

# **The Development Payoffs of Good Governance: Emerging Results of a Social Experiment in Bulacan and Davao del Norte**

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*This study presents some corroborative evidence based on the first year of the pilot test of the Governance for Local Development (GOFORDEV) Index in twelve cities and municipalities located in the provinces of Bulacan and Davao del Norte in the Philippines. Developed in support of the country's fiscal decentralization program, the GOFORDEV Index is both a measure of good governance and a scheme to empower local groups to push for local development. Local groups—local government units, business and associations, nongovernment organizations (NGOs) and academic institutions—were mobilized as partners tasked to generate and disseminate the localities' scores in the Index. To document the possible development payoffs, process documentation studies were undertaken to identify the modifications in budget allocations and processes that may be due the Index and two rounds of household surveys were conducted to assess the constituencies' satisfaction with the delivery of basic public services and the performance of local officials and the extent of their participation in local affairs. The study also indicates that GOFORDEV Index already yielded development payoffs, even only while it gestates.*

## **Introduction**

Does good governance lead to local development? Specifically, will a citizen feedback mechanism designed to improve the quality of local governance advance the constituency's welfare? This study presents some preliminary evidence based on the first year of the pilot test of the Governance for Local Development (GOFORDEV) Index in twelve cities and municipalities located in the provinces of Bulacan and Davao del Norte in the Philippines. Introduced

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by the Philippine Center for Policy Studies (PCPS), the GOFORDEV Index is both a measure of good governance and a process for promoting local development.

As a measure of good governance, the GOFORDEV Index is essentially a score based on household survey and local government fiscal data and other documents. The survey is designed to gauge the overall assessment of the constituency regarding the delivery of basic public services and the extent of their participation and consultation in local affairs. The official fiscal data and documents, on the other hand, are used to infer the relative expenditure priorities of the local government. Integral to the design of the Index, however, is the public dissemination of the local scores. Thus, the GOFORDEV Index may be likened to other citizen feedback mechanisms adopted in other countries. In places where similar schemes are employed, the developmental payoffs are clear: the famous Report Card Survey adopted in Bangalore, India, for example, has led to improvements in the delivery of public services (Gopakumar 1992).

More than just a scoring system, the GOFORDEV Index may also be considered as a process for a wider and more effective people's participation and consultation, which is both a means to, and an end of, development. In particular, the Index, which is designed for local adoption, could help build the technical capability of the local government units (LGUs) and civil society organizations (CSOs) engaged as partners during the pilot test. Further, the open public discussions of the Index in the pilot areas have opened up opportunities for local officials to be made accountable to their constituencies, or for local budget planning to become more participative or consultative.

This study presents some emerging development payoffs of the GOFORDEV Index. The payoffs are classified into two types. The first type refers to the improved fiscal performance of the concerned local governments in the pilot areas, based on the documentation and analysis of local budget processes and outcomes. Improved budgetary allocations are desired because the local governments are at the forefront of service delivery to the poor and other marginalized sectors in the Philippines. The other type of development payoffs refers to the peoples' overall satisfaction with the delivery of basic public services and with the performance of their local officials. Another welfare indicator used is the impact of the Index on civic participation in the pilot areas. These payoffs are gauged based on the results of two rounds of household surveys, that were undertaken before, and seven months after, the introduction of the Index.

The results show that, while the Index has yet to directly bear on budget outcomes, it is beginning to influence the procedures, methods, and basis for budget planning and reporting. In the municipality of Guiguinto, Bulacan, for instance, reported fiscal expenditures are aligned with the real provision of

basic public services. In the municipality of Braulio E. Dujali, Davao del Norte and in Panabo City, their involvement with the Index has led to more consultations with local leaders. Moreover, one encouraging development payoff is the increasing public awareness of the Index, especially of those who are active in civic affairs, and the possible use of the Index by the local constituents in assessing the performance of their local governments and public officials.

The rest of the study is organized as follows: The experimental setup of the pilot test of the Index is briefly described in Section II, followed by a discussion in Section III of the methodological and data issues addressed in this study. Section IV presents the analysis of the impact of the Index on the fiscal outcomes and processes. In Section V, the welfare impact of the Index is evaluated. The last section contains some concluding remarks.

### **The Social Experiment**

#### *Development of the GOFORDEV Index*

The GOFORDEV Index was developed during the first two phases of the Governance Project of PCPS, a nongovernment organization (NGO) involved in policy research and advocacy in the Philippines. Initiated in 1999 with the support of the Ford Foundation, the Governance Project was undertaken to help deepen the country's fiscal decentralization program through the development, adoption and institutionalization of a performance assessment system for city or municipal governments.

The GOFORDEV Index comprises ten indicators of good governance which are grouped into three sub-indices, namely: the Development Needs Index (DNI), the Development Orientation Index (DOI) and the Participatory Development Index (PDI). The component indicators and sub-indices of the GOFORDEV Index are shown in Table 1. Simply put, the DNI gauges the constituency's assessment of public service provision; the DOI reflects the LGU's relative priority for such services; and the PDI measures the extent of people's participation and their consultation by their officials. Each of these sub-indices and indicators has a range of score from zero to 100. A simple average of the three sub-indices constitutes the GOFORDEV Index. (A more detailed account of the development of the Index is given in Capuno [2000].)

#### *The Pilot Test of the Index*

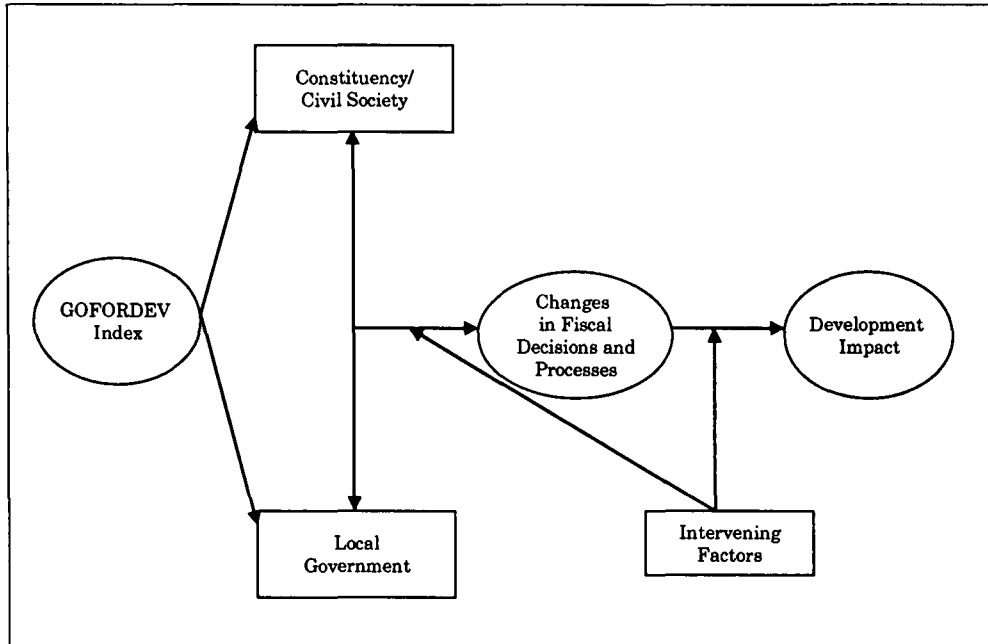
To ensure its validity and usefulness, the Index was piloted for two years (2001-2002) in twelve cities and municipalities in the provinces of Bulacan and

Table 1. Indicators of Governance for Local Development (GOFORDEV)

