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Developing and Implementing a Local Economic Development and Competitiveness Index for Cities and Municipalities in the Philippines

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Acronyms

AIM	Asian Institute of Management
BERL	Business and Economic Research, Ltd
BLGS	Bureau of Local Government Supervision
CBMS	Community Based Monitoring System
CEDOS	Chief Economic Development Society
CIDA	Canadian International Development Agency
DILG	Department of the Interior and Local Government
DTI	Department of Trade and Industry
EO	Executive Order
FEED	Few in number, Easy to collect, Easy to understand, Effective measure
GDP	Gross Domestic Product
IFC	International Finance Corporation
INVEST	Investment Enabling Environment Project
LGPMS	Local Government Performance and Management System
LGSP-LED	Local Government Support Program for Local Economic Development
LGUs	Local Government Units
NCC	National Competitiveness Council
NEDA	National Economic and Development Authority
NSCB	National Statistical Coordination Board
NSO	National Statistics Office
OFW	Overseas Filipino Worker
PCCRP	Philippine Cities Competitiveness Ranking Project
RCCs	Regional Competitiveness Councils
RDC	Regional Development Council
UK	United Kingdom
USAID	United States Agency for International Development
WEF	World Economic Forum

I. Introduction

The identification and development of local economic development and competitiveness indicators have become imperative in the light of the different ranking and comparative studies conducted at the global scale. There is that ranking conducted by various credit rating agencies such Fitch Ratings which upgraded the Philippines' credit rating to Investment Grade March 2013. There is also the Global Competitiveness Ranking (World Economic Forum) which, in 2012, increased the country's rank from 75th to 65th and the Travel and Tourism Competitiveness Report which, in 2013, rated the country 82nd from 94th. There are also the World Competitiveness Scoreboard where the country slipped from 41st to 43rd in 2012 and the Doing Business Report of 2013 where the country's rank also declined from 136th to 138th. The differences in the results are largely due to the methodologies employed and number of countries considered in the rankings.

The majority of the data generated out of such global ratings and rankings are national in scale and have most likely overlooked the major contributions coming from the more dynamic and direct engine of competitiveness and development, which are cities and municipalities. For a developing economy like the Philippines, it is crucial to identify and focus on the specific indicators at the local levels for three reasons. First, it can pinpoint the benefits and connections of the outcomes of the global rankings to the localities. Second, it helps identify the specific areas and their local economic strengths and weaknesses. Finally, it will allow local level comparisons which could help lagging localities to focus on their gaps and trigger catch ups. Cities, in particular, are bound to benefit from such comparisons as they are the considered centers of economic activities and generate investments and resources for cluster areas around it and in the province where it is located.

At present there is no standardized system or mechanism for compiling such local indicators in the Philippines. The economic and development indicator system that generates the national economic data is based on different surveys that consider only samples from localities. Thus, no area-specific estimates can be provided except at the regional and national levels. The closest system of a standardized local data collection is the Community Based Monitoring System (CBMS). This system, however, is not implemented in all municipalities and cities as doing so is expensive. There are just pockets of local data collections, mostly initiated by local governments for their local use.¹ Consequently, the lack of a standardized mechanism constrains local government units (LGUs) from conducting such local data collections regularly. Because of these factors, most reports on LGU economic development are dated, one-time reports and/or are focused on some aspects rather than a regular comprehensive assessment.

