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**Leadership and Innovation under Decentralization:
A Case Study of Selected Local Governments in the Philippines**

by

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Leadership and Innovation under Decentralization: A Case Study of Selected Local Governments in the Philippines

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Abstract

This study investigates the importance of leadership as a driver of local government innovations. Based on a survey of 209 innovations introduced in selected 48 local governments in the Philippines during the period June 2004-June 2008, the observable qualities and possible incentives of incumbent mayors are linked empirically with their reported number of innovations. The Poisson regression results show that the statistically relevant incumbent's characteristics are age, educational attainment, and experience in the public sector, re-election status and terms in office, controlling for other factors. Also, the fiscal capacity of the local government and the poverty status of the local population are found statistically significant. However, all these factors vary in relative importance across types of innovations. Several policy inputs are suggested to hone the leadership qualities of incumbent mayors for greater adoption of innovations.

Key words: Incumbent leaders, local government innovations, Philippines

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I. Introduction

Many developing countries in Asia like Vietnam, Indonesia, India and China and in other parts of the world adopted fiscal decentralization programs in recent decades to improve the delivery of frontline public services (World Bank 2005, Bardhan and Mookherjee 2006, Bird and Vaillancourt 1998). The improvements are expected since local authorities, with their superior information and direct accountability to their constituents, can better match service provisions to with the people's needs. Further, local officials may experiment or innovate as well in the production of public goods if only to compare favorably with their more enterprising peers (Oates 1972). But since local leaders often enough differ in talent and motivation, and face varying opportunities and constraints, they would adopt or share novel ideas at different paces. If so, then the situation could widen inequities in access to basic services, especially in rural areas where local government tax revenues are often inadequate. To help identify policy measures to close the innovation gaps, this paper investigates the drivers of local innovations based on a case study of selected local governments in the Philippines.

Of late, the subject of local government innovations has gained as much attention as other topics on fiscal federalism in both the literature and policy discussions. Initially, the interest on innovations was focused on developed, federal countries like the USA, France, Germany, Great Britain, Canada, New Zealand and Australia (Kamarck 2004). But as government reforms and modernization including developments in public administration paradigms (e.g., new public management, government re-engineering) spread across countries, the focus widened to cover the innovations and *best practices* in developing countries as well. Recently, however, novel public services in Brazil, South Africa, Chile and the Philippines have been noted (Ford Foundation 2005). Some focusing on Asian experiences, various scholars have also further

classified these innovations according to their novel features, rates of diffusion or adoption, correlates or determinants, and impact or sustainability (Kim, Lee and Kim 2007, Wu, Ma and Yang 2010, Kim 2008, Siddique 2007, Walker 2006). In the Philippines, Brillantes (2001) cited the importance of enabling policy environment, aggressive civil society, financial status, access to information or expertise through training or engagement with local academic institutions, and the quality of the local chief executive (i.e., mayor or governor). Broadly similar conditioning factors and, importantly, leadership are emphasized also in case studies of local innovations in Latin American countries and elsewhere (Campbell and Fuhr 2004, Gabris, Golembiewski and Ihrke 2001).

Following the lead of previous studies that emphasize leadership, an agency model of the incumbent local chief executive (i.e., municipal or city mayor) is adopted in the empirical analysis part of this paper. Specifically, the adverse selection version of the agency model is used to highlight the connection between the innate quality of the political leader and local fiscal decisions, including the decision to adopt innovation (Persson and Tabellini 2002, Besley 2006, Barro 1973). This conceptual framework seems appropriate since local leaders are more easily qualified based on their observed characteristics rather than on their exercise of leadership. Some of the important characteristics are the incumbent's educational attainment, experience and electoral incentive (particularly, term in office). Arguably, these personal characteristics and the institutional incentives will be correlated with the local chief executive's desire to lead to achieve her political goals (to serve the people's, personal or group interests).

Analyzing the incidence of innovations from the perspective of the local chief executive (LCE) is also apt in the case of the Philippines because mayors and governors command enormous administrative and political powers. They propose and then disburse the annual fiscal

budgets of their local government units (LGUs). With this power, they can prioritize public services and use their discretionary funds to win supporters or return favors, subject only to the administrative oversight of the national government. More often than not, the incumbent LCEs are supported by the majority in the local councils, get to appoint their own wards in key positions, and effectively appoint their own successors (mostly their kins) (de Dios 2007, Lacaba 1995), and make fiscal decisions to be re-elected (Solon, Fabella and Capuno 2009).

To explore further the role of leadership as an innovation driver, this study presents the case of selected forty eight Philippine cities and municipalities with reported 209 innovations during the period June 2004-June 2008. The focus is on the then incumbent LCEs, particularly their observable qualities and their electoral incentives, and the empirical relationships of the leadership characteristics with the number of innovations in their respective political jurisdictions, controlling for other factors. The empirical results show that the rates of innovations are determined by the local government's fiscal capacity, the poverty status of the local population, and the mayors' experience and political motivations. These findings suggest a few inputs to policy to induce innovative leadership under decentralization.

II. Local government innovations under decentralization

Shortly after the enactment of the Local Government Code in 1991, many local government units (LGUs) began to innovate. One trigger for this is their greater fiscal autonomy achieved through a bigger share in the internal revenues of the national government and greater expenditure responsibilities. According to Manasan (2007), the share of LGUs in the general government expenditures net of debt service grew from an annual average of 11 percent in 1985-1991 to 22.9 percent in 1992-2003. The corresponding figures for their share in the general

government revenues for the same periods are 4.9 percent and 6.9 percent, respectively. Another impetus to innovation is the closer accountability of LGU officials to their constituents. Under the Code, elected local officials have a shorter term in office (three years) and can assume the same office for only three consecutive terms. Also, elected officials can be recalled through direct referendum if they have lost the confidence of their constituents. The people can also directly legislate. Further, LGUs are mandated to have private sector representatives in local consultative bodies for health, education, peace and order, and development planning. (Nolledo 1992)

Early innovations were in health services, which comprised the bulk of national government functions devolved to LGUs. Most notably, the provincial governments of Bukidnon and Guimaras established their own health insurance programs. The city governments of Puerto Princesa and Cotabato put up satellite clinics and used barangay (village) halls to provide curative care services in remote areas. The city governments of Lapu-Lapu and Olongapo mobilized health volunteers, women's groups and private practitioners in medical missions (Pineda 1998). There were also other developments. The municipal governments of Masinloc (of Zambales province), Sta. Maria (of Bulacan province), and Kalibo (of Aklan province) pioneered in the enhanced management of environmental, marine and coastal resources. The city governments of Cebu, Muntinlupa and Naga and the provincial government of Bulacan pioneered in e-governance to facilitate and insure transparency in local government transactions. Other innovations were designed to tap non-traditional sources of revenues or resources (user fees in Malalag, Davao del Sur, and municipal bond floatation in Victorias, Negros Occidental), deepen democratic participation and accountability ("people's congress" in Dumarao, Capiz, and "Pahayag sa Banwa" in Batad, Iloilo), or reduce poverty through livelihood, housing or other

targeted programs (e.g., in General Santos City and the town of Guagua, Pampanga). (Galing Pook 2001, 2002 and 2006, Brillantes 2001).