<i>Index</i>	<i>Objective</i>	<i>Indicators</i>	<i>Formula</i>
Development Needs Index (DNI)	To measure access to and the adequacy of basic public services	Adequacy of Health Services Ratio	Health Service = [(Number of respondents who are aware that there is a rural health center with a regular doctor in their barangay)/(Total number of respondents)] x 100
		Adequacy of Day Care Services Ratio	Day Care = [(Number of respondents who are aware that there is a day care center with a regular teacher or a social worker in their barangay)/(Total number of respondents)] x 100
		Access to Sources of Drinking Water Ratio	Drinking Water = 100 - [(Number of respondents who reported difficulty in getting drinking water)/(Total number of respondents)] x 100
	To measure the perceived efforts in solving public problems	Addressing Public Problem Ratio	Public Problem Ratio = [(Number of respondents who are aware of some pressing public problems and report that the local government addresses these problems)/(Total number of respondents)] x 100
	To measure the perceived effect on family conditions in life	Effect on Family Condition Ratio	Family Condition Ratio = [(Number of respondents who reported that the local government helped improve their family condition in life)/(Total number of respondents)] x 100
Development Orientation Index (DOI)	To measure the relative prioritization for development-oriented public services	Development Expenditure Ratio	Expenditure Priorities = [(Expenditures on social services and economic services)/(Total expenditures)] x 100  *net of outlays for personal services
Participatory Development Index (PDI)	To measure the extent of the people's direct participation in local consultative or decisionmaking bodies	Participation in Municipal or City Development Council	Municipal/City Development Council = 100 if the Municipal/City Development Council was convened at least twice last year with the presence of private sector representative(s); 0 if not
		Participation in Local School Boards	School Board = 100 if the Local School Board was convened at least once last year with the presence of the president or representative of the Parents-Teachers Association; 0 if not
	To measure the degree of public consultations	Barangay-Level Consultation Ratio	Barangay Consultation = [(Number of respondents who were consulted by their mayor, vice maor, barangay officials or members of the <i>Sangguniang Bayan</i> (legislative council) at least once last year)/(Total number of respondents)] x 100
		Presence in Barangay Meeting Ratio	Barangay Meeting = [(Number of respondents who reported that the mayor or vice mayor attended at least one public meeting in their barangay last year)/(Total number of respondents)] x 100
GOFORDEV Index	To measure quality of local governance		GOFORDEV Index = 1/3 [DNI + DOI + PDI]

Davao del Norte in the Philippines. Following the conceptual framework shown below, the pilot test was designed and implemented to tease out the impact of the Index on local budget processes and outcomes, and on local welfare, after controlling for possible intervening factors.

**Figure 1. The GOFORDEV Index and Local Development**



To account for the intervening factors, the pilot areas were selected following an experimental design. Initially, the pilot provinces, Bulacan and Davao del Norte, were randomly selected from a field of 76 provinces classified according to their relative levels of fiscal revenues (i.e., resources for development) and socioeconomic development. The latter is indicated by the provinces' scores in the Human Development Index (HDI), a composite measure of life expectancy, literacy rate and average family income. Bulacan belongs to the cluster of provinces with higher than average levels of fiscal resources and socioeconomic development, while Davao del Norte belongs to the cluster with a fairly high HDI, but still lower than that of Bulacan, and less than average level of socioeconomic development. To provide geographical contrast, Bulacan is a province just outside north of Metro Manila, while Davao del Norte is in Mindanao, far down south of Metro Manila.

Random sampling technique was also used to choose sample cities and municipalities within the two provinces. Initially, all component LGUs within each province were grouped into two: those with better than or just average level of fiscal resources and those with lower than average level of fiscal resources. In each province, six in each of the two clusters of cities and municipalities were randomly picked to be the actual pilot areas. Thus, the selection of the two provinces and twelve cities and municipalities together already controls for some socioeconomic, historical, and geographical factors that may bias the results of the pilot test.

To control further for the possibility that the practice of "good governance" may have already been in operation in the locality even before or without the Index, the twelve pilot areas were further divided into two groups. In those areas classified under experimental group, the scores in the Index were both generated and disseminated. In those areas classified under the control group, on the other hand, the scores were generated but not disseminated. The non-disclosure of the Index results in the control group was intended to capture some of the inherent or endogenous catalysts for good governance in the pilot areas.

In all the pilot areas, the local area partners carried out all the field activities related to the generation and dissemination of the scores in the Index. Their involvement helped ensure the usefulness of the Index to local stakeholders. With the different types of local area partners enlisted, it should be possible to identify the agent-related factors such as relative competence, credibility or effectiveness that may bias the impact of the Index. To tease out these factors, four LGUs were enlisted as local partners in four experimental areas, while CSOs were enjoined as partners in four other experimental areas. Likewise, CSOs were appointed as partners in the control areas. These CSOs were carefully selected and monitored to minimize the leakage of the Index in the control areas. The specific local area partners in each of the pilot test areas are shown in Table 2.

#### *Schedule of the Pilot Test Activities*

During the first year (2001) of the pilot test, five major activities were undertaken. Held from February to March 2001, the first activity was field mobilization during which prospective local area partners were briefed about the Governance Project and were later invited formally to join in the pilot test activities. One type of local area partners invited consisted of local government officials or personnel. This was true for Guiguinto, San Jose del Monte City, Braulio E. Dujali and Panabo City whose respective Municipal/City Planning and Development offices were the partners. Two civic organizations of business

**Table 2. Pilot Test Areas and Local Partners**

<i>Levels of Economic Status</i>	<i>Bulacan</i>			<i>Davao del Norte</i>		
	<i>Experimental Areas</i>		<i>Control Areas</i>	<i>Experimental Areas</i>		<i>Control Areas</i>
	<i>LGU</i>	<i>CS Org.</i>	<i>CS Org.</i>	<i>LGU</i>	<i>CS Org.</i>	<i>CS Org.</i>
High	San Jose Del Monte City	Baliuag	Plaridel	Panabo City	Sto. Tomas	Tagum City
Low	Guiguinto	Angat	Bustos	Braulio E. Dujali	Samal City	Asuncion

people were also enlisted, namely: the Rotary Club of Angat and the Soroptimist International of Baliuag. Three NGOs, namely the LAWIG Foundation, the Davao Provinces Rural Development Institute, and the Rural Development Institute, were contracted as local partners in the Island Garden City of Samal, Sto. Tomas and Asuncion, respectively. Lastly, the Bulacan State University-Bustos Campus was asked to cover the two control areas in Bulacan (Bustos and Plaridel), while St. Mary's College was tasked to cover Tagum City.

From April to May 2001, a baseline survey of the twelve areas was spearheaded by two local academic institutions, namely the Bulacan State University-Malolos Campus and the Ateneo de Davao University. The baseline survey was intended to measure the local constituency's assessment of the quality of local public services, the performance of their local officials and their participation in public affairs prior to the intervention. Since this survey was also used to appraise the performance of the agents, it had a similar sampling design and survey instruments used by the agents.

Simultaneous with the conduct of the baseline survey, the local agents in each of the two provinces underwent training. The training was intended to boost the competence of the agents in survey work and to ensure the credibility of the collected data. Actual fieldwork started in mid-May 2001 and lasted until June 2001. To facilitate processing of the survey and fiscal data, the agents were provided a data processing software program that automatically churned out the scores in the Index. The scores were sent to the PCPS main office where they were checked for consistency and reliability.

To coincide with the local budget period, the information dissemination activities of the Governance Project were held from July to September 2001.

The timing was in consideration of the Index's objective to influence local budget processes and decisions. The local information campaign in the experimental areas involved the distribution of GOFORDEV *komiks* (a short magazine) and posters, and the conduct of three public presentations. The PCPS developed the information materials and also the training module for the conduct of the local public presentations. The total number of *komiks* and posters distributed was equivalent to 30 percent and three percent, respectively, of the total household population in each of the areas.

In the conduct of the public presentations, the agents were advised to invite (any) local organizations, key stakeholders and ordinary residents. Most of them, however, were able to present before a meeting of local officials, including a session of the municipal/city legislative councils. It should be noted that the information materials simply suggested to the readers how the quality of local governance may be objectively assessed (by using the GOFORDEV indicators) and the governance ratings based on the Index. Thus, the materials were neutral in the sense that they neither disparaged nor praised the local government or any particular local official.

The first year of the pilot test was capped with a household impact survey carried out in February-March 2002 by two local academic institutions, namely: the University of Regina Carmelli of Malolos, Bulacan and the University of Immaculate Conception of Davao City. This survey was very much similar to the baseline survey in terms of sampling design, although the instrument used for this survey included a few more questions than the earlier one. Together with the baseline survey, the household impact survey was used to identify the factors associated with the possible changes in the constituency's evaluation of the local public services and officials.

However, it should be noted though that a second impact assessment survey is to be undertaken in the first quarter of 2003. The survey is meant to capture the impact of the Index in the second year (2002) of the pilot test. A full analysis of the pilot test based on the baseline and the two impact assessment surveys will be the subject of another paper.