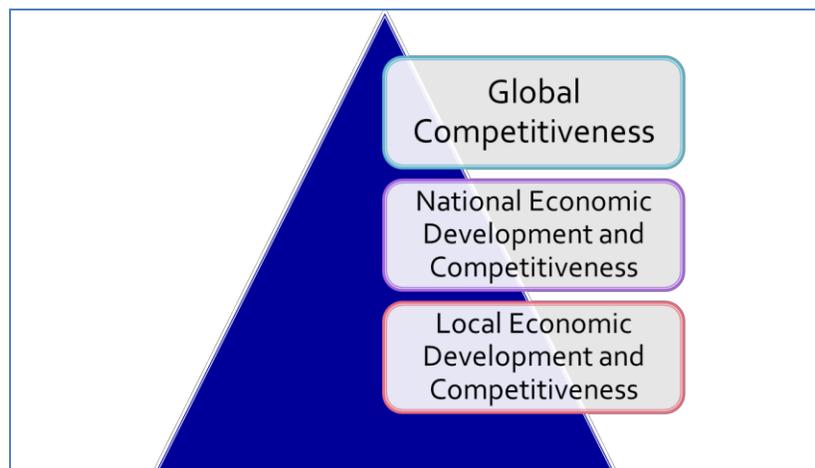
In response to this gap, the Investment Enabling Environment (INVEST) Project of the United States Agency for International Development (USAID) has taken the initiative to develop such a set of indicators and had tested a preliminary list of indicators in its three (3) pilot cities of Batangas, Iloilo and Cagayan de Oro, with the support of the Canadian International Development Agency (CIDA)-funded Local Governance Support Program for Local Economic Development (LGSP-LED). On a broader scale, INVEST has been closely coordinating with the National Competitiveness Council (NCC) in responding to this gap. To date, a framework to identify and prioritize the core factors and indicators to be used in measuring development and competitiveness levels in LGUs has been presented to the Sub-Working Group on Local

¹ An example is the Local Economic Analysis Program (LEAP) implemented in 2005 in Magarao, Camarines Sur.

Investment Reforms which is jointly chaired the Department of Trade and Industry (DTI), Department of the Interior and Local Government (DILG) and NCC on November 2012. This framework was eventually adopted by the NCC and used as basis for determining the indicators that will be used for assessing city competitiveness. After a series of consultation meetings with the NCC, INVEST and LGSP-LED, a working list was arrived at, for validation and confirmation by proposed implementers – the Regional Competitiveness Councils (RCCs). One of the activities of the RCCs is to gather indicators at the regional level that correspond to those used in competitiveness rankings and beyond those that are being collected by national government agencies. This activity is motivated by the desire to collect indicators at the local levels that aggregated up to the national level.

The basis of all these efforts hinges on the idea that competitiveness has a seamless interconnectivity from the local to national to global environment as illustrated in Figure 1. The idea follows the concept that local economic development and competitiveness indicators can be gathered at the local level and can be aggregated to the national and even to the global levels. The local level indicators can be used to compare cities and municipalities based on a common list of indicators. This same list can be aggregated depending on the level of analysis desired, ie., group of cities, group of municipalities, provinces, group of provinces and regions. Ultimately, the different regions can provide an overall picture representing the national. However, it is important to note that not all indicators identified locally are comparable at the global level. There may be indicators that cater more to the needs of the local economy. Nonetheless, the framework relatively followed the process that puts into perspective the global competitiveness definition. These are discussed in detail in the succeeding sections.

Figure 1. Seamless Interconnection from Local to Global Competitiveness



II. Description of the Framework

A. Clarifying the Concept of Competitiveness

Among the key issues in the localization of the development indicators is the need for a clear definition of what constitutes competitiveness. Michael Porter (2004) defined competitiveness as being based *on location* and *is essentially the productivity* that companies located there can achieve. It is important to note that the productivity being referred to by Porter is one that allows sustainable prosperity over time. Ketel (2006), commenting on Porter, added that the crucial aspect of prosperity is the understanding of a “created” and an “inherited” prosperity. Inherited prosperity is one that is based on limited natural resources flowing into financial assets such as the vast oil fields of the Middle East. For our purpose, we are focused on prosperity that is based on activity that *creates value* “by providing products and services at prices higher than their cost of production.” Under this context, the framework focuses on developing essential aspects of a locality based on its existing natural and physical conditions, the human, physical, financial and natural resources it possesses; the systems under which it operates; and how the interplay of all such factors lead to value creation that ultimately contribute to sustainable productivity.

B. Existing Competitiveness Indicator Systems

The drive for productivity-based competitiveness has led to the development of various indicator systems. The different competitiveness indicator systems range in scope from global to national to sub-national levels. In the case of the Philippines, the following competitiveness indicator systems are most prominent and regularly followed:

1. Global Competitiveness Indicator Systems

- a. *The IMD Competitiveness Survey*. The results of this survey are published as the World Competitiveness Yearbook (WCY). It covers 59 countries worldwide and focuses on four main factor components of competitiveness: economic performance, government efficiency, business efficiency, and infrastructure. These factors are subdivided further into 20 sub-factors and 300 criteria (IMD website, April 2013)
- b. *The World Economic Forum (WEF) Global Competitiveness Index*. This ranking system covers 144 economies worldwide and focuses on a more rigid set of 12 factors called “pillars.” These factors include: institution, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, market size, business sophistication and innovation (www.weforum.org, April 2013)
- c. *The IFC – Doing Business Survey*. This survey ranks 183 economies based on 10 factors that affects a business. These are: starting a business, dealing with construction permits, getting electricity, registering property, protecting investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency.