While it is generally agreed that more LGU innovations occurred since 1991 than before it, there is as yet no official count of innovations or best practices.² Arguably, among the most complete are the rosters of applicants and winners of the Galing Pook Awards (GPAs) of the Galing Pook Foundation and of the Sentrong Sigla certification of the Department of Health.³ For the period 1994-2005, the GPA lists a total of 1,384 local programs or projects submitted for consideration. Of these, 208 were adjudged outstanding or trailblazing programs. Some LGUs – more famously, the cities of Marikina and Naga, and the provinces of Bulacan and Nueva Ecija – have won several GPAs although for different programs. Over the period 1999-2005, the Sentrong Sigla certificate has been conferred to about 1,420 rural health units (of municipalities) and city health centers all over the country.

The numbers of LGUs that adapted or replicated innovations made elsewhere are even harder to estimate. To be sure, however, mechanisms are in place to facilitate the spread or diffusion of local innovations. Sometimes with support from donor or bilateral institutions, local government officials go on exposure trips or educational tours (the so-called *Lakbay Aral*), undergo formal trainings and workshops, or participate in peer-to-peer mentoring to acquire information or expertise. Also, newly elected local officials go through orientation and training seminars given by the Local Government Academy, Development Academy of the Philippines or academic institutions. Moreover, the League of Municipalities of the Philippines and the League of Cities of the Philippines both have their own provincial chapters that serve as venues for

² In the Philippines, “innovations”, “best practices” and “good practices” in local public services or administration are used interchangeably in that each is often defined in relation to what the LGU or its neighbors had before, rather than on the purely technical merit of the innovation as commonly used in business or engineering.

³ However, even these lists may be partial since other innovative LGUs may not have vied for these awards or certification programs.

sharing knowledge or fostering competition among their members. The same purpose is served by provincial development councils (found in all provinces), inter-local health zones (in most congressional districts), metropolitan arrangements (in Tagbilaran and Iloilo, for example), and other inter-LGU alliances (say, for coastal and marine resource management).

The importance of access to information and other factors that possibly sparked LGU creativity have been investigated previously. In health, the critical motivating factors are the inadequate fiscal transfers for the expenditure responsibilities devolved to the LGUs and the quality of the local chief executive (Quimpo, 1996). The importance of the quality of local leadership – which include vision, technical/managerial competence, political commitment – are again emphasized in the study of innovative practices in human resource management in the provinces of Bulacan and Bohol, the cities of Marikina and Naga, and the municipality of Malalag (Juan, 1999). These early studies provide rich descriptions of the coverage, the possible causes and consequences of local innovations. The task now at hand is to tease out the relative importance of the various factors found correlated with innovations to provide detailed guides to policy.

III. An innovation survey of selected LGUs

Given the then limited data on LGU innovations, a survey of 48 cities and municipalities in four Philippine provinces was undertaken in May-June 2008. A two-person team visited the sites and interviewed mayors, vice mayors, municipal or city administrators and local planning officers to collect information on local innovations, fiscal and administrative profiles, and the characteristics of the LCEs. Supplementary data were culled from the National Statistical

Coordination Board, Department of the Interior and Local Government and the Commission on Elections and other official sources.

For this case study, the four provinces were purposely selected based on the reported innovativeness of some of their component LGUs. These innovative LGUs and most of their neighboring towns or cities were visited to inquire them as well about their own innovations and motivations. The selection of the sample LGUs is based on the assumption that the spread of innovation or at least the drive to innovate will be greater among neighbors than among distant LGUs. It should be noted that the forty eight LGUs studied here are not to be taken as representative of the more than 1600 municipalities and cities in the country, although they account for substantial proportion of the LGUs in their respective provinces.

Both located in Luzon, the provinces of Palawan and Camarines Sur are in the south west and south east of Metro Manila, respectively. The provinces of Iloilo and Negros Occidental are in the Visayas, the central part of the Philippines. An island province, Palawan is nearly as big in terms of land area (17,031 square kilometers) as the three other provinces combined. In 2005, Palawan was the least populated (886,000) while Negros Occidental was the most populated (2,846,000). The most-widely spoken language is Tagalog in Palawan, Ilonggo in Iloilo and Negros Occidental, and Bicolano in Camarines Sur. In 2000, the official estimates of population poverty incidence were about 36 percent in Palawan, 48 percent in Camarines Sur, 37 percent in Iloilo, and 50 percent in Negros Occidental. All four provinces are predominantly agricultural, with Iloilo and Negros Occidental as the traditional main sugar producers in the country.

Figure 1. Map of the Philippines, and the provinces of Palawan, Camarines Sur, Iloilo and Negros Occidental



Situated in these provinces are some of the most innovative LGUs in the Philippines. These are Puerto Princesa City in Palawan, Naga City in Camarines Sur, Bacolod City in Negros Occidental, and the municipalities of Concepcion and Batad in Iloilo. In 1994-2002, Naga City has won seven Galing Pook Awards, Puerto Princesa City five, and the two Iloilo municipalities one each. Bacolod City has been recognized for excellence in public affairs and business-friendly orientation. With these LGUs as references, their neighboring LGUs were likewise interviewed.

To guide the selection of the neighboring LGUs, it is posited that communication channels or the pathways by which news or information spread across LGUs enable decisions makers (LCEs, in this case) to learn directly from their peers or other authorities (as suggested in Rogers 1995). The same channels also enable the local constituents or political rivals to be aware of innovations elsewhere which they can now use as performance benchmarks. One such channel is the province's road network. Thus, the municipalities that lie from north to south along the major provincial roads in Palawan and Iloilo are included.

Another possible information pathway is participation in formal, local inter-LGU networks, in the province. Thus, all the members of the Metro Naga Development Council (MNDC) in Camarines Sur, and of the Northern Iloilo Alliance for Coastal Development (NIACDEV) and the Banate Bay Resource Management Council, Inc. (BBRMCI) in Iloilo are included in the survey.⁴ All sample LGUs were also asked about their participation in educational tours, conferences, exhibits or training courses that exposed them to innovations in other LGUs.

