the key impact on increased consumption levels is stronger on poorer households, suggesting that it might make sense to vary municipal allocation by poverty levels.

Second, there are challenges in sustaining empowerment and barangay-level governance

impacts, and in affecting improvements in municipal-level governance. This could require greater LGU involvement and better integration of project processes with the local planning cycle, along the lines currently being followed by the Makamasang Tugon initiative. Further, findings from the qualitative study suggest that the project was relatively successful at empowering project volunteers, but that the broader citizenry was not as positively affected.

Third, while a large proportion of barangays in targeted municipalities received at least one subproject during the three cycles, some did not. Project volunteers who engaged in the relatively time-consuming KALAHI-CIDSS processes and did not manage to get a project for their barangay might be reluctant to engage in similar processes in the future.

	Impacts		
Key Indicators	Sign	Size*	Comments/Explanation
Household Welfare			
Per capita consumption (log)— overall	Positive	Medium	Stronger in prioritized barangays
Per capita consumption (log)—poor households	Positive	Medium	As above
Per capita consumption (log)—non-poor households	Negative	Small	As above
Non-food share to total consumption	Positive	Small	As above
Labor force participation	Positive	Small	Stronger for women
Farmers selling their produce	Positive	Medium	
Income diversification	Positive	Small	
Access to Services			
Visits to health stations	Positive	Medium	Associated with improve services
Access to water	Positive	Small	Issues with subproject maintenance
Year-long road access	Positive	Medium	Stronger in prioritized barangays
Elementary school enrollment	Negative	Small	Low level of investments in sample barangays
Secondary school and college enrollment	Positive	Medium	Stronger for girls
Social Capital and Local Governa	nce		
Group membership	Positive	Medium	
Trust	Positive	Large	Toward community men bers and strangers
Collective Action	Negative	Medium	Increased opportunity cost?
Barangay Assemblies	Positive	Medium	Stronger in short term

### 1. KALAHI-CIDSS

his report reviews available evidence on the KALAHI-CIDSS program with the aim of identifying both its strengths and weaknesses. It will serve as an input into the planned revisions to project operating procedures and for the ongoing scaling up of the program. The report starts by indicating the program's main achievements in terms of outputs. It then briefly presents the systems put in place to measure project impacts and to learn from the various studies that were implemented during the course of the program. The report presents the main results from the final quantitative and qualitative impact evaluations with a special focus on the project impacts on poverty, as well as access to basic services, local governance, and social capital. The last section of this report indicates areas for potential improvement.

At the turn of the new millennium, poverty in the Philippines—on the increase due to the aftermath of the 1997 Asian Crisis—was mostly a rural phenomenon. In 2000, about 44 percent of the rural population was poor and about three-fourths of the poor lived in rural areas (World Bank 2002). The passage of the 1991 Local Government Code (RA 7160) provided opportunities for local poverty reduction efforts, but implementation fell short of original expectations. While significant responsibilities were devolved to local government units (LGUs), transfers were not deemed sufficient to pay for these services. Further, poor rural communities often lacked opportunities to effectively engage in local development processes.

The KALAHI-CIDSS program sought to respond to some of the shortcomings in the implementation of the Local Government Code. Set up in 2002, the program aimed at alleviating rural poverty by providing resources to poor rural municipalities for public goods investment and reviving local institutions mandated by the 1991 Local Government Code. Specifically, the project had the objectives of "strengthening local communities' participation in barangay governance, and developing their capacity to design, implement and manage development activities that reduce poverty" (World Bank 2002).

The government of the Philippines committed \$82 million² to the project, which was complemented by a \$100 million loan from the World Bank. Given the project emphasis on alleviating rural poverty, it targeted the poorest 25 percent of municipalities in each of the poorest 42 provinces.³ At first, the project was implemented in 184 municipalities. In 2010, it was expanded to an additional 16 municipalities. The project is currently being expanded through a \$120 million grant from the Millennium Challenge Corporation and a \$59 million loan from the World Bank. The selection of municipalities for project expansion took place in the first half of 2011.

As of December 2010, the project had supported 5,645 subprojects, worth Php5.7 billion and benefiting about 1.26 million households. The five most common subproject types were roads, water systems, school buildings, health stations,

<sup>2</sup> All dollar amounts are U.S. dollars unless otherwise indicated.

<sup>3</sup> Concerns about the capacity of regional DSWD offices to cover a large number of municipalities prevented the program from targeting the poorest municipalities regardless of their province of origin. In addition, a decision was made not to implement the project in the Autonomous Region of Muslim Mindanao (ARMM). A similar project, the ARMM Social Fund, was implemented instead.

Table 2. Distribution of subproject types (December, 2010)							
	% of Subprojects	% of HH Beneficiaries⁴	% Total Cost				
Basic social services (e.g., health, edu- cation, water)	50.1	49.1	44.5				
Basic access infrastructure (e.g., roads, bridges)	27.5	26.1	36.5				
Community production, economic support, and common service facilities	11.4	12.7	8.9				
Environmental protection and conservation	10.2	11.7	9.6				
Other	0.8	0.5	0.5				
Source: KALAHI-CIDSS National Project Man	agement Office.						

and pre/post agricultural production facilities. The distribution of subprojects financed under the program is shown in Table 2.