### **Methodological and Data Issues**

To establish the causal effects of the GOFORDEV Index on fiscal outcomes and local welfare, at least four major measurement issues have to be addressed. The first major issue arises due to the peculiarities of the local budget process. In particular, the Index may not have any effect on the budget allotments in 2001, since these were already decided during the previous budget cycle in the second half of 2000, i.e., before the Index was introduced. Hence, only the baseline and the household impact surveys basically capture the impact of the



2001 budget. What the Index could have influenced then, if at all, is the actual disbursement of these budget allotments, say for health, education, social welfare and economic services, especially during the second half of 2001.

To capture such effects, the factors—possibly including the Index—that contribute to a favorable assessment of local public service delivery and of the performance of key local officials are identified. A favorable assessment in this case should indicate an improvement in welfare, although the correlation between satisfaction with public services and an actual improvement in welfare status (like health status) may not be perfect.

A comparison of the budgets for 2001 and 2002, nonetheless, should reveal the impact of the GOFORDEV Index on allotments across expenditure items. If the Index were effective in calling the attention of local officials, then the total allotment for basic public services (health, education, social welfare, livelihood programs) would have improved if their shares in the total budget were initially low, as indicated by the Development Orientation Index. Moreover, the budget procedures and processes would have become more transparent if wider and effective public consultations were held, the need for which can be inferred from the Participatory Development Index.

The resulting changes in the budget allotments and procedures in the pilot test areas are reported herein based on process documentation studies commissioned to four independent researchers. Each covering three areas, the researchers interviewed key local officials and other informants and examined public documents to determine the budget impact of the Index, if any. The highlights of the process documentation are summarized in the next section.

The second major problem concerns the lagged effects of the Index on the commonly-used welfare indicators, such as infant mortality rate, adult literacy rate, poverty rate, etc. Since the true welfare effects are not readily observed and given the limited duration of the pilot test of the Governance Project, more proximate impact variables are examined. The principal impact variables investigated here are the citizens' awareness or knowledge of, and their satisfaction with, the quality of public service delivery and the performance of their local officials. While greater awareness or high level of satisfaction may not actually lead to enhanced welfare, they are nevertheless among the widely accepted correlates of progress in public services delivery.

Another estimation problem is the simultaneity of effects; that is, a dependent variable (say, a welfare indicator) may also have an effect on one of the explanatory variables (say, the reelection of an official). Among the explanatory variables used, the one that is likely to be endogenous is the reelection status of the mayor. This is suggested by the high proportion of respondents, living in areas with reelected mayors in the May 2001 elections,

who reported satisfaction with the performance of their mayors during the baseline survey undertaken prior to the elections. This estimation issue is avoided here simply by using only the impact assessment survey in the regression analyses of the mayor's performance. To provide the setting for the regression analyses, however, the results of the baseline survey are also summarized below.

Lastly, there are unobserved intervening factors which could systematically bias the welfare estimates. These factors may not be easily measured due to time or resource constraints (e.g., detailed demographic data or even the same respondent across time). They may also be qualitative in nature, such as the political strife between the mayor and members of the local legislative council (which approves the budget). Further, some sociocultural characteristics or historical events have no natural measure because they are multidimensional. To partially account for these factors, dummy variables are introduced in the regression equations. The dummy variables included are provincial, city/municipality, and agent-specific dummies. In addition, the analysis is supplemented with stories, anecdotes, insights and observations to qualify and enrich the interpretation of the statistical data.

### **Changes in the Fiscal Outcomes and Processes**

#### *Changes in Budget Allocations*

The GOFORDEV Index highlights both the relative priority of the local government for basic public services and the extent to which such provisions are able to meet the needs of the constituency. Where needs are not met, therefore, an improved allocation of the fiscal budget is expected when such concern is relayed to responsible local officials through the different activities of the local area partners. The process documentation studies, however, conclude that the GOFORDEV Index has had no perceptible impact yet on the overall budget decisions, largely because it has only been recently introduced in the areas (Berja 2002, Antonio 2002, Bantilan-Pepito 2002, Generalao 2002).

Hence, the changes in the budget outcomes in the pilot test areas are better explained by other factors. The budget changes can be seen in Table 3 where the fiscal budgets of the pilot test areas for the years 2000-2002 are shown. Most of these areas suffered budget cuts during the period, except for four areas—San Jose del Monte City, Panabo City, Angat and Bustos—consistently showing increasing annual budgets. The cases of San Jose del Monte and Panabo City are easily explained. Their recent conversion from municipalities to cities entitles them to a bigger share in the Internal Revenue Allotment (IRA), which is the principal source of revenues of most local

governments and the single most important form of central fiscal transfers in the Philippines. It should be noted that the LGU's budget appropriations are often greater than its actual expenditures owing largely to the delays in the releases of the IRA and to unrealized tax revenue forecasts.

**Table 3. Total LGU Budget Appropriations: 2000-2002**

Local Government Unit	Relative Economic Status	Total Budget Appropriations				
		2000 (in million pesos)	2001 (in million pesos)	2002 (in million pesos)	Percentage change between 2000-2001	Percentage change between 2001-2002
<b>Bulacan</b>						
•San Jose del Monte	High	119.40	276.95	329.09	131.95	18.83
•Baliuag	High	97.90	93.69	91.97	-4.30	-1.84
•Plaridel*	High	69.08	64.39	67.56	-6.79	4.92
•Guiguinto	Low	62.54	58.32	69.57	-6.75	19.29
•Angat	Low	43.77	43.89	50.02	0.27	13.97
•Bustos*	Low	37.42	39.85	40.90	6.49	2.63
<b>Davao del Norte</b>						
•Panabo City	High	64.08	69.59	202.57	8.60	191.09
•Sto. Tomas	High	64.06	37.99	38.62	-41.25	1.66
•Tagum City*	High	369.53	369.35	259.96	-0.05	-29.62
•Braulio Dujali	Low	31.23	23.26	20.97	-25.52	-9.85
•Samal City	Low	325.26	207.28	194.48	-36.27	-6.18
•Asuncion*	Low	50.55	51.50	49.94	1.88	-3.03

\*Control area.

The annual local budget is usually based on three factors. The first factor is the estimated IRA share of the local government for the coming fiscal year. The second consideration is the mayor's priorities; these may include, for example, his campaign promises and his approved projects based on the list proposed by local consultative bodies (such as the Local School Board, City/Municipal Development Council, Local Health Board). The last factor is the previous outlay, since the bulk of local government expenditures consists of recurrent ones such as wages and salaries, and maintenance and operating expenses. Save for the twenty percent of the IRA mandated for local development projects, usually only a small portion of the budget is spent on capital outlays and on other strategic expenditures.

However, a closer look at the budget allocations of the local governments reveals an interesting trend. In particular, the areas with relatively high scores

in the DOI reduced their percentage allocation for economic and social services between 2001 and 2002, while those with relatively low DOI did exactly the opposite (Figure 2). As defined in Table 1, the DOI—which was introduced in the areas during the information campaign—reflects the relative priority of the local government for social services (like health, education, housing and social welfare) and economic services (like agriculture and livelihood programs). Note, however, that the scores in the DOI are based on the actual expenditures in 2000 of the local government for capital outlays and maintenance and other operating expenses only. By excluding the wages, salaries and other personal allowances of government personnel, the DOI captures only the actual outlays for drugs and medicines, hospital facilities and equipment, farm implements and extension services, and the like. In contrast, however, the budget shares for social and economic services depicted in Figure 2 include personal services.