Of the forty eight sample LGUs, fifteen municipalities including the municipality of Concepcion in Iloilo are included. In Bacolod, the sample LGUs comprises all and only the

⁴ Note that there are similar networks where membership is nearly universal if not mandatory. All component LGUs in a province are members of the provincial development council, most municipalities belong to the local chapter of the League of Municipalities of the Philippines, and most cities to the local chapter of the League of Cities of the Philippines. While these networks may be critical sources of information, membership in them is unlikely to vary much across areas.

eleven cities including Bacolod City. The sample LGUs for Palawan (ten) and Camarines Sur (twelve) include both their principal cities (Puerto Princesa and Naga, respectively) and the surrounding municipalities. The samples in each province constitute about a thirty four percent of the total number of LGUs in Iloilo, Negros Occidental and Camarines Sur, and about forty percent in Palawan.

Using a four-page questionnaire, the respondent is asked to identify her LGU's six top or best innovative programs, with three of them in expenditures services and the other three in revenue or public administration services. The innovations could be a product (e.g., health insurance service), process (e.g., simplified business licensing procedure) or organizational (e.g., wider people's consultation), but the key distinction is that it is new and significantly improved compared to previous or current services. This definition of innovation is adapted from the Oslo Manual used in innovation surveys of firms in Canada and OECD countries.⁵ To verify the reported innovations, the respondents were asked to provide the names, if any, of the new programs. A partial list of the innovations is provided in Annex 1. While this approach to innovation could be biased, it has the advantage of having the decision making unit (here, the LGU) rather than the innovation itself (as under the so-called objective approach) as the unit of analysis. With this advantage, it is then straightforward to link innovation to various factors internal and external to the decision making unit, and to compare innovators from non-innovators (Mairesse and Mohnen 2010). This more comprehensive approach seems appropriate for the purposes of the study as an initial attempt to empirically establish the drivers of LGU innovations in the Philippines.

⁵ The instruments used in innovations surveys and developed by Statistics Canada and the OECD countries are available in www.statcan.ca/english/sdds/instrument/428_Q1_E.pdf and www.oecd.org/dataoecd/37/39/3748901.pdf.

To guide the respondents, the local government services are classified into “public services” like health, education, nutrition and public infrastructures that directly confer benefits to the constituents, and “revenue mobilization and public administration” like tax collection and development planning that have only indirect or less direct benefits to the people. Additional information collected were about the timing of innovations, the motivations for and sources of information, whether the innovations are considered original or replicas, and whether the innovations have won awards or prizes.

The forty eight LGUs reported a total of 209⁶ innovations since June 2004 and up to the time of the survey (May-June 2008). The sample LGUs in Palawan reported thirty nine, in Iloilo sixty two, in Negros Occidental fifty nine, and in Camarines Sur forty nine. Of the total, 63 percent were innovations in public services that directly impact local welfare (like health, education, social welfare). Of total, about 78 percent were adopted since June 2004, and nearly 21 percent were introduced only after May 2007. Most respondents said that the innovations were meant “to meet constituent needs or demands (48 percent), “to encourage people’s participation”(10 percent), or to “improve the quality and performance of civil servants in the LGU”(7percent). Most respondents claim that the main source of innovative ideas are internal sources (mayors, own technical staff or local stakeholders), and external sources (i.e., institutional or government sources and Lakbay Aral activities) are only second in importance. Many are also aware of the highly acclaimed innovative LGUs like Naga City and Marikina City. Due to a large number of “don’t know” responses, there is no clear pattern as to whether the local innovations were copied from or replicated elsewhere. About 25 percent of the reported innovations merited awards or

⁶ The total excludes the five innovations that were reported in excess of the top/best six that were asked of the respondents in three LGUs. The excluded innovations are in “public services” or expenditure services.

recognitions from local, regional or national award-giving bodies (including national government agencies).

IV. Empirical framework

The survey collected counts or numbers of local innovations during the period May 2004-June 2008, which covers one complete term (June 2004-May 2007) and about a year in office after the May 2007 local elections. To analyze the determinants of the incidence of innovations during the said period, the poisson regression model is applied on the survey data. The same regression model is used in similar studies of local government innovations in other countries (e.g., Ashworth, Geys and Heyndels 2006, Boemkhe and Witmer 2004, Feller, Elmes and Meyer 1982).

Formally, the Poisson regression model specifies that each y_i is drawn from a Poisson distribution with parameter λ_i , which is related to the regressor \mathbf{x}_i , as in the following equation (Greene 2003)

$$Prob(Y_i = y_i | \mathbf{x}_i) = \frac{e^{-\lambda_i} \lambda_i^{y_i}}{y_i!}, \quad y_i = 0, 1, 2, \dots$$

It is assumed that λ_i is a log-linear function of \mathbf{x}_i , i.e.

$$\ln \lambda_i \equiv \mathbf{x}_i' \boldsymbol{\beta}.$$

The Poisson regression model is estimated using maximum likelihood method. Instead of the coefficients, we estimate the incidence rate ratios (IRR), which measures the change in the incidence rate of y_i due to a unit change in x_j , holding all the other \mathbf{x} 's constant. Specifically, the IRR for x_j is computed as

$$\frac{e^{\ln(E) + \beta_1 x_1 + \dots + \beta_j (x_j + 1) + \dots + \beta_k x_k}}{e^{\ln(E) + \beta_1 x_1 + \dots + \beta_j x_j + \dots + \beta_k x_k}} = e^{\beta_j},$$

where E measures the exposure which when multiplied against the incidence rate yield the observed number of events.

The survey data pose a few estimation issues. First, there could be wide variations across provinces in both observed and observed factors that influence the incidence of local innovations. Some of the factors that affect the transmission of knowledge within the province would include sociocultural networks, political institutions or geography. These are controlled for here by introducing provincial dummy variables and estimating robust standard errors based on the provincial clustering of the sample LGUs.

Second, the important determinants of innovations may be different between expenditure services and revenue services. To verify this, separate regression runs are done for all types of innovations, innovations in public services only, and innovations in revenue mobilization and public administration only. The regression equations are estimated using the poisson module in STATA. Third, the reported innovations are limited to the six best that the LGU adopted during the study period. To handle the upper censoring of the reported innovations, the CENPOIS module in STATA is also used (Hilbe and Judson 1997).