KALAHI-CIDSS applied a detailed participatory process to the identification, prioritization, implementation, and evaluation of community-level subproject investments. The process follows what is known as the community empowerment activity cycle (CEAC), which consists of five main stages:<sup>5</sup>

- 1. *Social preparation stage*. Communities participate in a series of activities to identify and prioritize their problems and needs.
- Subproject identification stage. Community
  members are technically trained to design
  and package subproject proposals that seek
  to address their needs.
- 3. Subproject preparation, selection, and approval stage. Community representatives—

through the Municipal Inter-Barangay Forum—select which proposals will be funded by KALAHI-CIDSS using a set of criteria they developed themselves.

- 4. Subproject implementation, monitoring, and evaluation (M&E), and operations and maintenance stage for approved subproject proposals.
- 5. *Transition stage*. Communities enter into the second implementation of the CEAC after subprojects are completed.

The program has a number of noteworthy design features that are consistent with community-driven development programs worldwide. First, once a barangay has been prioritized for subproject investment, a community bank account is opened and funds from the project flow directly from the Philippine government's implementing agency—the Department of Social Welfare and Development (DSWD)—accounts into the com-

Data on beneficiaries are taken from subproject proposals and correspond to the number of households in each barangay that are expected to benefit directly from the sub-project.

<sup>5</sup> http://kalahi.dswd.gov.ph/index.php?option=com\_content&view=article&id=3&ltemid=3 visited on 12/16/2010.

munity account. Second, community volunteers are fully responsible for procurement of subproject inputs and reporting to the community at large and municipal authorities on the usage of funds. Third, the role of municipal mayors in approving subprojects is limited by their non-voting status in the Municipal Inter-Barangay Forum. Fourth, communities are required to provide local counterpart contributions, either in cash or in-kind, which are pooled from various sources (province, municipality, barangay, and community). This helps develop the capacity of communities for resource leveraging/mobilization.

In reviewing the impact of KALAHI-CIDSS in participating municipalities, it is important to consider a few key aspects of the program. First, participating municipalities receive an annual grant equivalent to PHP 300,000 for each barangay; the total municipal grant is then allocated competitively among barangays in the municipality. This corresponds to about 19 percent of the Internal Revenue Allotment (IRA); that is, regular fiscal transfers from the central government, in KALAHI-CIDSS municipalities, and to an average annual per capita allocation of approximately PHP 300. Given the small size of the per capita allocation, expectations of the likely poverty reduction impact of the program should be similarly modest.

Second, given the competitive nature of the prioritization process to allocate funding to villages within municipalities, it is not possible

to know ex-ante which villages will receive a subproject and which villages will not. As a result, among the treatment municipalities surveyed, the sample covers both villages that were prioritized and villages that did not receive any subproject financing (but which did receive social preparation and project identification and design training).

Third, common to all CDD operations, KALAHI-CIDSS finances a number of different subprojects, which are likely to affect different dimensions of household welfare. For example, one would not expect similar impacts for a farm-to-market road and for a school building. As a result, project impacts are diluted over a broad range of outcome indicators and one should expect relatively smaller impacts on a number of indicators. Due to sample size restrictions, no attempts were made to assess impacts by types of subprojects.

Fourth, to better understand the impact of KALAHI-CIDSS, ideally these results should be compared to those of similar efforts to support basic community infrastructure and services in the Philippines. Unfortunately, a limited number of such programs in Philippines have been subjected to this kind of robust analysis. As a result, it is difficult to judge whether KALAHI-CIDSS is a cost-effective way of achieving the observed impacts. However, the large-scale impact evaluation of the Pantawid Pamilyang Pilipino Program (4Ps), also implemented by the DSWD, will generate useful comparative information.

# **2.** Background on the Evaluation Strategy<sup>6</sup>

### 2.1. Design

As part of the project's overall M&E efforts, a rigorous impact evaluation was designed in 2003 to evaluate project impacts on poverty reduction, social capital, empowerment, and governance, and to examine processes by which poverty has been reduced and communities empowered. The evaluation followed best practices; it collected quantitative and qualitative data before, during, and after project implementation in a sample of KALAHI-CIDSS municipalities that received support ("treatment" municipalities) and from comparable municipalities that did not receive support ("control" municipalities). Data were collected on a broad range of indicators: service delivery (access to health, education), poverty (employment, per capita consumption, selfrated poverty) and empowerment/governance (group membership, participation in barangay assemblies, collective action). The quantitative sample includes 2,400 households in 135 barangays in 16 municipalities in 4 provinces. Focus group discussions, key informant interviews, and direct observations took place in a subset of 20 barangays in 4 municipalities in 2 provinces.

The control group was selected through cluster analysis and provides a credible estimate of what would have happened in the treatment municipalities in the absence of the project. Comparison municipalities should have evolved similarly

in the absence of the project. The team used cluster analysis to select two pairs of comparison and treatment municipalities in each of four provinces. The pairs with the best match were selected. Unsurprisingly, given the strict poverty targeting procedures used by the project, control municipalities are slightly richer than the treatment municipalities but appear similar along other dimensions (Chase and Holmemo 2006).

The team was also able to test the so-called parallel trend hypothesis, which is whether the two groups evolved similarly prior to project implementation. Specifically, data from the 2000 and 2003 Family Income and Expenditure Surveys suggest that there are no statistically significant differences between the two groups in terms of changes in consumption levels between the two surveys. This gives credence to the view that the two groups would have evolved similarly in the absence of the project and that the observed differences can be attributed to the project.

The evaluation was designed to capture medium-term impacts. Therefore, while baseline data collection took place in 2003, endline data were not collected until early 2010. More than a year went by between the end of project activities in the sample municipalities and endline data collection. The design was thus able to pick up lasting impacts that materialized more slowly.<sup>8</sup>

<sup>6</sup> This sections builds on Chase and Holmemo (2006) and Labonne and Chase (forthcoming).