2. **National Competitiveness Indicator Systems**

- a. *National Statistical Coordination Board (NSCB) –Gross Domestic Product (GDP) at National and Regional levels.* The NSCB measures economic growth, one of the criteria for competitiveness using value added and expenditure approaches and releases data on GDP every quarter and GRDP every year.
- b. *National Statistics Office (NSO) – Census of Household and Population, Labor Force Survey, Survey of Establishments and Industries, Prices and Construction Statistics, Family Income and Expenditure Survey.* The NSO conducts these different surveys that provide detailed information up to the regional level. These surveys are done for specific sectors and have different time frames.

3. **Sub-national Competitiveness Indicator Systems**

- a. *Asian Institute of Management (AIM) – Philippine Cities Competitiveness Ranking Project (PCCRP).* Started in 1999, the PCCRP computes for competitiveness indices based on hard data from national government agencies, soft/primary data from academic partners and perception survey data for 24 indicators which are classified into 6 competitiveness drivers: dynamism of the local economy, cost of doing business, infrastructure, human resources training, responsiveness of the local government unit and quality of life. A total of 29 cities were included in the report, classified into three categories, metropolitan growth centers, growth centers and emergent cities. The latest report was prepared in 2009.
- b. *DILG – LGPMS.* This document contains the self-assessment reports of LGUs on their performance covering administrative, social, economic, environmental and basic governance leading to an integrated system of governance indicators. It is the basis of the Seal of Good Housekeeping Awards which opens opportunities for LGUs to access grants to finance local development.
- c. *LGUs –CBMS.* The CBMS is a standardized integrated system of local level assessment providing information on basic health, education, jobs, and infrastructure, among others. It is also implemented in 15 other developing countries across the world.

Table 1 below summarizes the frequency and data source of the above indicator systems.

Table 1. Features of Existing Competitiveness Indicator Systems

TABLE 1	Type	Conducted by	Frequency
IMD Competitiveness Survey	Combination of Official Reports and Executive Opinion Survey	IMD	Annual
Global Competitiveness Index	Combination of official data and executive opinion	WEF	Annual
Doing Business Report	Combination of survey, conference calls, visits and written correspondence	IFC	Annual with country cases
GDP	Various surveys of NSO and other government agencies	NSCB	Quarterly
Labor Force Survey	Survey	NSO	Quarterly
Price Indexes	Survey	NSO	Monthly
AIM PCCR	Combination of official national and city data, perception survey, local information from local academic partners and key informant interviews of selected city officials	AIM	Bi-Annual
LGPMS	Reports	BLPS-DILG	Annual (Governance) Every 3 years (Development)
CBMS	Survey	LGU	-

One of the key weaknesses of these indicator systems is the lack of regular and consistent data collection at the sub-national levels. This has led to inconsistent and non-standardized data availability which renders difficult the task of comparing localities. One possible reason for such weakness is the lack of local technical skill in gathering and analyzing global data. Another possible reason is lack of sustained funding as in the case of the CBMS. Without a regular and standard set of indicators for local data collection and a mechanism to implement it, it will be difficult to compare competitiveness and economic development of localities.

C. International Local Competitiveness Indicator Systems

There are at least three comparable local level competitiveness indicator systems currently being implemented in other countries. These are the following:

1. Chief Economic Development Society (CEDOS) – UK (2011)
2. BERL – Local Government Economic Indicators Framework – New Zealand (2010)
3. POLICOM – Economic Strength Rankings - US (2012)

All these indicator systems have aptly adapted their respective processes to local conditions and culture while taking note of the need to relate and contribute to the overall competitiveness of the higher level of governance and eventually to the nation. These are essentially key aspects that can also be considered and adapted in the Philippines.

a. CEDOS

This agency led other United Kingdom (UK) government organs, such as the Audit Commission, Local Government Association, and the Improvement and Development Agency, in developing a performance measurement system for local economic development in the UK. . The key essence of its approach is to improve both local economic development through the local governments and the manner through which local governments can contribute to national economic performance.