Finally, to control for possible selection bias – since participation in Lakbay Aral activities or membership in inter-LGU networks could be endogenous – instrumental variable technique, particularly the STATA module IVPOIS (Nichols 2007), is applied. However, with only limited data, the unique identifying instrument used is a dichotomous variable “municipality” that indicates whether or not the LGU is a municipality (instead of a city). The municipalities are presumed more likely to join LGU networks since they cluster together more often than cities do (the spatial clustering of cities is observed only in Metro Manila and Metro

Cebu in the Philippines). As will be shown in Table 1 below, there is also not much variation across the sample LGUs in their participation in pertinent Lakbay Aral activities.

Data

The definitions and summary statistics of the regression variables are presented in Table 1.

There are three dependent variables, namely: Innovations (the total number of innovations since June 2004), Innov_service (number of innovations in service delivery since June 2004), and Innov_revenue (number of innovations in revenue mobilization or public administration since June 2004). The average number of innovations for all types is four, nearly three for innovations in public services, and around two for advances in revenue mobilization or public administration.

Table 1. Variable definitions and summary statistics

Variable	Definition	Obs	Mean	Std. Dev.	Min.	Max.
Innovations	Total number of innovations since June 2004	48	4.35	1.41	0	6
Innov_service	Number of innovations in service delivery since June 2004	48	2.75	0.67	0	3
Innov_revenue	Number of innovations in revenue mobilization or public administration since June 2004	48	1.60	0.96	0	3
Per capita budget	LGU total budget per capita in 2007	48	4083.5	16535.8	737.6	116077.2
Per capita budget2	Square of per capita budget 2007	48	2.84e+08	1.94e+09	543983.7	1.35e+10
Poverty rate	Poverty incidence rate	48	45.88	13.98	9.12	71.82
Palawan	1 if LGU in Palawan; 0 otherwise	48	0.21	0.41	0	1
Iloilo	1 if LGU in Iloilo; 0 otherwise	48	0.31	0.47	0	1
Negros Occidental	1 if LGU in Negros Occidental; 0 otherwise	48	0.23	0.42	0	1
Camarines Sur	1 if LGU in Camarines Sur; 0 otherwise	48	0.25	0.44	0	1
High school	1 if mayor finished high school only or below; 0 otherwise	48	0.04	0.20	0	1
Mayor_age	Mayor's age in years	48	51.81	11.16	33	75
Mayor_male	1 if mayor's male; 0 otherwise	48	0.77	0.42	0	1
Business	1 if mayor's main occupation is business; 0 otherwise	48	0.58	0.50	0	1
Private sector	1 if mayor's previous work was in the private sector	48	0.48	0.50	0	1
Re-elected	1 if mayor was re-elected in May 2007 elections; 0 otherwise	48	0.52	0.50	0	1
First term	1 if mayor is on his or her first term; 0 otherwise	48	0.46	0.50	0	1
Last term	1 if mayor is on his or her last term; 0 otherwise	48	0.23	0.42	0	1
Lakbay Aral	1 if LGU participated in educational tours, conferences, exhibits, etc.; 0 otherwise	48	0.96	0.20	0	1
LGU network	1 if LGU is a member of local alliances or networks (NIACDEV, MNDC or BBCRMCI); 0 otherwise	48	0.35	0.48	0	1

The explanatory variables can be classified into three groups. The first group pertains to the fiscal capacity of the LGU to undertake what could be costly innovations. Fiscal capacity is measured by the LGU's budget per capita in 2007 and its squared value. The average per capita budget is a little less than 4,100 pesos. However, it ranges from about 738 pesos to 116,077 pesos. Since most LGUs are heavily dependent on central fiscal transfers, their budget in a given year is also a good indicator of their "permanent income" and thus of their organizational capacity as well. The squared value of the per capita budget is used to determine if fiscal resources are subject to diminishing returns. Also belonging to this group of regressors are the LGU-level indicators of sources of information on innovations, namely: Lakbay Aral (whether any LGU official has participated in educational tours, conferences, exhibits or other activities where innovations are presented or discussed), and LGU network (whether the LGU is a member of a local alliance or network where technical know-hows can at least be shared). About 96 percent have participated in Lakbay Aral, while only about 35 percent are members of local alliances.

The second group of regressors accounts for the institutional, geographic, demographic and sociocultural factors that influence decisions to innovate. Poverty rate is introduced to capture both the demand for services and, possibly, the civic quality of the local voters. On the average, around 46 percent of the local population is poor. To further control for unobserved provincial characteristics (e.g., local culture, geography), three provincial dummy variables are defined for Palawan, Iloilo, Negros Occidental, with Camarines Sur as the control province. The dummy variables would also serve to account for the differences in the political interactions among the sample LGUs within each province. Unlike the sample LGUs in the three other provinces, for example, those in Camarines Sur are all members of the Metro Naga Development Council.

The last type of explanatory variables pertains to the LCE's characteristics. These are meant to capture the LCE's skills, competence and experience (Mayor_age, Mayor_male, High school, Business and Private sector). The average age of the mayors is about fifty two years, and the oldest is seventy five. About three in four are males, and half of them have a business background or worked previously in the private sector. About 4 percent of them attained high school education only or less. About half of the sampled LCEs were re-elected in May 2007 or in their first term of office. Nearly one in five mayors was on his or her last term in office at the time of the interview.

V. Determinants of the number of innovations

All innovations

Table 2 shows the results of the regression analysis of the total number of innovations (all types). Model 1 and Model 2 basically have same regressors except that Model 2 also includes LGU network and Lakbay Aral. The last two regression results reported in the last four columns of Table 2 control for censoring of the number of innovations and possible endogeneity of LGU network, respectively.

In both Model 1 and Model 2, the statistically significant regressors are Per capita budget, Per capita budget2, Mayor_age and Re-elected, the last two being significant at the 1-percent level. The estimated IRRs indicate that richer LGUs have only slightly higher innovation rate than less well-off LGUs. However, the negative z -statistic for the variable Per capita budget2 suggests a lower rate of innovation as the LGU becomes richer. The results imply that rich LGUs may have many innovations already in place and thus expect an additional, costlier innovation to

yield only marginal returns. However, the fiscal variables are only weakly significant (10-percent level).