**Figure 2. Development Orientation Index (DOI) and the Changes in the Budget Shares of Social and Economic Services between 2001 and 2002**

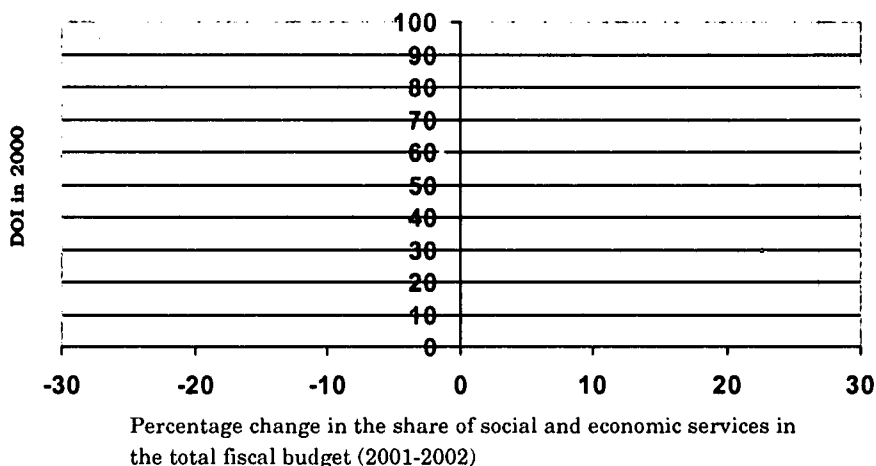


Figure 2 shows that the LGUs with DOI scores of at least 50 reduced the shares of social and economic services in their total budgets between 2001 and 2002. Of these LGUs, Guiguinto registered the biggest cut in the budget share at 27.11 percent. On the other hand, the LGUs with DOI scores of less than 50 allocated an increasing proportion of their budgets for social and economic services. Among these are the three LGUs in the experimental areas, namely: San Jose del Monte City (10.22 percent), Sto. Tomas (11.44 percent) and Samal City (15 percent). These observations then point to a relatively high or growing preference for basic public services, especially in the areas where the GOFORDEV Index was disseminated. However, more evidences are needed to

conclude whether the Index has directly influenced the way the local fiscal resources were apportioned.

### *Some Improvements in Budget Processes*

While it has yet to affect budget allocations, the GOFORDEV Index already has led to some improvements in local budget processes. Most notably in Guiguinto, for example, the head of the Municipal Planning and Development Office, being the local area partner of the Governance Project, was able to push for the reclassification of certain budget items to better reflect the allocations for social and economic services. The results of the reclassification are now incorporated in the Annual Report of the Municipality of Guiguinto submitted to the provincial government and the Department of the Interior and Local Government. Moreover, the Index was reportedly used as reference during the budget hearings in Guiguinto and as a basis for the formulation of the municipality's Annual Investment Plan for 2002. Information regarding the Index was likewise shared with the municipal employees and department heads and with visiting local government officials from other provinces.

In Panabo City where the City Planning and Development Office was also the local area partner, the Index was also used as input in the formulation of a City Development Strategy (CDS). The CDS is a World Bank-sponsored project aimed at developing a local action plan to improve governance and to enhance the global competitiveness of selected cities in the Philippines. Further, the Index was also incorporated in the last Executive Agenda of the Mayor, which contains the vision, mission, and the priority projects and programs of the local chief executive.

The NGO-partners, on the other hand, were able to use the Index in their advocacy activities, although these activities have yet to be mainstreamed in the local budget processes. These activities include a petition by the Davao Provinces Rural Development Institute addressed to the Department of Agriculture, Department of Agrarian Reform and the local *Sangguniang Bayan* (legislative council) for support services to rice farmers and other agricultural workers in the Municipality of Sto. Tomas. Reportedly, the LAWIG Foundation shared the Index with other groups in fora and meetings the Foundation organized or participated in. Also, the Foundation referred to the Index in its project proposal for a local cooperative.

In sum, the GOFORDEV Index has yet to have a big dent on local budget outcomes and processes. Given the institutional rigidities in government bureaucracies and operations, however, only incremental changes can be reasonably expected within the short period since the Index was introduced in the pilot test areas. Nonetheless, the pilot test activities are enhanced and

intensified in 2002. Among the major changes are the more visually-appealing komiks and posters, supplemental leaflets and stickers, increased number of public presentations (one of which specifically targeted local government officials) and the inclusion of workshop sessions during the public presentations (to draw up an action plan). To make them more effective, competent and confident advocates of good governance in their respective areas, the local area partners are also provided with better training and higher overall level of support in 2002.

### **Analysis of Welfare Impact**

In this section, the possible effects of the Index on the delivery of public services and on the performance of local officials are investigated. Such changes may be expected to the extent that the Index has influenced the actual disbursement of the 2001 budget, following the introduction of the Index in the pilot test areas in the latter half of 2001. Or, possibly, the desired changes may arise out of the people's initiative, which may have been triggered by the Index. Thus, the immediate consequence of the Index may be the heightened consciousness of the local population about governance issues, which often precedes fiscal or administrative refinements.

Thus, awareness of the Index is used here to explain the constituency's satisfaction with the delivery of local public services and the performance of local officials. A satisfactory assessment is taken as a proxy for a positive level of welfare, although the correlation between a favorable assessment and improvements in welfare may not be perfect. Nonetheless, the people's level of satisfaction is often used as a proximate welfare indicator.

To measure the changes in the overall level of satisfaction, the results of the baseline and impact assessment surveys are compared. Note that the two surveys follow the same sampling design and use the same survey instruments. The overall profiles of the respondents in the two surveys in Bulacan and Davao del Norte are presented in Table 4. The baseline results suggest that the respondents in the two provinces roughly belong to the same age cohorts (early 40s), have the same average family sizes (5), and appear to reside permanently in the areas as indicated by the high proportion of house owners among the respondents. Only a small proportion of the respondents reported that they are employed in their respective local governments. Relative to the respondents in Davao del Norte, the Bulacan respondents have higher levels of income (and expenditures) and educational attainment. This only confirms the higher-than-average socioeconomic status of Bulacan, a province adjacent to Metro Manila.

Largely the same overall profile describes the respondents in the impact assessment survey. The only notable difference is the number of respondents

**Table 4. Profile of Respondents in the Baseline and Impact Assessment Surveys\***

<i>Municipality/City</i>	<i>Average Age (in years)</i>	<i>Percent of respondents who finished at least high school</i>	<i>Average family size</i>	<i>Average monthly household income (in pesos)</i>	<i>Average monthly electric bill (in pesos)</i>	<i>No. of respondents who are employed in their local government</i>	<i>Percent of respondents who are house-owners</i>
<i>Baseline</i>							
<b>Bulacan</b>	41	54	5	9,803	662	27	75
•Angat	42	45	5	9,335	565	3	83
•Baliuag	41	55	5	10,825	667	6	72
•Guiguinto	42	47	5	8,339	680	3	65
•San Jose del Monte	41	64	5	10,450	620	9	74
•Plaridel	39	53	5	9,704	653	2	78
•Bustos	42	57	5	10,162	787	4	80
<b>Davao del Norte</b>	41	50	5	7,414	260	50	72
•Braulio E. Dujali	41	45	5	6,250	244	7	78
•Panabo	40	72	6	12,109	335	6	62
•Samal	42	29	5	4,441	195	11	69
•Sto. Tomas	40	52	5	8,772	276	7	79
•Tagum	39	58	5	7,415	336	11	54
•Asuncion	41	44	6	5,497	174	8	90
<i>Impact Assessment</i>							
<b>Bulacan</b>	41	52	5	9,333	685	34	59
•Angat	43	39	5	9,864	550	5	73
•Baliuag	42	65	5	11,674	10,343	3	61
•Guiguinto	40	56	5	8,000	784	9	51
•San Jose del Monte	40	61	5	10,204	618	9	57
•Plaridel	43	49	5	9,863	678	5	49
•Bustos	40	43	5	6,393	447	3	60
<b>Davao del Norte</b>	42	44	5	9,316	227	40	53
•Braulio E. Dujali	47	33	5	4,784	232	5	78
•Panabo	40	60	5	11,638	334	11	53
•Samal	40	42	5	5,654	110	5	43
•Sto. Tomas	42	38	5	5,465	208	3	34
•Tagum	40	62	5	9,910	353	10	54
•Asuncion	42	30	5	18,447	126	6	57

\*Total sample size per municipality or city is 100. The percentage shares of the sample households in the total number of households are 1.28 in Angat, 0.48 in Baliuag, 0.95 in Guiguinto, 0.25 in San Jose del Monte, 0.76 in Plaridel, 1.22 in Bustos, 2.94 in Braulio Dujali, 0.39 in Panabo, 0.66 in Samal, 0.67 in Sto. Tomas, 0.33 in Tagum and 0.90 in Asuncion.

employed in their local governments. Between the two surveys, the number of respondents who are employed in their LGUs rose from 27 to 34 in Bulacan, but dropped from 50 to 40 in Davao del Norte. In addition, a smaller proportion of

the latter set of respondents owns the house they lived in, although the house owners still constitute the majority among the respondents in both provinces. On the whole, therefore, the respondents in the two surveys appeared to have real stakes in an improved quality of local governance. Their profile is also indicative of a mature and responsible participation in the government affairs.