<sup>7</sup> Cluster analysis is a statistical method that allows researchers to pair together similar municipalities along a set of chosen indicators. More details can be found in Chase and Holmemo (2006).

A large number of evaluations are designed to capture impacts within a relatively short time-frame (e.g., one or two years). As King and Behrman (2009) and Woolcock (2009) judiciously pointed out, this can lead to unreliable

The evaluation was designed to estimate the impacts of the KALAHI-CIDSS intervention as a whole. However, it is also possible to compare changes in villages that were and were not prioritized (i.e., received subproject investments funding), but those results are more tentative. Indeed, as discussed in section 3.1 below, there are differences between prioritized and non-prioritized villages (Labonne and Chase 2009). Since some of those differences could also affect the outcomes of interest, results on the impacts of living in a prioritized village are less credible than results on the impacts of living in a treatment municipality.

# 2.2. Implementation and Challenges

The impact evaluation was carried out in three phases between 2003 and 2011.9 Implementation was not without challenges, however. First, due to budgetary and logistical constraints, data were only collected in 16 municipalities for the quantitative surveys and in 4 municipalities for the qualitative survey. As a result, one could question whether results from the evaluation are externally valid; that is, whether results from the evaluation would carry over in other project areas. While it is not possible to adequately answer this question, available data indicate that treatment municipalities in our sample were similar to other KALAHI-CIDSS municipalities prior to project implementation.<sup>10</sup>

Second, to reap the benefits from having a household panel dataset, efforts were devoted

to keeping attrition to a minimum. Nonetheless, the sample size was reduced from 2,400 households during the baseline survey to a little less than 1,900 households during the endline survey, mostly due to migration and deaths. Initial results suggest that such attrition is unlikely to significantly bias the results as the levels and determinants of attrition do not appear to differ between the control and treatment groups.<sup>11</sup>

Third, one of the original control municipalities in Albay (Malinao) ended up being included in the PODER project, a KALAHI-CIDSS-type program supported by the Spanish aid agency. As a result, baseline data had to be collected in a replacement control municipality (Oas).

In the impact evaluation sample, about twothirds of treatment barangays were prioritized for subproject investment at least once. Put differently, about a third of the sample barangays in treatment municipalities did not receive a single subproject throughout the three subproject cycles. Regression analysis applied to the impact evaluation data helped to control for this difference within the treatment municipalities.

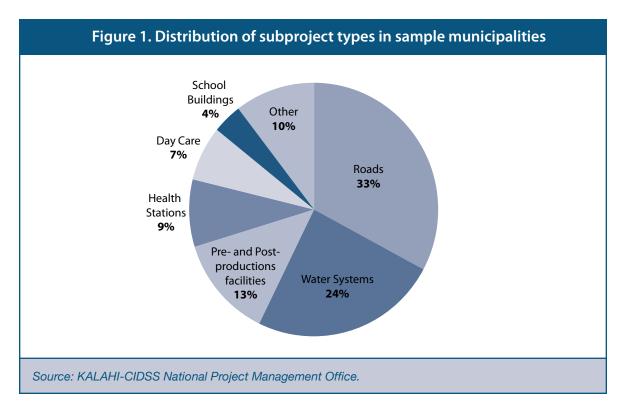
The actual distribution of subprojects in the sample barangays is shown in Figure 1. The relative importance, and level of investment by subproject type, should be borne in mind when interpreting results. Specifically, in our sample, project impacts should only be expected on outcomes that can be affected by subprojects that were chosen by the community. The impacts might differ in areas where communities selected a different mix of subprojects.

results if either project impacts take time to materialize, with short-term evaluations underestimating project impacts, or if they fade away quickly, with short-term evaluations overestimating project impacts.

<sup>9</sup> The actual timing of data collection was as follows: quantitative baseline in Sept/Oct 2003; qualitative baseline in April/June 2005; quantitative midterm—Oct./Nov. 2006; qualitative and quantitative endlines—Feb./March 2010.

<sup>10</sup> For example, the small area estimates released by National Statistical Coordination Board indicate that in 2000 poverty incidence was 64.8 percent in the eight treatment municipalities in the sample and 62.8 percent in the other KALAHI-CIDSS municipalities, a difference that is not different from zero at the usual levels of statistical significance.

<sup>11</sup> Attrition was 21 percent in the treatment group and 22 percent in the control group.



Available data indicate that participation rates in project activities are relatively high, suggesting that households in targeted municipalities see value in the KALAHI-CIDSS approach. About 80 percent of households in treated municipalities indicated being aware of the project and three in every five expressed satisfaction in the project. Participation rates were around 65 percent in the preparatory and planning phases and 31 percent in the subproject implementation phase. Of particular interest, women are more likely to participate in proposal selection and preparation. Conversely, men are more likely to participate in subproject implementation. This might reflect traditional gender roles in those communities. Interestingly, women volunteers

belong to the same socioeconomic status as most of the constituents, but are more available for and interested in barangay projects. This is consistent with the view that project processes are not dominated by local elites.

Local elected officials also view the project in a positive light. About 75 percent of barangay and municipal officials indicated being satisfied with the project. When asked about the benefits of the KALAHI-CIDSS, the most common responses are infrastructure improvement and better access to services; community empowerment also figures among the top responses. Not surprisingly, feedback from barangays not prioritized to receive subproject financing was more negative.