Table 2. Determinants of the total number of innovations

Explanatory variables	Poisson regression				Censored Poisson regression		Instrumental variable Poisson regression	
	Model 1		Model 2		IRR	z-statistic ^a	Coefficient	z-statistic
	IRR	z-statistic ^a	IRR	z-statistic ^a				
Per capita budget	1.000*	1.75	1.000*	1.69	1.000*	1.92	0.00009*	1.69
Per capita budget2	1.000*	-1.92	1.000*	-1.89	1.000**	-2.14	-8.0e-10*	-1.92
Poverty incidence	0.996	-1.06	0.993*	-1.73	0.995	-0.95	-0.009*	-1.90
Iloilo	1.076	0.80	0.942	-0.39	0.921	-0.42	-0.183	-0.67
Negros Occidental	1.076	0.88	1.039	0.44	1.034	0.36	0.016	0.10
Camarines Sur	0.991	-0.08	0.751	-1.32	0.877	-0.44	-0.576	-1.04
Mayor_age	1.007***	3.19	1.006***	2.71	1.006***	2.69	0.006	1.49
Mayor_male	0.951	-0.43	0.929	-0.64	0.875	-1.39	-0.112	-0.79
High school	0.928	-1.50	0.913	-1.18	0.781***	-3.38	-0.128	-0.83
Private sector	0.881	-1.29	0.890	-1.22	0.839**	-1.97	-0.108	-0.80
Businessman	0.897	-1.15	0.895	-1.24	0.876	-1.02	-0.096	-0.66
Re-elected	0.656***	-4.01	0.607***	-4.84	0.628***	-5.81	-0.561*	-1.71
Last term	1.318	1.34	1.288	1.19	1.221	0.76	0.202	0.78
First term	0.842	-1.21	0.767*	-1.68	0.749*	-1.72	-0.332	-0.84
LGU network			1.279**	1.97	1.182	1.03	0.477 ^b	0.86
Lakbay Aral			1.030	0.26	1.114	0.78		
Constant							2.045***	3.86
Number of obs.	48		48		48		48	
Log-pseudolikelihood	-87.149		-86.861		-82.709			
Goodness of fit χ^2	18.541		17.964					
Prob> χ^2	0.9998		0.9999					

^a Computed using standard errors that are adjusted for 4 clusters (province).

^b Endogenous regressor = LGU network; instruments = Muni, Per capita budget, Per capita budget2, Poverty incidence, Iloilo, Negros Occidental, Camarines Sur, Mayor_age, Mayor_male, High school, Private sector, Businessman, Re-elected, Last term, First term.

***Significant at the 1% level. **Significant at the 5% level. *Significant at the 10% level.

Further, Model 1 shows that the LGUs led by older mayors have about 1.007 times the innovation rate of those led by younger LCEs. However, incumbent LCEs that were re-elected have only about 0.656 or 0.607 times the innovation rate of those that were newly-elected in May 2007 elections. These indicate that LCEs with longer experiences or are more knowledgeable tend to be more enterprising, but their success in seeking another term in office makes them less inclined to innovate.

The importance of re-election performance (1.006) is likewise evident in Model 2, which now include as well sources of innovative ideas (LGU network and Lakbay Aral). In addition,

however, LCEs in their first term are found to have only about 0.767 times the innovation rate of those in their second or third term. This may be explained by the fact that LCEs on their first term had only a short time at the time of the interview (only one year since May 2007 election) to learn and adjust to their new roles. That LCEs seem “to learn by doing” can be inferred further from the IRR of the variable Last term, which indicates whether or not the LCE is still eligible to run for the same office. While not statistically significant, the estimated IRR for this variable is 1.288, which suggests that LCEs with nearly nine consecutive years in office have greater innovation rate than those with only six years or less.

Another interesting result in Model 2 is that LGUs that join networks – where members may exchange information, mentor each other or engage in friendly competition – appear to be more enterprising and innovative. Significant at the 5-percent level, their innovation rate is 1.279 greater than those who are not network members. However, the IRR of Lakbay Aral while positive and greater than unity is not statistically different from zero.

Another statistically, although weakly (10 percent), significant IRR found in Model 2 is that for Poverty incidence. Since it is less than unity (0.993), this particular result indicates that fewer innovations are adopted in areas with poor population than where there are less poor people. To the extent that poverty correlates with the level of education of the voters, the lower innovation rate in the poor LGUs may then be due to voters having low expectations or demands of their leaders.

As for the other variables, their estimated IRRs and significance are qualitatively similar across the two models. Further, the two models appear to fit the data very well. The goodness-of-fit χ^2 indicates the hypothesis that the data are Poisson distributed cannot be rejected.

Some of the results change after controlling for censoring of the reported innovations or endogeneity of participation in inter-LGU networks. After controlling for censoring, the new statistically significant IRRs are High_school and Private_sector. Both factors assess the LCEs' ability honed through formal education or in the non-government sector. The LCEs that had only high school education or less have only 0.781 times the innovation rate of those who continued to college or some other higher education levels. Those who had been working in the private sector prior to being elected have only 0.839 times the innovation rate of those who come from a different sector. The results suggest that, controlling for other factors, one's experience in the private sector may not count very much in introducing innovation in the public sector where the organizational culture and incentives are different.

However, the qualitative results for the variables Per capita budget and its squared value, Mayor_age, Re-elected still hold in this case. But the two participation variables – LGU network and Lakbay Aral – and Poverty incidence as are the rest of the explanatory variables are not anymore statistically significant. After instrumenting for LGU network, only four variables remain statistically significant. The respective coefficients of the fiscal resources of the LGU (Per capita budget (0.00009) and Per capita budget2 (-8.0e-10)) and the income status of the local population (Poverty incidence (-0.009)) have the same signs and levels of significance as in Model 1 and Model 2. Among the remaining variables, only the IRR of Re-elected (-0.561) is statistically significant, although now only at the 10 percent level. Showing a negative sign, it also has qualitatively the same implications as in the other models (i.e., re-electionist LCEs are less likely to innovate than others).

Innovations in service delivery

Table 3 shows the significant determinants of innovations in service delivery (or expenditure services). Under Model 3, the regressors with the statistically significant IRRs are Poverty Incidence (0.996), Mayor_age (1.004), High school (0.842), Re-elected (0.704) and Negros Occidental (0.917). However, Negros Occidental and Poverty incidence do not appear to be significant anymore in Model 3 where the explanatory variables for sources of innovation ideas (LGU network and Lakbay Aral) are included. But the IRRs of the three other variables – Mayor_age (1.004), High school ((0.809), and Re-elected (0.702) – remain mostly highly significant (1-percent level). The results of the goodness-of-fit χ^2 also confirm that the data fits a Poisson distribution. Also, the levels of significance of the regressors in Table 3 are similar to those in Table 2.

After controlling for censoring of the reported innovations in service delivery, only the IRRs of Negros Occidental (1.086), High school (0.869) and Re-elected (0.696) maintain their statistical significance. Unlike in Model 1, the reported IRR of Negros Occidental is now greater than unity, which suggests that the incumbent city mayors in Negros Occidental appear to be more innovative than the mayors in the three other sample provinces. One possible explanation is that city mayors may be more “competitive” owing to their small numbers (less than 100) than municipal mayors (more than 1500), and that the Negros Occidental cities are comparable to one another. In all the regression results so far, measures of the fiscal capacity of the LGU (Per capita budget, Per capita budget2) do not appear to be statistically relevant driver of service innovations. This means that LGUs are not constrained by their fiscal revenues to innovate in services that directly benefit the people.