CEDOS has adhered to the following principles as the bases for its indicator system:

- Few in Number
- Easy to Collect
- Easy to Understand
- Effective Measures of Performance

These principles were used to formulate the Headline Performance Indicators for local authority economic development activity. In essence, these indicators focus on the performance of local governments in creating the appropriate business and investment environment for sustainable prosperity. They are grouped into four (4) key areas as follows:

BOX 1. CEDOS HEADLINE PERFORMANCE INDICATORS:

1. Business Support (*how local governments respond to business starts*)
2. Inward Investments (*number of new investments and jobs creation related to it*)
3. Land and Premises (*improvement in physical infrastructure in terms of land and premises for business*)
4. Training and Employment (*provision of skills development and capacity improvements for sustainable productivity growth*).

The interplay among the Headline Performance Indicators are shown in Figure 2.

Figure 2. CEDOS Framework for Local Economic Development



b. BERL

In 2010, Local Government New Zealand, the local government association of New Zealand, commissioned BERL Economics to develop a Local Government Economic Indicators Framework. This was in response to the need to respond to the changing global, regional and national economic landscape. In particular, the research intended to measure local government contribution to national economic growth. The core idea of BERL is to link local investments to the sustainable improvement of productivity and prosperity. It has identified six (6) headline priority areas which can serve as the measurement points at the local government level. These are summarized in Box 2 below and illustrated in Figure 3.

BOX 2. BERL HEADLINE PRIORITY AREAS:

- a) leadership/facilitation (*setting and implementation of a local vision and plan for economic growth*),
- b) Infrastructure and resource management (*ensuring that the physical environment is conducive to economic growth*)
- c) regulation (*creating a quality environment to make it easier for businesses to grow, invest and create jobs*
- d) services (*effective coordination and delivery of activities to help in the functioning of local communities*)
- e) business and industry development (*facilitation of industry growth and implementing measures that support a conducive business environment*)
- f) social community (*environment that supports total well being and enables communities to participate and contribute to economic growth*).

Figure 3. BERL Framework



c. POLICOM

The POLICOM is based on a methodology called the Economic Strength Ranking of Localities. It defines economic strength as the long-term tendency for an area to grow both in size and in quality. It therefore measures the long term productivity and sustainable prosperity of an area. It groups data into three (3) sectors as follows: Group 1 data reflects the overall growth in size and quality. The “quality” of the economy is based upon what people earn, as this influences their “standard of living;” Group 2 data reflects how the local economy is behaving while Group 3 data pertains to negative sectors as growth in these sectors lead to a poor economy. This is summarized in Figure 4.

Figure 4. POLICOM Local Economic



D. Constructing the Philippine Local Competitiveness Framework

To construct the country’s own local competitiveness framework, the guidelines in developing indicators from the Chief Economic Development Society - UK (CEDOS, 2011), the Local Government Economic Indicators Framework – New Zealand (BERL, 2010) and the POLICOM Local Economic Strength Ranking (2012) were adapted. The FEEE Principle, i.e. Few in Number, Easy to Collect, Easy to Understand, and Effective Measures of Performances was also considered.

More specifically, the following steps were followed in formulating the framework:

1. Identifying, studying and comparing existing global, national and sub-national competitiveness and economic comparisons and studies including cities and local comparisons used by different countries;
2. Focusing on the most common factors among all the indicator systems and finding convergence among these to simplify local comparability (see Figures 5 and 6);

Figure 5. Convergence of Global Factors Figure 6. Convergence of Sub-national Factors



3. By using the FEEE principles and finding the most common among the key indicators areas, identifying three (3) convergent factors: Economic Dynamism, Government Efficiency and Infrastructure as shown in Figure 7. These factors consistently appear in the other indicator systems, whether at the global or at the local levels. The simplified funnel in Figure 7 illustrates how these priority factors can help determine local economic development and competitiveness.

Figure 7. Three (3) Convergent Factors



The common priority factors, however, need to be linked to the sub-national, national and global indicator systems so that they can contribute to overall national competitiveness within the global perspective. Thus, an integrated framework interconnects the local up to the global levels of competitiveness and development as seen in Figure 8. This now serves as the core local economic development and competitiveness framework. It implies aggregation, consultative policy making and a common agenda for development by both national and local governments.