# 3. Results of KALAHI-CIDSS in terms of Welfare

### 3.1. Who did the project reach?

This section of the report reviews the program targeting procedures at the provincial, municipal, and barangay levels. A map of project areas for the period 2002–09 is shown in Annex 1.

As previously noted, the project was implemented in the poorest 25 percent of municipalities in some of the 42 poorest provinces identified through a customized index developed in collaboration with Dr. Arsenio Balisacan at the University of the Philippines School of Economics. The rankings resulting from this analysis were consistent with official rankings subsequently released by the National Statistical Coordination Board in 2005 (World Bank, n.d).

While the program was successful in directing resources to the poorest municipalities, the possibility of elite capture-that is, better-off and connected individuals might dominate project processes and receive a disproportionate share of project benefits (Mansuri and Rao 2004)—remained a concern. To avoid this pitfall, KALAHI-CIDSS was specifically designed to help ensure that poor households and communities within eligible municipalities could benefit from the project. For example, the specific poverty concerns of the program were emphasized in the social preparation and subproject design phases of the CEAC, and in the meetings in which communities developed criteria against which to rank project proposals. Facilitators were also instructed to encourage participation of marginalized households.

Available evidence indicates that KALAHI-CIDSS subprojects were not subject to elite capture, at least in its most malign form (Labonne and Chase 2009). Barangay captains (elected village officials) did not appear to be an overwhelming force behind proposals put forward to the MIBF (subproject prioritizing committee), as their preferences and those of community members were equally represented in community proposals. Not surprisingly, individuals who were already active in community affairs prior to the project were more likely to have their preferences represented in the submitted community proposal. Moreover, and consistent with the challenges of engaging marginalized groups, the survey found that women and individuals who had not attended school were less likely to have their preferences represented in the subproject proposal. However, this result was obtained after only one subproject cycle; DSWD revised its operating procedures shortly afterward to promote greater inclusiveness. There is no evidence available on the effect of those revisions, however.

The impact evaluation also revealed that KALAHI-CIDSS was successful in targeting the poorest, best-organized villages. Surprisingly, however, more unequal villages were more likely to have their proposals funded. This appears to be due to the fact that the barangay captain was more likely to take control of a disorganized community preference, and to influence inter-village competition at the MIBF. This is akin to benevolent forms of elite capture, in the sense that the community, and not just the barangay captain, benefits from receiving a subproject.

### 3.2. Key Welfare Impacts

This section of the report reviews program impacts on per capita consumption and explores avenues through which those impacts

might have materialized. Results are shown in Table A.1 (Annex 2).

Per capita consumption increased by about 5 percent as a result of the project. Once we distinguish between households that were classified as poor in 2003 and those that were not, an interesting pattern emerges. <sup>12</sup> There is evidence that the project had a positive impact on per capita consumption for poor households, but that it had a small negative impact on non-poor households. This further reduces concerns over elite capture of project benefits. If project benefits had been captured by local elites, one should expect to observe larger impacts on non-poor households than on poor households.

Moreover, and not surprisingly, positive changes in consumption patterns were especially marked in villages that received one or more subprojects as part of the prioritization process. In poor households in barangays that were prioritized once, for example, per capita consumption in 2010 was 7 percent higher than it would have been had the project not been implemented. This seems to suggest that—in

addition to social preparation—physical investment is critical in generating positive impacts on household welfare.

The project also had a positive impact on the non-food share of consumption, which some researchers have argued is a better measure of household welfare.<sup>13</sup> A 1.5 percentage point increase in the non-food share of consumption can be attributed to the project. Again, this effect is concentrated in barangays receiving subproject investments.

On the other hand, the self-perception of poverty—that is, the share of households rating themselves as poor—does not seem to be affected by the project. A potential explanation for this finding is that the increase in per capita consumption was not large enough for households to switch from feeling poor to feeling non-poor. Alternatively, self-reported poverty measures might not be very good measures of household welfare.

Additional survey findings on household employment and marketing practices suggest how these positive impacts might have come about.

Findings from the qualitative evaluation highlight how the program could have generated such impacts. In San Ramon, Libon (Albay), community members indicated that, among the development projects in their barangay, the KALAHI-CIDSS-funded road-improvement project created the most impact, as more transport and utility vehicles are now plying to and from the area. This increased traffic is creating business opportunities in the community, and has also made transportation available at much lower fares than before.

Similary, the barangay of Remedios, Esperanza (Agusan del Sur) built a rice and corn mill with the Remedios Farmers Cooperative (REFAMCO). The project has, according to community members, cut corn and rice production costs by 30 percent by bringing the mill closer to the people (and the grain to be milled). Previously, there were few milling facilities on the western part of the Agusan River and transport costs to the producers were therefore much higher. The community also noted that because the mill's services are better, other barangays—such as Bakingking, New Gingoog, Tagabase, and Hawilian—are now using it.

<sup>12</sup> Households were classified as poor in 2003 if their baseline per capita consumption was lower than their regional poverty line.

<sup>13</sup> Measures of per capita consumption do not account for (a) potential economies of scale within the household, and (b) the relative needs of children and adults.

Regarding employment, the survey found that labor force participation went down in both treatment and control communities between the baseline and endline surveys, especially between 2006 and 2010. This was likely due to the negative impacts of the global financial crisis; however, the decline was less marked in KALAHI-CIDSS municipalities. Specifically, the project led to a 4 percentage point increase in labor force participation compared to what would have happened otherwise. Notably, the positive impacts are especially marked for women, with a 5 percentage point increase in the probability of participating in the labor force. It is important to note that these improvements are more likely to reflect greater economic activity generated by the project than to simply reflect direct, project-related employment opportunities, which were completed at least a year prior to survey implementation.