Table 3. Determinants of the total number of innovations in service delivery

Explanatory variables	Poisson regression				Censored Poisson regression		Instrumental variable Poisson regression	
	Model 3		Model 4		IRR	z-statistic ^a	Coefficient	z-statistic ^a
	IRR	z-statistic ^a	IRR	z-statistic ^a				
Per capita budget	1.000	0.69	1.000	0.16	1.000	-0.11	0.00002	0.41
Per capita budget2	1.000	-0.89	1.000	-0.30	1.000	0.04	-1.83e-10	-0.55
Poverty incidence	0.996*	-1.82	0.996	-1.29	0.997	-1.59	-0.005	-1.51
Iloilo	0.884	-1.51	0.865	-0.95	1.013	0.08	-0.225	-0.97
Negros Occidental	0.917***	-3.21	0.927	-3.05	1.086*	1.92	-0.115	-0.88
Camarines Sur	0.903	-1.63	0.867	-0.74	1.174	0.95	-0.312	-0.75
Mayor_age	1.004***	2.73	1.004*	1.86	1.003	1.28	0.004	0.91
Mayor_male	1.023	0.25	1.015	0.15	0.965	-0.47	0.012	0.11
High school	0.842***	-8.23	0.809*	-4.52	0.869**	-2.26	-0.201	-1.58
Private sector	1.009	0.09	1.006	0.07	1.006	0.05	0.011	0.10
Businessman	0.938	-0.75	0.940	-0.73	0.966	-0.49	-0.063	-0.52
Re-elected	0.704***	-6.55	0.702***	-8.36	0.696***	-8.58	-0.406	-1.34
Last term	1.174	0.87	1.154	0.71	1.272	1.39	0.138	0.63
First term	0.906	-1.01	0.902	-0.86	0.898	-1.20	-0.158	-0.47
LGU network			1.025	-0.96	0.861	-1.61	0.173 ^b	0.41
Lakbay Aral			0.892	0.20	0.997	-0.03		
Constant							1.433***	3.27
Number of obs.	48		48		48		48	
Log-pseudolikelihood	-72.855		-72.853		-61.461			
Goodness of fit χ^2	9.203		9.200					
Prob> χ^2	1.000		1.000					

^a Computed using standard errors that are adjusted for 4 clusters (province).

^b Endogenous regressor = LGU network; instruments = Muni, Per capita budget, Per capita budget2, Poverty incidence, Iloilo, Negros Occidental, Camarines Sur, Mayor_age, Mayor_male, High school, Private sector, Businessman, Re-elected, Last term, First term.

***Significant at the 1% level. **Significant at the 5% level. *Significant at the 10% level.

In contrast, none of the explanatory variables is found statistically significant after controlling for possible endogeneity of participation in LGU networks. The results here could be due to the limited variability in the sample of service innovations. Given the limited sample, the variable “Municipality” may also be a weak instrument.

Innovations in revenue mobilization and public administration

Finally, Table 4 shows the statistically relevant drivers of innovations in revenue mobilization and public administration. Technically, these innovations in revenue and administrative services are no less important than the innovations in expenditure services. But from the point of view of the incumbent with only three years before she runs for office again, such innovations may be less preferable since her “investments” to improve in revenue

mobilization and administrative services will first appear as costs before they yield the benefits that will bear on the people's welfare.

Table 4. Determinants of the total number of innovations in revenue mobilization and public administration

Explanatory variables	Model 5		Model 6	
	IRR	z-statistic ^a	IRR	z-statistic ^a
Per capita budget	1.000*	1.69	1.000*	1.67
Per capita budget2	1.000**	-2.09	1.00**	-2.07
Poverty incidence	0.994	-0.77	0.988*	-1.86
Iloilo	1.554***	3.37	1.119	0.50
Negros Occidental	1.427**	2.22	1.272	1.30
Camarines Sur	1.164	0.65	0.604	-1.49
Mayor_age	1.012***	2.83	1.011**	2.26
Mayor_male	0.831	-0.82	0.795	-1.12
High school	1.114	0.90	1.184	1.48
Private sector	0.676**	-2.02	0.708*	-1.83
Businessman	0.828	-0.92	0.820	-0.95
Re-elected	0.570***	-2.75	0.458***	-3.28
Last term	1.677**	2.09	1.627**	1.98
First term	0.755	-1.19	0.587**	-2.15
LGU network			1.809***	4.48
Lakbay Aral			1.367***	2.73
Number of obs.	48		48	
Log-pseudolikelihood	-61.622		-60.939	
Goodness of fit χ^2	20.120		18.753	
Prob> χ^2	0.9995		0.9998	

^a Computed using standard errors that are adjusted for 4 clusters (province).

***Significant at the 1% level. **Significant at the 5% level. *Significant at the 10% level.

In comparison to the results reported in Table 3, those in Table 4 show both the same and other new statistically significant factors. In both Model 5, the variables with the statistically significant IRRs are Per capita budget (1.000), Per capita budget2 (1.000), Mayor_age (1.012), Re-elected (0.570), Iloilo (1.554), Negros Occidental (1.427), Private sector (0.676) and Last term (1.6777). In Model 6, wherein LGU network and Lakbay Aral are added to the list of regressors, the statistically relevant variables are Per capita budget (1.000), Per capita budget2

(1.000), Poverty incidence (0.988), Mayor_age (1.011), Private sector (0.708), Re-elected (0.458), Last term (1.627), First term (0.587), LGU network (1.809) and Lakbay Aral (1.367).

Thus, the results indicate that fiscal capacity could induce innovation in revenue mobilization or administrative services, while the local poverty condition could dampen such inclination, which may be understandable since a large, poor constituent would want to be provided for than taxed by their local governments. Also, the LCE's experience (as captured by age and private sector background) helps. Political incentives also seem to matter. Re-electionist or first-term mayors are unlikely to innovate, but those on their last terms are likely to have higher innovation rates. Two things could explain this. First, those in their last terms have had nine full years to learn and implement new products or processes, while those in their first or second term may still be learning the ropes. Second, those on their terminal term may want to leave a good reputation that his or her successor, usually another family member, can capitalize in the next election. Finally, the Poisson model also seems to fit the innovation data in this case as well, as suggested by the results of the goodness-of-fit χ^2 test.⁷

VI. Conclusion

In sum, the Philippines' nearly twenty years of experience provides convincing proof to Oate's hypothesis that local governments will have become more experimental and innovative under decentralization. Given the plethora of awards and recognitions that have been introduced in the Philippines since 1991, the number of previous studies on local innovations, and on the results of the survey reported here, the range of local innovations is wide, from services that directly confer benefits to the constituents to revenue mobilization and public administration. The

⁷ Censored poisson is not applied in Table 4 since no more than three innovations are reported in this case. The instrumental variable technique is also not applied due to limited data.

present study also shows that there are more innovations than formally reported or recognized. In addition, this study has sought to deepen understanding of leadership as critical driver of local innovations.