As discussed in section I, the finalized list of indicators is not exactly one to one to the global competitiveness list of indicators. Firstly, while the list attempts to cover global indicators, it takes into consideration local needs and situation and data availability at the local level. Second, the finalized indicator list in Appendix F is based on a validation of an initial long list at selected INVEST and LGSP-LED Pilot sites and an extensive workshop for all Regional Competitiveness Councils (RCCs) in Cebu. Thus, overall, the finalized list will at best cover about 80% of the most common indicators gathered at the global level. The remaining 20% will mostly concern local governance and local adherence to national laws and regulations. These are crucial in helping localities attain not a one-time competitiveness condition, but one that is sustainable over time. These ensure that the local competitiveness rankings are significantly able to help the country make good in the competitiveness ranking at the global level.

Figure 8. Local Economic Development and Competitiveness Framework



4. From each priority factor, identifying crucial elements to serve as sub-factors;

The basis of choosing each sub-factor was primarily its contribution to the attainment of the three (3) priority factors. The justification and explanation of each factor and its corresponding sub-factors are below:

- a. *Economic Dynamism*, which refers to the activities that create stable expansion of businesses and industries and higher employment. Conceptually, it refers to the combination of the entrepreneurial spirit and the financial institutions that will channel it (Edmund Phelps). Localities are the centers of economic activities. Business expansion and job creation are easily observable in local settings.
- SIZE OF THE ECONOMY, which refers to the total output and services produced in the locality. It can be represented by the increasing number of business establishments and productive capacities;
 - GROWTH OF THE ECONOMY AND INVESTMENTS, which refers to the improvement of the total output and services produced, implying more investments and savings in the locality;
 - INCREASE IN EMPLOYMENT, which is the necessary outcome of a growing local economy, and pertains to the creation of jobs by both existing and new establishments;
 - COST OF LIVING, which estimates the prices of basic essentials – food, housing and human capital services necessary to sustain productive expansion;
 - FINANCIAL DEEPENING, which refers to the channels by which expanding capital and investments can be dispersed quickly to businesses and productive units requiring them the most. Long term investments require more of financial institutions to support expansion;
 - PRODUCTIVITY, which measures the quality of the local labor force in relation to its total output. Low productivity imply high cost of labor and eventually, doing business; and
 - PRESENCE OF BUSINESS AND PROFESSIONAL ORGANIZATIONS, which imply active private sector participation in the growth process. These groups signify the intention to stay longer in the locality and reveal their concern for the implications of progress considering social, economic and environmental issues.
- b. *Government Efficiency*, which refers essentially to the quality and reliability of government services and support for effective and sustainable productive expansion. Conceptually, this looks at government as an institution that is largely not corrupt; able to protect and enforce contracts; apply moderate and reasonable taxation, and is able to regulate (La Porta et. al, 1999).
- TRANSPARENCY AND ACCOUNTABILITY, which imply that local governments are expected to exhibit behaviours that dissociate themselves from corruption by opening processes and systems to all stakeholders and allowing openness in all its activities;
 - CAPACITY TO GENERATE RESOURCES, which refers to the LGU's ability to raise its own resources by being independent and creative in finding ways to generate further economic activities for their respective locales. With it

responsible for its own resource, it will be prudent and will use said resource efficiently;

- RECOGNITION OF PERFORMANCE, which indicates that the quality and reliability of the recipient LGUs have been recognized in competitive awards at the peer, sub-national, national and even global level. The recognition could be for a specific service or for the totality of the LGU's performance in service delivery;
- RESPONSIVENESS TO PRODUCTIVE EXPANSION, which refers to the ability of the LGU to create an environment conducive to existing and future business locators, including the efficiency with which it deals with businesses, from registration to renewal;and
- BASIC GOVERNMENT SERVICES, which refers to safety, natural and human security, and human capital formation services, the presence and then quality and quantity of which affirm LGU commitment to sustainable productive expansion by securing future human and natural resources.

c. *Infrastructure*, which refers to the physical building blocks that connects, expands and sustains a locality and its surroundings to enable the provision of goods and services. It critically involves basic inputs of production such as energy; water; interconnection of production such as transportation, roads and communications; and sustenance of production such as waste management, disaster preparedness, environmental sustainability and human capital formation infrastructure.