In addition, the survey found that households in KALAHI-CIDSS municipalities diversified their source of income, and they are now slightly more likely to be working in more than one sector. This has potentially important long-term implications for household welfare, as it should improve their ability to deal with shocks. Preliminary evidence indicates that this might be the case. As a result of the project, households in KALAHI-CIDSS areas are better able to protect food consumption when faced by shocks (Labonne 2011).

Further, the positive impacts on poor house-holds' per capita consumption might come from improved production practices. While farmers are less likely to engage in multicropping as a result of the project, <sup>14</sup> they appear more likely to be selling their produce. While control municipalities experienced a 2 percentage point increase, from 2003 to 2010, in the likelihood of marketing produce, treatment municipalities experienced a 16 percentage point increase

over the same period. This should translate into higher incomes and into higher and more diversified consumption for households in the treatment areas.

### 3.3. Access to basic services<sup>15</sup>

The project led to an increase in the proportion of households visiting a health facility when sick, and an increase in the use of public barangay health services, versus private hospitals and clinics. Improved service quality seems to be an important factor in these changes. As a result of the project, respondents in treatment municipalities are 10 percentage points more likely to report getting the needed services when visiting the barangay health stations. This effect is quite large, representing and increase of about a third of the baseline levels.

Findings from the qualitative evaluation highlight how the program could have generated such impacts. In barangay Guadalupe, KALAHI-CIDSS financed a health station—the biggest health center in the municipality of Esperanza—that is considered a mini-hospital by the residents. Complete with materials necessary for emergency cases, in- and outpatient care, and with a minor surgery ward (not normally found in other health centers), it is a well-used facility that also services the nearby barangays of Tandang Sora and Or-ganika. The barangays assist the health center in terms of allowances for barangay health workers and other small needs. The municipal LGU assists in terms of technical assistance, repair, maintenance, and other needs.

In line with the small number of prioritized barangays in the sample that decided to invest in school buildings, the project had a small impact on the likelihood that a given barangay has an elementary school. Surprisingly, however, program implementation apparently led to a small decline in elementary school enrollment, but

<sup>14</sup> The reasons behind this shift are unclear, however.

<sup>15</sup> Results are available in Table A.2.

to an increase in secondary school and college enrollment. Compared with the control group, college-age children in treatments areas are 5 percentage points more likely to be enrolled in college. Given that only 8 percent of college-age children were enrolled in 2003, this is a large effect. The small positive impact on secondary school enrollment, however, masks important gender differences with a reduction in enrollment for boys and an increase for girls.

The project also had a small positive impact on access to level 2 and 3 water systems.<sup>16</sup> This impact much lower than expected, however, given the relatively large amount of investment in water systems in the sample municipalities. The impacts on access to safe drinking water (from al; sources) are slightly larger but still limited. Results from the qualitative follow-up analysis seem to suggest two potential explanations for these findings. First, the capacity of water systems appears to be limited, thereby preventing them from serving all households in the barangay. Second, maintenance problems appear to limit the systems' long-term impacts. While operation and maintenance groups are set up and are expected to collect fees, available funds appear insufficient to pay for needed repairs maintanance and repairs.

The project also had a positive impact on accessibility. Specifically, the project resulted in a 6 percentage-point increase in the proportion of households whose house is accessible year-round. The changes are larger in prioritized barangays, with a 10 percentage-point increase for each completed subproject. While roads financed under the project are most likely driving this impact, no attempts were made to test that hypothesis directly due to small sample sizes. These results are shown in Table A.2 (Annex 2).

On a side note, an apparent byproduct of KALAHI-CIDSS is that there are now more financing institutions operating in treatment communities. Specifically, project barangays are 9 percentage points more likely to be served by micro-finance institutions. This represents about a 50 percent increase over baseline levels. This increase appears to be principally due to the work of the Center for Agriculture and Rural Development, which has targeted KALAHI-CIDSS communities due to the higher social capital levels present. This positive programrelated outcome provides DSWD with an opportunity to promote linkages with related government (and non-government) services that rely on social mobilization under the current extension of KALAHI-CIDSS and for future potential programs.

<sup>16</sup> In the Philippines, a level 2 water system consists of a piped water system with a communal water point (e.g. borewell). A level 3 water system introduces private water points (e.g. house connections).

# **4.** The Results of KALAHI-CIDSS in terms of Governance and Social Capital

his section reviews project impacts on local governance and social capital, in line with the project development objective. The results are shown in Table A-3 (Annex 2).

### 4.1 Barangay governance

KALAHI-CIDSS led to an increase in participation in barangay assemblies and understanding of barangay affairs—specifically, more was known about barangays' income and expenses in treatment municipalities. However, this increase appears to be short-lived, with strong impacts during the mid-term survey and smaller impacts at the time of the endline survey. This could suggest that governance impacts are tied to project implementation and more effort should be devoted to ensuring they are sustained.