### *Summary Changes in Selected Welfare Measures*

A comparison of the welfare indicators obtained from the two surveys is presented in Table 5. Each survey respondent was asked, among others, whether he/she: (i) is satisfied with the performance of the mayor, (ii) is satisfied with the observed improvements in at least one public service in the *barangay* (village), (iii) considers that the local officials practice good governance (*mabuting pamamahala*), and (iv) is a member of any local or community organization. It should be noted, however, that the mayor or local officials referred to in the two surveys may be different depending on election outcome in May 2001. Among the areas with newly elected mayors are Bustos, Angat, Tagum City and Sto. Tomas. Possibly, therefore, the election outcome may have implications on public service delivery.

**Table 5. Comparison of Selected Welfare Measures from the Baseline and Impact Assessment Surveys**

Welfare Measures	Bulacan (% of the total sample)		Davao del Norte (% of the total sample)	
	Baseline Survey (April-May 2001)	Impact Assessment Survey (February-March 2002)	Baseline Survey (April-May 2001)	Impact Assessment Survey (February-March 2002)
1. Satisfied with the mayor's performance in office	70	69	65	76
2. Aware of and satisfied with the improvements in at least one public service in the barangay	44	42	37	48
3. Considers the local officials to practice good governance	70	70	84	74
4. Member of any local or community organization	16	13	36	38
5. Aware of how municipality/city public projects are chosen	16	24	23	18



Eight months after the elections, however, the Bulacan residents are found slightly less satisfied with their respective mayors and with whatever improvements in public services there were in their barangays. Between the two surveys, the overall satisfaction in Bulacan with the mayor's performance declined from 70 to 69 percent. The overall satisfaction in the province with public services likewise dipped from 44 percent to 42 percent. In contrast, however, the scores on both welfare measures improved significantly in Davao del Norte. In addition, consistently more respondents in Davao del Norte than in Bulacan consider their local officials to practice "good governance," although a smaller percentage of Davao del Norte residents gave such favorable rating in 2002 than in 2001.

Another interesting contrast between the residents of the two provinces is in their awareness of how local public programs are selected and in their membership in any local organization. In particular, Bulacan residents appear to be less organized in 2002 than in 2001, although they are more aware now than before of project selection procedures in their localities. The exact opposite however may be said of the residents of Davao del Norte. The constituency of the province appears to be more organized in 2002 than 2001, although they seem to be more alienated now from local planning activities. In both places, however, the organized sector and informed citizenry constitute only a minority of the local population.

While interesting, these summary statistics do not yield any clear pattern of welfare change, much less identify the factors that could lead to the desired welfare outcomes. To isolate the critical factors, a more detailed analysis, therefore, is required.

#### *Critical Factors Behind a Favorable Assessment*

The citizen's favorable assessment of local public service delivery or of the performance of a local official may be influenced by a number of factors. These factors may include personal or family characteristics (educational attainment, age, marital status, employment status, family size, household income), features of the area itself (rural/urban) and the quality of the local officials (say, whether or not they are given a new mandate by the local population). A more critical assessment, however, is expected when the citizens are more informed and when they deliberate about some important aspects of local governance. The provision and public discussion of some critical information is precisely the track taken by the GOFORDEV Index to push for good local governance.

Therefore, to measure the independent effect of the GOFORDEV Index on the probability of a favorable assessment, the following probit regression model is estimated:

$$\text{Prob}(W = 1 \mid \mathbf{H}, \mathbf{L}, \mathbf{A}, \mathbf{I}) = \Phi(\beta_0 + \beta'_h \mathbf{H} + \beta'_l \mathbf{L} + \beta'_a \mathbf{A} + \beta'_i \mathbf{I}),$$

where  $W$  is a welfare indicator with value 1 (for “favorable assessment” or “yes”) or 0 (for “not favorable assessment” or “no”), the  $\beta$ 's are coefficients,  $\mathbf{H}$  is a vector of household characteristics,  $\mathbf{L}$  is a vector of LGU characteristics,  $\mathbf{A}$  is a vector of characteristics of the local area partner, and  $\mathbf{I}$  is a vector of variables denoting the different Index-related activities in the area. The symbol  $\Phi$  refers to the standard cumulative normal distribution with mean 0 and variance 1 (For more on the probit model, see Greene 1993).

Based on the data collected in the impact assessment survey, three sets of welfare measures are used. The first one refers to the respondent's reported satisfaction with the delivery of certain public service (health, livelihood, water, and road). The second one pertains to the respondent's satisfaction with the performance of a key local official or group of local officials (mayor, vice mayor, barangay captain, members of the Municipal/City Legislative Council, members of the Barangay Legislative Council). The last set refers to the reported participation of the respondent in local project planning, implementation, monitoring and evaluation.

The household- or respondent-level factors controlled for are age, sex, marital status, relation to the household head, household size, educational attainment, number of employed household members, number of household members with government jobs, average monthly family income, and whether the household owns the abode it dwells in. Several sets of dummy variables are introduced to account for other factors that impinge on local welfare. One set of dummy variables is introduced to control for province-level and municipal-level factors, and for the unobserved factors that are correlated with the area's economic status. Among these dummy variables is the reelection status of the Mayor (whether the mayor is a new one or a reelected incumbent). Another set is included to differentiate the types of local area partners (LGUs, NGOs, business groups and academic institutions) that represented the GOFORDEV Index in the localities.

The respondents are differentiated further from another with a dummy variable that denotes whether they reside in an experimental or control area. To account for the impact of the different information dissemination activities during the pilot test, dummy variables are also introduced to denote whether the respondent had received a copy of the komiks, seen a poster about the Index, or become aware of any public meeting about the Index in their areas.

Further, a dummy variable is introduced to identify those who have respondents in both surveys.

The variable definitions, summary statistics, and the detailed results<sup>1</sup> are shown in Appendices 1-6. The following discussion shall focus only on the welfare impact of the Index, defined here to be the total increase in the probability of a favorable assessment of a particular public service, or the performance of a local official or a group of officials, as a result of the respondent's general awareness and knowledge of the Index. In addition, the impact of the Index on the respondent's likelihood of getting involved in public planning, implementation, monitoring or evaluation is also evaluated.

Arguably, there is nothing in theory that an information collection and sharing system such as the GOFORDEV Index should necessarily lead to a negative or positive assessment. With the information system, the residents in the area are only expected to be critical with their assessments. Since the GOFODEV Index was not exposed in the four control areas, then the 400 survey respondents in these areas assessed their local governments on some other basis. If their responses to the same question significantly diverge from those in the experimental areas, other things being constant, then the Index may be said to have influenced the way people evaluate their local governments.

The contribution of the Index in the probability of a favorable assessment of a particular public service and the performance of the local officials is shown in Table 6. In this case, a favorable assessment is an affirmative answer of the respondent to the question of whether he or she is satisfied with the public service delivery or with the accomplishments of the cited local official. In general, the full introduction of the Index in eight of the 12 pilot test areas contributed to the likelihood of the respondent's satisfactory assessment of any improvement in public services in the barangay (0.35 point) and to a satisfactory assessment of such an improvement (by 0.36 point). Moreover, the respondents in these areas also tend to give a positive assessment of their barangay health centers (by 0.04 point) and local public roads (by 0.25 point), more than those living in the control areas.

To account for the possibility that some of those living in the experimental areas may not be aware of the Index (and may therefore be using other basis for their assessments), the statistical analysis is directed further to those who are aware of it, presumably because of the information campaign undertaken in the areas. The results of the statistical tests are shown in Table 6 where it can be seen that the different information dissemination activities of the Index contributed to the likelihood of a favorable assessment. In particular, those who have some knowledge of the Index tend to report a satisfactory assessment of local water facilities, i.e., 0.10 points more likely than those who are not aware of the Index. Those who have received a copy of the komiks or seen a

**Table 6. Contribution of the GOFORDEV Index to the Probability of a Favorable Assessment of Local Public Service Delivery and Performance of a Local Official**

Assessed Services and Officials	Increase in Probability (as result of the respondent's)				
	Living in the experimental area	Awareness of the Index	Receipt of a copy of the komiks	Having seen a poster	Knowledge of a meeting about the Index
Aware of any improvement in public services in the barangay	0.35	0.12	0.0	0.16	0.0
Satisfaction with any improvement in public services in the barangay	0.36	0.0	0.13	0.18	0.0
Satisfaction with the barangay health center	0.04	0.0	0.0	0.0	0.0
Satisfaction with water facilities	0.0	0.1	0.0	0.0	0.0
Satisfaction with LGU's livelihood projects	0.0	0.0	0.0	0.0	0.0
Satisfaction with local public roads	0.25	0.0	0.0	0.0	0.11
Satisfaction with the performance of the mayor	0.13	0.0	0.10	0.13	0.0
Satisfaction with the performance of the vice mayor	0.0	0.0	0.0	0.18	0.16
Satisfaction with the performance of the barangay captain	0.0	-0.16	0.0	0.13	0.15
Satisfaction with the overall performance of the members of the Municipal/ City Legislative Council	0.0	0.0	0.0	0.12	0.18
Satisfaction with the overall performance of the members of the Barangay Legislative Council	0.0	0.0	0.0	0.11	0.0

Note: See Appendices 4 and 5 for the detailed results.

poster, on the other hand, are also more likely to report a satisfaction with improvements in public services in their barangays. Further, those who have knowledge of any public meeting of the Index tend to give satisfactory rating of local public roads, i.e., 0.11 point more than those who have no such knowledge.