- PROVISION OF BASIC INFRASTRUCTURE, which refers to the availability, reliability and predictability of infrastructure inputs needed for production, interconnection and expansion;
 - AVAILABILITY OF TECHNOLOGICAL INFRASTRUCTURE, which refers to the availability of a group of physical networks that serves as the core communication links between and among value chains, including basic knowledge and information transmission among households, business, production process and private services, in the process facilitating connections among human, social, financial and natural capital;
 - PROVISION OF SOCIAL INFRASTRUCTURE, which refers to the physical support for the sustainable development of human and natural capital, these infrastructure including hospitals, educational institutions and housing facilities.
5. From each of these factors and sub-factors, formulating an initial list of sixty (60) indicators after a series of validation meetings with LGSP-LED and field visits by their research assistants to three pilot sites, i.e., Batangas City, Iloilo City and the Municipality of Cabatuan in Iloilo Province (Please see Appendix E);

The field visits provided a clearer picture of the availbity of identified indicators at the local level. The field validation involved visits to local government offices, national government agencies with regional and local offices such as the NSO and NSCB, and local business chambers, among others. Within these 60 indicators, a total of thirty (30) core indicators are being suggested as the base for assessing local economic

development and competitiveness. The results of the field validation and the original list of indicators area attached as Appendices B – F.

Among the key findings of the field validations were:

- a. Data are available but may need processing since many of them are in the “count form” and what is required are ratios and percentages.
 - b. There may be issues of veracity in the data furnished by applicants during registration process, particularly those pertaining to values of investments, sales and number of employees.
 - c. Indicators must be able to neutrally capture data for both agricultural and industrial localities.
6. Finalizing the list of indicators for use by the localities (Appendix G).

The list is an initial attempt at constructing a standardized set of indicators. It may be improved and/or updated if the data are found to be difficult to collect after the initial run. The NCC is expected to compile the initial and/or baseline data for these indicators.

The 30 indicators will form what will be called the Local Index of Competitiveness and Economic Development. As each city and municipality compiles its own data base, these will be translated into scores and a summative index. The index can be used to rank local competitiveness among cities and first class municipalities in the country. The rankings can also validate and provide a general indication of local economic growth at levels lower than regions. In a way, this will become a local assessment of competitiveness and economic development. Details of the index, its weights and how it will be computed are in Appendix H-1.

III. PROPOSED INSTITUTIONAL MECHANISM

After an agreement is reached on the final list of core indicators that will become part of a regular local assessment framework, it is imperative to consider the long term implications of this indicator system. First, the system has to be institutionalized and connected with the regular economic data gathering mechanism conducted by national government agencies. Second, it can serve as a standard measure of performance across different levels of LGUs and thus can be used as basis for the provision of incentives to encourage catch up in terms of economic development and competitiveness. Third, it can serve as the minimum information that can be used for locator decisions, whether for new businesses, expansions of businesses, personal and family migration, and investment by foreign interests and OFWs, among others. Finally, this indicator system can serve as another type of LGU performance metric, particularly in the area of competitiveness and development.

A. The Government Agencies Involved

Establishing and then institutionalizing this indicator system is, however, a challenge. The local government autonomy provided under the Local Government Code has given LGUs the flexibility to respond to local issues as they see fit. Meanwhile, national government agencies are at best able to gather data at the regional levels. Thus to institutionalize this process requires a convergence of responsibilities between national government agencies and local governments. At present, the logical level of convergence is at the regional level. The agencies crucial to local development and competitiveness are primarily the NCC,² National Economic and Development Authority (NEDA), DTI, and DILG. NEDA Regional Offices serve as the secretariat to the Regional Development Councils (RDCs) which coordinates the implementation of the regional development plans using both the national and local level inputs. The DTI Regional Offices, meanwhile, serve as the secretariat of the RCCs. The DILG has regional offices and has a representative in each of the LGUs all over the country. In addition, considering that this is primarily a task of data collection, national agencies involved in the collection of official data must be involved and, over the long term, provide the standard statistical measurements that will connect the local indicator system to the present system of official data collection and analysis. The regional divisions of the NSCB³ and the regional and provinces offices of the NSO can be tapped to help in ensuring the scientific validity and consistency of the results of the indicator system. The academe in the locality and the local business and professional organizations can likewise help in the conduct of data gathering and validation of the results.