This increase in participation in barangay assemblies seems to be associated with a qualitative change in how the assemblies are perceived. Prior to project implementation, they were, at best, considered avenues for reporting. Now they tend to be seen as mechanisms for participation, transparency, and accountability. The following quotes from the qualitative evaluation reflect the differences of opinion (between control and treatment municipalities) toward barangay assemblies:

"More often, barangay assemblies (...) are reduced to occasions for reporting accomplishments and expenditures, and for presentation of plans, programs, and projects, that are in most cases already approved by the barangay council." (focus group discussion (FGD) participant in Balangibang, Polangui, a control municipality)

"Barangay Assemblies are good and effective venues for the people to be heard." (FGD participant in Bacolod, Libon, a KALAHI-CIDSS treatment municipality)

This change seems to be partly driven by a new breed of barangay leaders. Especially in barangays that received subproject financing, some of the community volunteers appear to have been empowered (Box 1). This new group of leaders can effectively engage elected officials. They are considered to be more service-oriented and committed than previous barangay leaders and, in some cases, they have been elected to barangay office. Interestingly, most of those volunteers are women. However, as discussed in more detail below, it appears that these empowerment benefits have yet to reach the broader community outside of the project volunteers.

Interestingly, according to the qualitative evaluation, there is also a shift in how community members appreciate their barangay captains. Traditionally, leaders are rated highly if they are available, understanding and able, within limits, to bring resources to the community. Households in treatment barangays in Agusan del Sur now also care about whether leaders are consultative, transparent, and able to plan for the future.

### **4.2 Social Capital**

Individuals in KALAHI-CIDSS municipalities are now more likely to trust both fellow community

### Box 1. Political Engagement: Virgie Niebres, Barangay Rawis, Pio Duran

Virgie Niebres is a 36-year-old resident of Rawis. She began studying nursing at Bicol University, but due to poverty was forced to stop schooling after only her first semester. Her husband is 37 and an elementary graduate. Together they have five children. Before the KALAHI-CIDSS project, their only source of income was from harvesting copra.

The KALAHI-CIDSS road project in Rawis has created the opportunity for Virgie to improve and diversify her family's livelihoods options. With a more efficient way to transport copra to market, they were also able to purchase a motorcycle operated by her husband for "habal-habal" (motorcycle rental).

Vergie also has benefited directly by working closely with KALAHI-CIDSS as project preparation team chairman and as a bookkeeper. She was then elected as the chair of the Barangay Subproject Management Committee (BSPMC). During project preparation, Virgie learned how to develop project proposals, and assisted with mapping impoverished regions. Her experience as a BSPMC chair also taught her various aspects of project implementation. She was able to overcome her shyness and enhance her public relations skills because she had to convince people in the barangay to attend barangay assemblies. She also gained the confidence to talk in front of a large crowd. Because of KALAHI, she learned to participate in barangay affairs. Being a volunteer also allowed her to attend numerous training events and seminars. She has traveled not only within the municipality, but even in other provinces. These experiences resulted in a new career for her as center chief of Simbag sa Pag-asenso, a Catholic social action lending microfinance program.

As center chief, Vergie handles 52 members from four barangays. She is also the Secretary of the Barangay Power Association, a local electrification association in charge of the maintenance of the barangay's electrification. The association's activities include the collection of payments from each household. She also became the manager of the distribution of fertilizers and seedlings provided by the Department of Agriculture in the municipality. She also takes part in the decision making in the barangay.

Source: World Bank (2011).

members and strangers than they would have in the absence of the project. These effects are large. For example, 2.8 percent more households in treatment municipalities report that they trust strangers. This represents an increase of about 50 percent of the baseline trust levels. Trust toward fellow community members also increased with the number of subprojects implemented in the communities.

In addition, households in KALAHI-CIDSS municipalities are 5.3 percentage points more likely to have at least one member belonging to a people's organization, religious and/or nongovernmental organization, as compared with households in the control group. Group membership has been shown to be an important component of social capital and determinant of household welfare (Narayan and Pritchett 1999).

However, the project led to a decrease in the proportion of households that participate in collective action activities.<sup>17</sup> The decline is especially marked in barangays that received subprojects. This is consistent with at least two, not necessarily mutually exclusive, explanations. First, public goods provided through the project reduce the demand for collective action. Second, households that contributed labor to KALAHI-CIDSS activities have less time to participate in collective action activities. However, since those effects were still present more than a year after project activities ended in the sample communities, it is unlikely that KALAHI-CIDSS activities were still "competing" with collective action activities. Alternatively, and as would be expected, a follow-up qualitative study found that an important driver of participation in collective actions is the opportunity cost of participation. As households become better off in treatment areas (which the impact evaluations find to be the case), there would be a decline in the participation of households in such "free" activities, as this reduces the time they would have for other productive activities. This explanation is consistent with

the fact that the drop in participation in collective action activities is concentrated in barangays that received a subproject. Also consistent with the opportunity cost explanation the impact evaluation also shows that the project led to an increase in the proportion of households willing to contribute money to projects that would benefit the community. Over time, households might be changing the nature of their participation as a result of project activities.

Available evidence indicates that both the social facilitation process and the subproject investment contribute to changes in local governance and social capital. First, we observe improvements in barangay governance even in tratment communities that did not receive subproject investments, but rather only facilitation support. Second, another study that looked at the impacts of road construction showed that these activities could lead to increases in generalized trust (Labonne and Chase 2010). While this study was not looking at roads financed with KALAHI-CIDSS grants, it used data collected as part of the evaluation.

<sup>17</sup> The survey used the term *Bayanihan* as a proxy for collective action. It refers to a communal effort to achieve a particular objective. The origin can be traced back to the Filipino tradition wherein community members gather together to help a family relocate their house to a new location (they literally carry the house on their backs). Further, it now encompasses both communal labor and labor exchanges in agriculture. Results from the qualitative evaluation indicate that the definition of bayanihan appears to be changing in the sample areas.

# 5. Looking Ahead

his section of the report seeks both to highlight implications from the evaluation for project expansion and to identify areas where additional analytical work could prove fruitful.