However, the Index does not seem to have any influence regarding the people's assessments of local livelihood projects.

An equally textured story is revealed from the bottom half of Table 6 where the reported changes in the probability assessments appear to be more sensitive to specific information dissemination activities under the Governance Project. Specifically, it is shown that, relative to others, the respondents who have seen a poster of the Index or, at least, have heard of a meeting about it are more likely to report satisfaction with the performance of their mayors, vice mayors, barangay captains and with the members of the city or municipal legislative council. One interesting finding is the negative effect of a simple awareness of Index on the assessed performance of the barangay captain (-0.16 point). This presumably points to the fact that the barangay captain is the most visible executive official at the barangay level and is therefore the most likely to be blamed for service inadequacies.

Arguably, if the Index will have its desired impact on local development, then it should permeate the consciousness of the members of the local community willing and able to participate in local public affairs. Whether these key citizens were effectively targeted during the information campaign is also investigated here. Table 7 shows the contribution of the Index to increase the likelihood of the respondent to participate in the planning, implementation, monitoring or evaluation of public programs or projects.

**Table 7. The Contribution of the GOFORDEV Index to the Likelihood of Participation in Public Program and Project Activities**

<i>Personal Participation in</i>	<i>Increase in Probability (as result of the respondent's)</i>				
	<i>Living in the experimental areas</i>	<i>Awareness of the Index</i>	<i>Receipt of a copy of the komiks</i>	<i>Having seen a poster</i>	<i>Knowledge of a meeting about the Index</i>
Planning activities	0.23	0.19	0.11	0.0	0.0
Implementation activities	0.27	0.18	0.0	0.0	0.0
Monitoring activities	0.26	0.14	0.11	0.0	0.0
Evaluation activities	0.23	0.17	0.0	0.0	0.11

Note: See Appendix 6 for the detailed results.

It can be gleaned from the table that the residents in the experimental areas are more likely to be involved in these activities than those in the control areas. Moreover, those who are only aware of the Index are also more probable to participate in public affairs than others. A closer look at the independent effects of the komiks, posters and meetings about the Index shows that the posters do not improve the chances that a respondent will be active in any of the public project activities. On the other hand, the receipt of komiks increases the likelihood that the respondent is involved in planning (0.11 point) or in monitoring (0.11 point) activities. Likewise, the simple knowledge of a meeting about the Index improves the likelihood by 0.11 point that the respondent participates in project evaluation. All told, therefore, the Index already shows some positive effects on people's participation in local public affairs.

While the Index is associated with a favorable assessment of local public services and local officials, a "not favorable assessment" of the same things is associated more with the local partners, as can be seen in Appendix 4 and Appendix 5. In particular, the likelihood of a "not favorable" assessment is found greater if the Index is introduced in the area by the LGU itself, by an NGO, or by a business group than if introduced by an academic institution (the control dummy in the regression estimates). This may be explained by the fact that academic institutions are perceived to be more "neutral" or unbiased than any of the other types of agents.

### **Concluding Remarks**

As a social investment toward improving the quality of local governance in the Philippines, the GOFORDEV Index already shows some development payoffs, even as it gestates. One development payoff concerns the elevated overall consciousness about governance issues in the pilot test areas. Apparently, the local population already refers to the Index when it assesses the delivery of public services and the accomplishments of key local officials. As the Index steers such assessments toward greater objectivity and more social, rather than personal, orientation, it may pave the way for greater empowerment among the people.

Their empowerment already manifests in their wider participation in local program and project activities, again seemingly brought about by the introduction of the Index in the pilot test areas. With their increased participation in public affairs, the people should be able to push for further improvements in public service delivery and in the performance of key officials. To hasten the pace of local development, the demand for such changes must be met by the local governments.

The ability of the local governments to meet development needs also appears to have been positively influenced by the Index. The changes in the budget processes in some of the covered areas like Guiguinto are intended to align reported fiscal expenditures with the actual provision of basic public services. In Braulio Dujali and Panabo City, on the other hand, more consultations with local leaders were undertaken as a result of the Index.

With these positive changes then, the Index may yet bring about substantive improvements on how the fiscal budget is apportioned. It will be interesting to track down whether more will be allotted to development-oriented expenditures, or whether wastages, inefficiencies and inequities in social allocations will persist.

Though indicative, these results however remain preliminary until a full assessment of the Index is made. A full evaluation of the impact of the Index will have to address a number of conceptual and measurement issues, including the link between participation and awareness on real welfare, the possible confounding effects of the presence of other similar indicators or initiatives in the area, the possibility that the welfare indicators themselves lead to awareness of the Index. These will be the subjects of succeeding analyses

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## Appendix 1

## Explanatory Variables

Name	Definition
Age	- Age of the respondent (in years)
Sex	- Sex of the respondent
Marital Status	- 1 if married, separated or widowed; 0 - otherwise
Household Head	- 1 if household head; 0 - otherwise
Education	- 1 if finished at least high school; 0 - otherwise
Household Size	- Total number of household members
Working members	- Number of household members with regular jobs
Government jobs	- Number of household members with government jobs
Income	- Total monthly household income
Own house	- 1 if the occupant household owns the house; 0 - otherwise
Bulacan	- 1 if the province is Bulacan; 0 - if Davao del Norte
Highly developed	- 1 if the city/municipality is above average in the level of development relative to other cities/municipalities in the province; 0 - otherwise
Municipality	- 1 if a municipality; 0 - if a city
Reelected	- 1 if the incumbent mayor is reelected in May 2001; 0 - otherwise
LGU partner	- 1 if the local partner is the local government unit; 0 - otherwise
NGO partner	- 1 if the local partner is a non-government organization; 0 - otherwise
Business group partner	- 1 if the local partner is business group (rotary/soroptimist); 0 - otherwise
Academe partner	- 1 if the local partner is an academic institution; 0 - otherwise
Same respondent	- 1 if the respondent reported that he/she was interviewed in the first (baseline) survey; 0 - otherwise
Experimental group	- 1 if the area belongs to the experimental group; 0 - if the area belongs to the control group
Aware of the Index	- 1 if the respondent reported that he/she is aware of the GOFORDEV Index; 0 - otherwise
Received <i>komiks</i>	- 1 if the respondent reported that he/she received a copy of the GOFORDEV <i>komiks</i> ; 0 - otherwise
Seen poster	- 1 if the respondent reported that he/she has seen a GOFORDEV poster; 0 - otherwise
GOFORDEV Meeting	- 1 if the respondent reported that he/she knew of a meeting or public presentation of the GOFORDEV index in the municipality/city; 0 - otherwise