Arguably, the incumbent mayor's ability and inclination to lead well depend on the institutional milieu, her knowledge and experience, and the incentives she faces. Notwithstanding the data limitations, this paper has shown that the important institutional factors are the fiscal capacity of the local government and the poverty profile of the population, which partly indicate the qualities of the local bureaucracy and voting population, respectively. The rates of innovations are found to be greater in LGUs with greater fiscal capacity, which makes sense given the better quality of local civil servants and the resources involved in innovations. However, the innovations rates tend to be lower in LGUs with large indigent population, whose immediate demands may not permit much leeway for experimentation and innovation, except perhaps for those services that directly benefit them.

The incumbent mayor's knowledge and experience are partly reflected by her age, educational attainment and involvement in the private sector. The results confirm that older or highly educated mayors are more experimental, but their private sector experience is perhaps less suitable for introducing innovations in the local government. Put differently, LCEs with experience in the public sector have better perspective of the types of service improvements that can be accomplished in a government bureaucracy.

Finally, the results for the electoral performance and terms in office suggest that mayors respond to political incentives. Re-electionist and first termers appear to have lower innovation rates than their other peers. This could mean two things. First, first-termers and re-electionists may still be learning the ropes but may soon introduce changes as they stay longer in office.

Second, the re-electionists could be winning based on performances other than innovation. That is, being innovative may not be a decisive re-election factor. However, some mayors on their last term are induced to make hard decisions – especially the innovations in revenue mobilization or public administration. These results indicate that while political incentives matter, the effect of the incentives may vary across terms in office.

Finally, there is some evidence that participation in local inter-LGU alliances educational tours, exhibits or conferences contribute to the likelihood of innovations in local services. While these serve to facilitate the exchange of ideas, peer-to-peer mentoring, and foster friendly competition, they are not sufficient to make LCEs more entrepreneurial. Perhaps this is not surprising since knowledge of innovations alone does not guarantee its application, especially if the innovation is costly or yield benefits that the incumbent cannot credit to herself.

The results suggest a few inputs to policy. First, there is a need to strengthen the orientation of newly elected mayors, especially on civil service procedures, government rules, and public administration. The orientation should give them an idea of what needs to be improved and how best it can be done. Second, foster yardstick competition among LGUs through widespread public information and education campaign. The public should be made aware about the innovations in their neighboring towns with which to compare their own leader's accomplishments. A better informed citizenry will sharpen elections as a disciplining mechanism for sub-performing local officials. Finally, the quality of the local bureaucracy should be improved. There should be less emphasis on costly, impressionistic educational tours and more on hands-on, in-depth internship or mentoring programs and on post-graduate education.

In closing, the results of the study, though informative, are far from conclusive given the limited sample. Similar studies with more observations should be welcome. Applying

econometric techniques on the data, the analysis should identify sharper policy instruments to encourage the wider adoption and faster diffusion of innovations. Closing the gap between innovation leaders and laggards should help reduce the persistent widespread differences in local welfare under decentralization.

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Annex 1. Partial list of local innovations

LGU	Public Service Delivery	Revenue Mobilization and Public Administration
El Nido, Palawan	Livelihood Development Project Solid Waste Management Maine Protected Area Management	Business One Stop Shop Free to Open Source System Barangay Development Planning (through Participatory Resource Appraisal)
Taytay, Palawan	Clusterization of Barangays (one cluster, one big tangible project)	
Roxas, Palawan	Population, Health and Environment Program Solid Waste Management Program Fishery Code (Marine Protected Area)	Bayan-Barangay sa Kaunlaran ng Roxas (Barangay Development Planning and Resource Appraisal)
Aborlan, Palawan	Mobile Clinic (Medical Mission) Ube Loading and Plowing Area for Selecta (ice cream company) Material Recovery Facility	House-to-House Tax Collection One-stop shop for tax and payment collections
Narra, Palawan	Literacy Education Program through NFE class Sanitary Landfill/Waste Segregation Tourism Promotion and Marketing Program	Papremyo sa Resibo (real property tax collection) Collection of out-going fees from special products of the municipality (exports) Market building and stall rental fees
Sofronia Espanola, Palawan	Impok Pangkalusugan Deployment of parateachers	Creation of Municipal Economic Development Office
Brooke's Point, Palawan	Public health program (TB DOTs, malaria eradication and family tubal ligation) Educational scholarship programs Day care services	Tax amnesty program and intensive information campaign
Bataraza, Palawan	Bantay Bayan Deployment of health personnel to barangays Deployment of parateachers	
Kalayaan, Palawan	Solid Waste Management Program Bantay Dagat Program	
Puerto Princesa City, Palawan	Bantay Puerto Program Coastal Renewal Project (Bay Walk) Tourism Police	Tax Revenue Assessment and Collection System (TRACS) Business One-Stop Shop ISO 9001: 2000 Accreditation
Oton, Iloilo	(None reported)	(None reported)
Guimbal, Iloilo	Solid Waste Management Program Information campaign through radio Bantayan Festival	One-stop-shop Codification of day-to-day office operations
Miag-Ao, Iloilo	Secondary Growth Center Development Project Zero Waste Management Program	Cashiering system (for tax collection) Salakayan Festival
San Joaquin, Iloilo	"Rabies-Free" Municipality AI Local Emergency Response Team (ALERT)	Intensified tax collection from economic enterprises Pooling of barangay and municipal funds for bigger barangay projects
Zarraga, Iloilo	Zarraga Pantat Producers' Association Enrollment in PhilHealth Indigent Program Solid Waste Management Program	Tax campaign thru visits to households and barangays Integrated tax collection and fee payment system