# 5.1. Implications for project expansion

As discussed above, some of the observed impacts are relatively small compared to the level of investment (for example, on access to level 2 and 3 water systems). These areas should be analyzed further to determine what may be done to optimize these investments or to encourage more effective subprojects.

Despite gains observed in barangay-level governance, results from the qualitative evaluation indicate that the project did not achieve similar successes at the municipal level. There are two possible explanations for this. First, very little direct capacity building was initially targeted at municipalities, so great changes in behavior should not have been expected. Second, the relative size and short-term nature of the funding as compared to other available forms of funding may be insufficient to influence great change in the dynamic between municipalities and barangays.<sup>18</sup> KALAHII-CIDSS has been experimenting with the so-called Makamasang Tugon initiative, which shifts responsibility for management of the program to the municipal LGUs. While it is too early to know whether this has made a difference, the project team might want to review the conditions of this initiative to ensure that they promote the needed transparency and participation in LGU activities.

Findings from the qualitative also study suggest that the project was relatively successful at empowering project volunteers, but that the broader barangay citizenry was not as positively affected. While this might reflect lack of interest by some of the community members, and the unwillingness to challenge local leaders that are seen as bridges to resources, this could also indicate that further efforts from the facilitators are necessary throughout social preparation.

While the competitive allocation of resources through the MIBF is a key feature of the project, some of its downsides need to be acknowledged. In practice, a large proportion of barangays in targeted municipalities receive at least one subproject during the three cycles, but some do not. Project volunteers who engaged in the relatively time-consuming KALAHI-CIDSS mobilization and empowerment processes and did not manage to get a project for their barangays might be reluctant to engage in similar processes in the future. There is a need to better manage expectations. Further, the project could offer support to non-prioritized communities in seeking funding for their KALAHI-CIDSS proposals through other sources.

Most respondents still see the municipality as the main source of funds for projects in their barangays (and as the main source of local counterpart contribution for their KALAHI-CIDSS subprojects). This might explain why they are unwilling to challenge the mayor's authority.

Findings from the impact evaluation indicate that, as result of the project, respondents' perceptions of crime and violence in their barangay decreased. However, findings from two recent studies suggest that the program might have led to a temporary increase in conflict levels, especially in areas where the New People's Army (NPA) is present (Arcand, Bah and Labonne 2010; Crost and Johnston 2010).19 The first study uses newspaper reports of conflict incidence between the Armed Forces of the Philippines (AFP) and either the NPA or the Moro Islamic Liberation Front (MILF) and finds that the project led to a decline in MILFrelated events, but to an increase in NPA-related events.20

While more research is necessary to understand which project component is driving this shift in conflict occurrence, available results call for a more cautious approach in conflict-affected areas. Nonetheless, it is important to keep in mind that there are no similar analyses available for other government programs in the Philippines, so it is impossible to compare the KALAHI-CIDDS approach with other development interventions in the Philippines along those dimensions.

# 5.2. Suggestions for additional analytical work

Findings from the evaluation are consistent with the view that subprojects are what drive the project impacts on poverty reduction. Long-term impacts will require sustained efforts and both social and physical investments. Moreover, the greatest impacts are found where poverty among households and communities is the highest. As a result, to increase the poverty reduction impacts of the project, the project team should explore ways to (a) support local communities' access to alternative and additional sources of funding, and (b) differentiate barangay grants by poverty levels. An option would be to vary municipal grants with municipal poverty levels. Alternatively, in richer municipalities, communities should be required to provide a larger local counterpart contribution. This is especially important as the project plans to expand into relatively richer areas. Such options could be carefully piloted and evaluated in a subset of municipalities.

Second, results from the evaluation also suggest that maintenance arrangements for water projects might be inadequate. The project team should carry out a thorough maintenance review of various project types. The study should also propose ways to improve maintenance arrangements in the future.

Third the project team should compile and facilitate access to data on the efficiency and effectiveness of different types of sectoral investments. While there is evidence that KALAHI-CIDSS subprojects are less expensive that comparable sectoral investments (Araral and Holmemo 2007), computations should be updated and compiled in a user-friendly format. This could serve as the basis for a long-term engagement with sectoral colleagues.

Fourth, the project team should carefully review the questionnaires used in the evaluation to better capture relevant data on outcomes and impacts. For example, as discussed above, measures of collective action used in the evaluation

<sup>19</sup> The differences between the program impact evaluation and these studies could come from the fact that, apart from Agusan del Sur, the impact evaluation sample areas are not too overly affected by either NPA or MILF conflict. It could also be that respondents refer to crime and violence between barangay residents and not with NPA and MILF.

<sup>20</sup> Both studies rely on nationwide conflict data and estimate project impacts using difference-in-differences and regression discontinuity techniques. The differences between the two sets of results could come from the variation in data sources but also from the different definitions of "conflict event" used. The first study looks at events with a 50km radius of eligible municipalities, while the second study is only concerned with events in KALAHI-CIDSS municipalities.

might not have been fully adequate and should be refined for a next phase.

A final note of caution is in order. While a number of studies were carried out throughout the project cycle, some were not adequately linked to operations and, as a result, their recommendations were not acted upon. If one wants to build

an empirical basis to inform policy and operational decisions, systems need to be put in place to (a) allow DSWD to identify areas where more research is needed; (b) carry out the studies in close collaboration between the project team and researchers; and, most importantly, (c) act upon research findings.