## Appendix 2

## Dependent Variables

<i>Name</i>	<i>Definition</i>
Improved service in the <i>barangay</i>	- 1 if the respondent reported that there was (were) improvement(s) in the public service delivery in their <i>barangay</i> last year; 0 otherwise
Satisfied with the improvements in the <i>barangay</i>	- 1 if the respondent reported that he/she is satisfied with the improvements in the <i>barangay</i> last year; 0 otherwise
Satisfied with <i>barangay</i> health center	- 1 if the respondent reported that he/she is satisfied with the delivery of services in the <i>barangay</i> health center; 0 otherwise
Satisfied with water facilities	- 1 if the respondent reported that he/she is satisfied with the services provided by local government for water facilities; 0 otherwise
Satisfied with livelihood projects	- 1 if the respondent reported that he/she is satisfied with the services provided by local government for livelihood projects; 0 otherwise
Satisfied with public roads	- 1 if the respondent reported that he/she is satisfied with the services provided by local government for public roads; 0 otherwise
Satisfied with the performance of Mayor	- 1 if the respondent reported that he/she is satisfied with the performance of the Mayor; 0 otherwise
Satisfied with the performance of Vice Mayor	- 1 if the respondent reported that he/she is satisfied with the performance of the Vice Mayor; 0 otherwise
Satisfied with the performance of Barangay Captain	- 1 if the respondent reported that he/she is satisfied with the performance of the Barangay Captain; 0 otherwise
Satisfied with the overall performance of the members of Municipal legislative council	- 1 if the respondent reported that he/she is satisfied with the performance of the Municipal legislative council; 0 otherwise
Satisfied with the overall performance of the members of Barangay legislative council	- 1 if the respondent reported that he/she is satisfied with the performance of the Barangay legislative council; 0 otherwise
Personally involved in planning activities	- 1 if the respondent reported that he/she has been personally involved in planning activities of the local government; 0 otherwise
Personally involved in implementing activities	- 1 if the respondent reported that he/she has been personally involved in implementing activities of the local government; 0 otherwise
Personally involved in monitoring activities	- 1 if the respondent reported that he/she has been personally involved in monitoring activities of the local government; 0 otherwise
Personally involved in evaluation activities	- 1 if the respondent reported that he/she has been personally involved in evaluation activities of the local government; 0 otherwise

## Appendix 3

## Summary Statistics

Variable	Observations	Mean	Maximum	Minimum	Standard Deviation
Improved service in the <i>barangay</i>	1200	0.4675	1	0	0.4992
Satisfied with the improvements in the <i>barangay</i>	1200	0.4475	1	0	0.4972
Satisfied with <i>barangay</i> health center	1200	0.8675	1	0	0.3392
Satisfied with water facilities	1200	0.8083	1	0	0.3938
Satisfied with livelihood projects	1200	0.5075	1	0	0.500
Satisfied with public roads	1200	0.7842	1	0	0.4116
Satisfied with the performance of the Mayor	1200	0.7225	1	0	0.4480
Satisfied with the performance of the Vice Mayor	1200	0.6325	1	0	0.4823
Satisfied with the performance of the <i>Barangay</i> Captain	1200	0.76	1	0	0.4273
Satisfied with the overall performance of the members of Municipal Legislative Council	1200	0.64	1	0	0.4802
Satisfied with the overall performance of the members of the <i>Barangay</i> Legislative Council	1200	0.7275	1	0	0.4454
Personally involved in planning activities	1200	0.2067	1	0	0.2067
Personally involved in implementing activities	1200	0.2117	1	0	0.2117
Personally involved in monitoring activities	1200	0.2183	1	0	0.2183
Personally involved in evaluation activities	1200	0.205	1	0	0.205
Age	1199	41.74	90	1	15.32
Sex	1200	0.3083	1	0	0.4620
Marital Status	1200	0.8592	1	0	0.3480
Household Head	1200	0.4342	1	0	0.4959
Education	1200	0.4817	1	0	0.4999
Household Size	1197	5.08	18	1	2.19
Working Members	1196	1.6489	12	0	0.9277
Government Jobs	1112	0.1259	3	0	0.4007
Income	1173	9343.79	250000	63	14813
Own House	1200	0.5833	1	0	0.4932
Bulacan	1200	0.5	1	0	0.5002
Highly Developed	1200	0.5	1	0	0.5002
Municipality	1200	0.6667	1	0	0.4716
Reelected	1200	0.6667	1	0	0.4716
LGU Partner	1200	0.3333	1	0	0.4716
NGO Partner	1200	0.25	1	0	0.4332
Business Group Partner	1200	0.1667	1	0	0.3728
Academe Partner	1200	0.25	1	0	0.4332
Same Respondent	1200	0.0617	1	0	0.2406
Experimental Group	1200	0.6667	1	0	0.4716
Aware of the Index	1200	0.0742	1	0	0.2622
Received komiks	1200	0.0617	1	0	0.2406
Seen Poster	1200	0.1	1	0	0.3001
GOFORDEV Meeting	1200	0.0475	1	0	0.2128

### Factors that Contribute to the Probability of a Favorable Assessment of Local Public Service Delivery

Explanatory Variable	Dependent Variable											
	Improved service in the barangay		Satisfied with the improvements in the barangay		Satisfied with barangay health center		Satisfied with water facilities		Satisfied with livelihood projects		Satisfied with public roads	
	dF/dx	z	dF/dx	z	dF/dx	z	dF/dx	z	dF/dx	z	dF/dx	z
Age	-0.0001	-0.11	-0.001	-0.10	0.0004	0.50	-0.007	-0.79	-0.00002	-0.02	-0.00009	-0.10
Sex	-0.0423	-1.07	-0.0155	-0.39	-0.0080	-0.33	-0.0011	-0.04	-0.0386	-0.99	-0.0020	-0.07
Marital status	0.0435	0.86	0.0416	0.82	0.0081	0.27	-0.0513	-1.39	0.0139	0.28	-0.0357	-0.93
Household head	0.0358	0.90	0.0141	0.36	0.0176	0.76	-0.0167	-0.58	0.0110	0.28	0.0096	0.32
Household size	0.0123	1.62	0.0099	1.31	0.0010	0.21	-0.0059	-1.08	0.0020	0.27	-0.0116	-2.10*
Education	0.0321	0.91	0.0163	0.47	0.0015	0.07	-0.0110	-0.77	-0.0174	-0.51	0.0190	0.71
Working members	0.0249	1.32	0.0250	1.33	0.0215	1.72**	-0.0067	-0.48	0.0091	0.50	-0.0149	-1.09
Government jobs	0.0912	2.12*	0.1042	2.44*	-0.0220	-0.92	-0.0458	-1.55	0.0652	1.55	0.0700	1.99*
Income	4.13e-07	0.38	6.05e-07	0.56	6.20e-09	0.01	1.37e-06	1.24	2.12e-06	1.68**	2.66e-07	0.31
Own house	-0.0061	-0.18	-0.0109	-0.32	0.0050	0.25	-0.0082	-0.33	0.0276	0.83	0.0038	0.14
Bulacan	-0.0605	-1.29	-0.0602	-1.28	-0.0331	-1.18	0.1746	5.48*	-0.0430	-0.94	0.0371	1.11
Municipality	0.0413	0.95	0.0434	1.00	-0.0626	-2.20*	-0.1613	-5.46*	-0.0971	-2.32*	-0.0592	-1.66**
Highly developed	-0.1712	-4.56*	-0.1911	-5.13*	-0.0424	-1.83**	-0.0136	-0.46	-0.0464	-1.28	-0.1229	-3.68*
Reelected	0.0304	6.68*	0.2872	6.36*	-0.0268	1.15	0.1005	2.45*	0.0080	0.18	0.2207	4.90*
LGU partner	-0.0463	-4.93*	-0.4596	-4.97*			-0.2161	-2.31*	0.1139	1.14	-0.5970	-5.45*
NGO partner	-0.3841	-4.79*	-0.3765	-4.77*	0.06162	2.07*	0.0446	0.74	0.0497	0.58	-0.2928	-3.66*
Business group partner	-0.0472	-6.01*	-0.4594	-6.02*	-0.0302	-0.86	0.0884	1.33	-0.0092	-0.10	-0.4578	-4.27*
Same respondent	0.0521	0.76	0.0288	0.42	-0.0215	-0.51	0.0423	0.89	0.0576	0.86	0.0452	0.91
Experimental group	0.3544	4.93*	0.3638	5.14*	0.0452	1.74**	0.0259	0.44	-0.0192	-0.26	0.2460	3.32*
Aware of the Index	0.1171	1.78**	0.0763	1.17	-0.0140	-0.34	0.0965	2.33*	0.0798	1.27	-0.0153	-0.30
Received komiks	0.1253	1.56	0.1346	1.67**	0.0329	0.68	-0.0363	-0.64	0.0985	1.31	-0.0611	-1.02
Seen poster	0.1591	2.59*	0.1794	2.93*	0.0555	1.55	0.0543	1.35	-0.0108	-0.18	0.0126	0.28
GOFORDEV Meeting	0.0992	1.19	0.1002	1.22	0.0471	0.95	-0.0149	-0.26	0.1073	1.37	0.1125	2.11*
Number of observations	1083		1083		1083		1083		1083		1083	
LR chi-square	145.61		144.60		58.42		146.89		51.64		85.08	
Prob>chi-square	0.0000		0.0000		0.0000		0.0000		0.0006		0.0000	
Pseudo-R-squared	0.0972		0.0969		0.0707		0.1386		0.0345		0.0765	

Note: Estimated using probit regression. \*\* and \*\*\* mean that the underlying coefficient is significantly different from zero at the 5% and 10% confidence levels, respectively. dF/dx denotes the change in probability due to a unit change in the independent variable x.