LGU	Public Service Delivery	Revenue Mobilization and Public Administration
New Lucena, Iloilo	Child Friendly Program Local Initiative for Education on Children Learning Center Clean and Green Program NutriHealth Program	
Pototan, Iloilo	Local transportation system Expanded program of immunization, TB-DOTs, nutrition program Mobile patrol	Computerization of tax administration (Electronic Business Permit and Licensing System, Electronic Real Property Treasury System)
Dingle, Iloilo	Medical and surgical missions Health facility upgrade Low-cost housing program Infrastructure development (road concreting and public market renovation)	Plans for conversion of idle properties to low cost-subdivision and other economically viable activities
Duenas, Iloilo	Rehabilitation of public market Provision of farm inputs and monitoring of livestock to prevent diseases Accreditation of RHUs with Sentrong Sigla	Revision of municipal tax code ordinance
Dumangas, Iloilo	Transportation Assistance Mobilization of Persons with Disability Dumagas Rescue Emergency Assistance Movement Agro-Meteorological Stations/Climate Field Application school	Review of tax ordinances Incentive schemes for investors Bagsakan centers and slaughterhouses Tax information drive (for community tax certificate)
Barotac Viejo, Iloilo	BV Nutrifood Plan Project Boboy (Education) Gawad Kalinga Housing Program	Tax collection campaign Computerization of tax administration
Ajuy, Iloilo	Gulayan sa Eskwelahan/Bakuran Mobile Day Care Services Gawad Kalinga Project Reforestation Project Makamasang Tugon	Tax mapping Business permits and licensing system Grievance Redress System Implementation of equipment rentals, fines for violations of fishery ordinance
Concepcion, Iloilo	Harnessing Synergy in Integrated Population, Health and Environment Program Newborn Screening and Nutrition Program Search for Child Friendly Barangay	Public Service Excellence Program
Batad, Iloilo	Project Pedro (Education)	Pahayag sa Banwa
Carles, Iloilo	Gawad Kalinga Housing Project Project Arnold (Fishery) Katungan EcoPark Fishport and market development	Tax mapping Adoption of Fishery Code Checkpoints in sea and land to collect auxillary taxes.
Talisay City, Negros Occ.	Economic Relief and Income Crisis (ERIC) Emergency Accident Insurance for Surgical Patients (EASP) Pagkaon sa Masa PhilHealth Para sa Masa Weekly medical missions/deployment of health workers in sitios	Pautang sa Barangay Computerization of tax administration Task Force on Tax Collection
Silay City, Negros Occ.	Youth Development Center	Adoption of merit promotion plan

LGU	Public Service Delivery	Revenue Mobilization and Public Administration
	Day Care Center and Women's Center	Performance evaluation system
Victorias City, Negros Occ.	Housing Development Program Solid Waste Management Gawahon Ecological Park	Real Property Tax Computerization Electronic New Government Accounting System Codification of Ordinances
Cadiz City, Negros Occ.	Solid Waste Management Cadiz Commercial Port Assistance Program	City Tax Collection Program Permit Application Flow
Sagay City, Negros Occ.	Sagay Marine Reserve School of the Future Nutrition Program	Establishment of a corn center and slaughterhouse
Escalante City, Negros Occ.	Community-Based Monitoring Project Gawad Kalinga Housing Project Facilitation of Direct Overseas Employment	Public auction of tax-delinquent real properties Collection user fees and goodwill money for the award of market stalls E-Barangay Project
Bago City, Negros Occ.	Nutri Pam Para sa Mamamayan Pabasa sa Barangay Community Disease Surveillance System Barangay Women and Children's Protection Desk Barangay Council for the Protection of Children and Women	One-Stop Shop Business Permits/Learning Centers Business Permit and License System Real Property Tax Processing Center
La Carlota City, Negros Occ.	Women and Children Crisis Center Day Care Worker's Manual Pasasalamat Festival	Market Executive Committee Issuance of official permanent plates for tricycles
Himamaylan City, Negros Occ.	Blood Letting Program Day Care Program Building Classrooms Program	Tax Computerization Program Electronic New Government Accounting System (NGAS) One-Stop-Shop Program
Kabankalan City, Negros Occ.	Kabankalan City Educational Assistance Program Dual Training Program Early Childhood Development	Business Tax Mapping Real Property Tax Computerization Kabankalan Linkage Services
Bacolod City, Negros Occ.	INSUMIX Feeding Program Bacolod Housing Authority Infrastructure Projects	Slaughterhouse Project (BOT) Bacolod IT Investment Program One-Stop-Shop Program
Bombon, Camarines Sur	PhilHealth membership Solid Waste Management Program Education scholarship Bloodletting program Binamban Festival	Tax information campaign Fees for garbage collection Tax ordinances
Bula, Camarines Sur	Basic Health, Sanitation and Social Welfare Program Gawad Kalinga/Core Shelter Assistance Project Materials Recovery Facility Food Security Assistance Program/Basic Food Assistance Program	Strategic Planning on Local Revenue Mobilization
Calabanga, Camarines Sur	Continuing Blood Donation and Assistance Scholarship Program Housing Program for the Poor	Market Enhancement Program

LGU	Public Service Delivery	Revenue Mobilization and Public Administration
	Infrastructure for Rural Productivity Enhancement Sector	
Camaligan, Camarines Sur	Beer Plaza Core Shelter Assistance Program Livelihood Program (training, equipment and financial support in catfish hatchery and raising)	Tax computerization
Gainza, Camarines Sur	Feeding program Reactivation of Public Employment Services Office Farm-to-market roads	Updated tax ordinances
Magarao, Camarines Sur	Farm-to-market roads Parahilot One Town, One Product (OTOP) program Magarao Business Council Materials Recovery Facility	Tax information campaign Issuance of business plates
Milaor, Camarines Sur	Infrastructure for Rural Productivity Enhancement Sector Rehabilitation of waterworks system Core Shelter Assistance Program	Collection of fees for water utility services
Minalabac, Camarines Sur	Community-Based Monitoring System	
Ocampo, Camarines Sur	Garbage collection (procurement of garbage truck) Gawad Kalinga/Core Shelter Assistance Project (housing program)	Revision of tax ordinances Issuance of ordinance to have all public transportation terminals located near the public market)
Pili, Camarines Sur	Alternative Learning System (ALS) Pili Integrated Ladies Association Persons-with-Disability- Friendly Programs	Revenue Enhancement Program Computerization of local civil registrar Free review clinics for local employees who will take up the civil service exams (professional level)
San Fernando, Camarines Sur	Multi-crop farming program (CPP RMY) Expansion of waterwork system Farm-to-market roads	Rentals on market stalls, buildings and equipments
Naga City, Camarines Sur	Reinventing the Naga School Board Project Quality Universal Elementary Education in Naga (QUEEN) Gender Responsive Economic Action for Transformation of Women (GREAT Women) Kaantabay sa Kauswagan	I-governance (City website, Citizens' Charter) Livelihood Inventory Beneficiary Information System