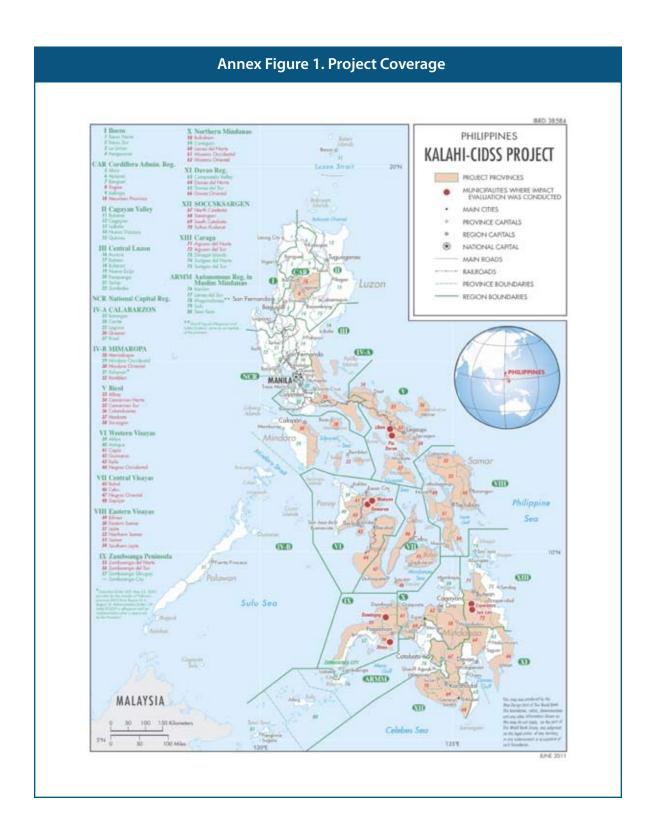
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# **Annex 1.** Project Coverage (2002–09)



# **Annex 2.** Main Quantitative Results

Table A.1: Main Results from the Quantitative Impact Evaluation—Household Welfare							
Indicator		reatmer	nt		Control		Ddiff
		'06	'10	'03	'06	'10	2003 vs 2010
Annual per capita expenditure (in 2010 prices)							
Average	9.51	9.76	9.82	9.67	9.90	9.93	0.05 +++
Among poor	9.15	9.56	9.45	9.25	9.65	9.50	0.05 +++
Among non-poor	10.04	10.05	10.06	10.12	10.16	10.16	-0.02
Nonfood share to total expenditure	33.0	43.0	41.6	37.2	45.1	44.4	1.4 +++
Labor force participation rate							
All	70.5	72.4	67.2	73.6	75.0	66.1	4.3 +++
Male	93.5	90.6	88.5	92.7	90.9	84.4	3.2 +++
Female	44.5	51.4	43.6	53.1	57.8	46.4	5.8 +++
Crop farming and gardening							
Engaged in crop farming	78.4	73.2	63.8	64.5	61.4	56.8	-6.9
Practices multi-cropping	34.7	25.4	26.6	31.2	28.3	28.5	-5.5
of which, % sold their produce	64.1	72.9	79.9	80.2	83.9	82.1	14.0 +++

Notes: +++, ++, + sign is positive and significant at the 1%, 5% and 10% level respectively ---, - sign is negative and significant at the 1%, 5% and 10% level, respectively

Source: Household questionnaire.

## Table A.2: Main Results from the Quantitative Impact Evaluation—Access to Services

Indicator		Treatment		Control			Ddiff
Indicator	'03	'06	'10	'03	'06	'10	2003 vs 2010
Water (level 2 and 3)	47.7	46.8	44.3	52.9	51.1	49.0	0.6+++
Got sick and visited a health facility	43.5	42.8	47.0	49.8	49.7	47.0	6.3 +++
House accessible all-year long	43.6	58.9	56.3	61.9	72.3	67.9	6.7 +++
School Enrollment							
Elementary	93.0	84.3	90.5	88.6	88.1	87.7	-1.6
Secondary	79.0	73.5	84.2	85.0	78.1	88.9	1.3 +++
College	8.2	7.9	10.6	15.4	11.7	12.4	5.4 +++

Notes: +++, ++, + sign is positive and significant at the 1%, 5% and 10% level respectively ---, --, - sign is negative and significant at the 1%, 5% and 10% level, respectively

Source: Household questionnaire.

## Table A.3: Main Results from the Quantitative Impact Evaluation— Social Capital and Local Governance

Indicator		Treatment			Control	Ddiff	
		'06	'10	'03	'06	'10	2003 vs 2010
Member of organization (household)	31.7	38.0	48.4	31.3	42.1	42.7	5.3 +++
Most people in the barangay can be trusted	54.5	54.8	59.0	62.4	62.1	54.5	12.3 +++
Strangers can be trusted	5.7	3.1	2.9	8.8	4.2	2.4	3.6 +++
Participated in collective action	60.7	59.8	55.3	54.4	57.6	51.7	-2.7
Attended barangay assemblies	62.9	73.9	72.2	62.1	57.2	66.3	5.0 +++

Notes: +++, ++, + sign is positive and significant at the 1%, 5% and 10% level respectively ---, --, - sign is negative and significant at the 1%, 5% and 10% level, respectively

Source: Household questionnaire.



Sustainable Development Department East Asia and the Pacific Region

### THE WORLD BANK

1818 H, Street N.W. Washington, D.C. 20433 USA Tel: 202 473 1000 Fax 202 477 6392 Internet URL: www.worldbank.org

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23rd Floor, The Taipan Place F. Ortigas Jr. Road, Ortigas Center Pasig City, Philippines Tel: (632) 637 5855 to 64 Fax: (632) 6375870

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