**Factors that Contribute to the Probability of a Favorable Assessment of the Performances of Local Public Officials**

Explanatory Variable	Dependent Variable									
	Satisfied with the performance of the mayor		Satisfied with the performance of the vice mayor		Satisfied with the performance of the barangay captain		Satisfied with the overall performance of the members of the city/municipal legislative council		Satisfied with the overall performance of the members of the barangay legislative council	
	dF/dx	z	dF/dx	z	dF/dx	z	dF/dx	z	dF/dx	z
Age	0.0021	2.02*	0.0012	1.04	0.0010	1.05	6.40e-06	0.01	0.0004	0.34
Sex	-0.0033	-0.10	-0.0066	-0.17	0.0056	0.18	-0.0081	-0.22	0.0299	0.90
Marital status	0.0303	0.69	-0.0671	-1.43	0.0330	0.81	0.0442	0.91	-0.0036	-0.09
Household head	-0.0254	-0.75	-0.0273	-0.73	-0.0445	-1.41	-0.0410	-1.10	-0.0348	-1.05
Household size	0.0047	0.72	0.0051	0.72	0.0020	0.33	-0.0024	-0.34	0.0033	0.50
Education	-0.0360	-1.22	-0.0611	-1.86**	-0.0248	-0.90	-0.0305	-0.93	-0.0645	-2.21*
Working members	0.0079	0.50	0.0026	0.15	-0.0139	-0.95	0.0519	2.72*	-0.0027	-0.17
Government jobs	0.0065	0.18	-0.0012	-0.03	0.0063	0.19	0.0158	0.40	0.0020	0.06
Income	4.59e-07	0.49	-1.16e-06	-1.08	1.20e-06	1.12	-1.34e-06	-1.24	3.97e-07	0.41
Own house	-0.0040	-0.14	0.0273	0.85	0.0055	0.20	0.0433	1.35	-0.0142	-0.49
Bulacan	-0.0704	-1.69*	-0.2236	-5.07*	-0.0987	-2.62*	-0.1395	-3.10*	-0.1220	-3.03*
Municipality	0.0145	0.37	-0.1368	-3.30*	-0.0732	-2.08*	-0.1038	-2.47*	-0.0432	-1.15
Highly developed	-0.1468	-4.43*	-0.1652	-4.46*	-0.1276	-4.02*	-0.2420	-6.55*	-0.1212	-3.70*
Reelected	0.2935	6.77*	0.1850	4.00*	0.0771	1.97*	0.2138	4.61*	0.0990	2.43*
LGU partner	-0.2254	-2.22*	-0.2356	-2.13*	-0.1369	-1.40	-0.2031	-1.86**	-0.0625	-0.63
NGO partner	-0.1361	-1.60	-0.0810	-0.91	-0.0185	-0.24	-0.0936	-1.06	0.0258	0.32
Business group partner	-0.2362	-2.39*	-0.0587	-0.59	-0.1241	-1.33	-0.1330	-1.32	-0.0892	-0.94
Same respondent	0.5228	0.90	0.0383	0.60	0.0990	1.91**	0.0943	1.49	0.1067	1.93*
Experimental group	0.1304	1.75**	-0.0031	-0.04	0.0255	0.35	0.0718	0.89	-0.0121	-0.16
Aware of the Index	-0.0700	-1.20	-0.0707	-1.10	-0.1643	-2.80*	-0.0279	-0.45	-0.0802	-1.38
Received komiks	0.1056	1.65**	0.1101	1.49	0.0319	0.49	0.0119	0.16	0.0710	1.23
Seen poster	0.1282	2.67*	0.1775	3.31*	0.1262	2.83*	0.1174	3.29*	0.1129	2.37*
GOFORDEV Meeting	0.1116	1.64	0.1574	2.10*	0.1495	2.41*	0.1791	2.44*	0.0806	1.19
Number of observations	1083		1083		1083		1083		1083	
LR chi-square	124.53		147.29		94.46		138.64		102.06	
Prob>chi-squared	0.0000		0.0000		0.0000		0.0000		0.0000	
Pseudo-R-squared	0.0993		0.1050		0.0809		0.0989		0.0823	

Note: Estimated using probit regression. \*\*and\*\*\*mean that the underlying coefficient is significantly different from zero at the 5% and 10% confidence levels, respectively. dF/dx denotes the change in probability due to a unit change in the independent variable x.

### Factors that Contribute to the Probability of the Respondent's Participation in Local Public Programs and Projects

Explanatory Variable	Dependent Variable							
	Personally involved in planning activities		Personally involved in implementation activities		Personally involved in monitoring activities		Personally involved in evaluation activities	
	dF/dx	z	dF/dx	z	dF/dx	z	dF/dx	z
Age	0.0011	1.10	0.0004	0.42	0.0020	2.01*	0.0012	1.20
Sex	0.0514	1.63	0.0507	1.60	0.1052	3.23*	0.0502	1.61
Marital status	-0.0025	-0.06	-0.0175	-0.43	0.0272	.68	-0.0194	-0.48
Household head	0.0018	0.06	0.0138	0.44	-0.0145	-0.46	0.0043	0.14
Household size	0.0057	0.99	0.0056	0.96	0.0006	0.10	0.0041	0.72
Education	0.0483	1.74**	0.0295	1.06	0.0502	1.79*	0.0438	1.60
Working members	0.0107	0.71	0.0148	0.98	0.0204	1.35	0.0124	0.82
Government jobs	0.0354	1.17	0.0278	0.89	0.0033	0.10	0.0121	0.39
Income	-2.94e-06	-1.92**	-3.08e-06	-1.92	-2.49e-06	-1.69*	-3.26e-06	-1.98*
Own house	0.0673	2.53*	0.0531	1.98	0.0377	1.40	0.0173	0.66
Bulacan	-0.0458	-1.33	-0.0121	-0.35	-0.0120	-0.33	-0.0593	-1.75**
Municipality	-0.2198	-6.16*	-0.1586	-4.58	-0.1566	-4.52*	-0.1788	-5.24*
Highly developed	-0.1188	-4.12*	-0.0924	-3.25	-0.0587	-2.04*	-0.0929	-3.28*
Reelected	0.1407	4.03*	0.1334	3.82	0.1298	3.71*	0.1130	3.21*
LGU partner	-0.2588	-3.82*	-0.2846	-4.13	-0.3151	-4.65*	-0.2626	-3.87*
NGO partner	-0.0876	-1.37	-0.1056	-1.62	-0.1415	-2.22*	-0.1241	-2.01*
Business group partner	-0.1773	3.07*	-0.2208	-4.17	-0.2454	-4.83*	-0.2081	-3.93*
Same respondent	0.0031	0.06	-0.0184	-0.37	-0.0475	-0.96	0.0161	0.32
Experimental group	0.2261	4.40*	0.2705	5.14*	0.2615	4.82*	0.2291	4.38*
Aware of the Index	0.1887	3.48*	0.1796	3.34*	0.1359	2.59*	0.1741	3.31*
Received <i>komiks</i>	0.1092	1.73**	0.0881	1.43	0.1061	1.68**	0.0824	1.38
Seen poster	-0.0252	-0.59	-0.0036	-0.08	-0.0140	-0.31	-0.0260	0.62
GOFORDEV Meeting	0.0278	0.46	0.08710	1.39	0.0869	1.39	0.1112	1.80**
Number of observations	1083		1083		1083		1083	
LR chi-square	234.78		207.96		182.07		206.79	
Prob>chi-square	0.0000		0.0000		0.0000		0.0000	
Pseudo-R-squared	0.2096		0.1827		0.1576		0.1846	

Note: Estimated using probit regression. \*\* and \*\*\* mean that the underlying coefficient is significantly different from zero at the 5% and 10% confidence levels, respectively. dF/dx denotes the change in probability due to a unit change in the independent variable x.