B. The Proposed Structure and Mechanism

With all stakeholders identified and the region being the locus of interaction, the next concern is the appropriate structure and mechanism to institutionalize data gathering. The initial data gathering is implemented by the RCC through contracted local partners with

² It should be noted likewise that the NCC also has a stake in this indicator system. It is bankrolling the initial data gathering stage. It is possible that it might be given the responsibility of implementing this system on a regular basis. However, with the lack of regional offices, NCC will have to work closely with the regional DTI offices. This might not be the best arrangement over the long term.

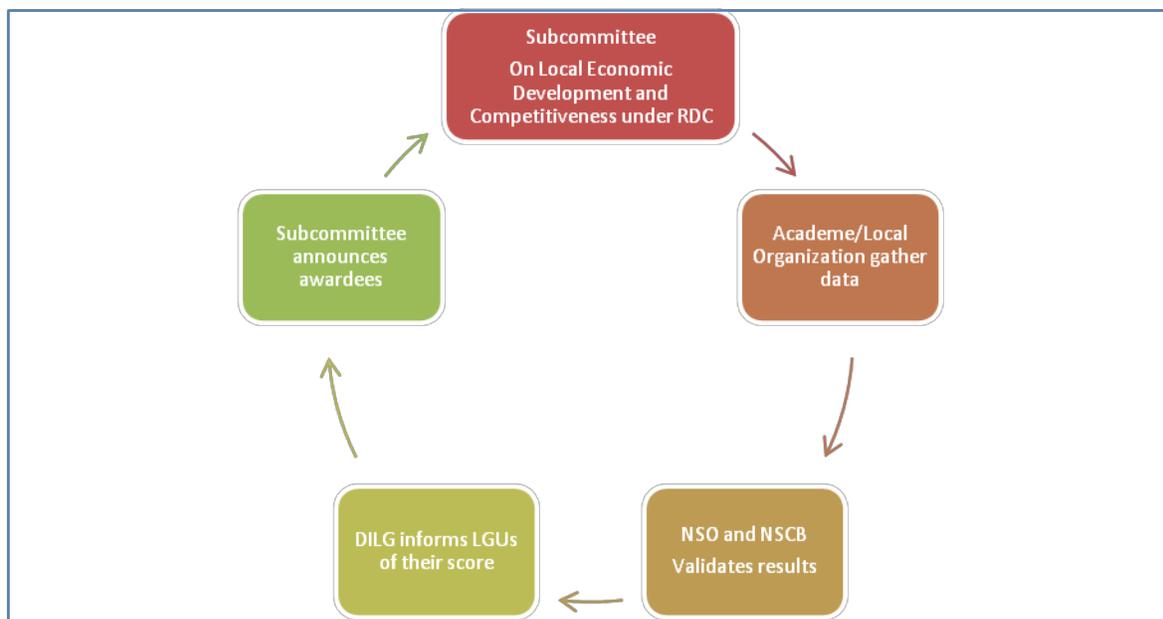
³ NSCB at present only has 9 regional divisions which also serve as its regional data centers.

funding assistance from the NCC. The contracted partners are mostly from local academe. This initial phase is considered an investment as it will create a baseline of local competitiveness and economic development information. It could also help in comparing which among the cities are competitive and what are the factors that make them so. This phase required a simple institutional structure.

The Sustaining Phase, however, needs a more organized and legalized structure to ensure that the operation of the indicator system becomes a regular monitoring activity at the local level. As key government agencies have already been identified, the next step is to determine the functional interaction among these entities. It is thus proposed that a subcommittee on local economic development and competitiveness be created as one of the subcommittees of the RDC or it can be the RCC itself. The main tasks of this subcommittee are to: a) coordinate and oversee the implementation of the data gathering for the indicator system, b) report the results of the annual assessment rankings based on the data gathered, and c) assist LGUs in responding to the results of the indicator assessment. The regional DTI and DILG can co-chair the body with NEDA, NSO and NSCB serving as members, and representatives from the academe, local chambers and business organizations, and local leagues as ex-officio members.

Because of an apparent conflict of interest, they being the objects of the assessment, LGUs would not be the appropriate entities to gather data. Instead, a third party stakeholder – the local academe or local business/professional organizations or any organization that is identified and commissioned by the subcommittee would be ideal. What is important is that whoever will be tasked to gather the data must closely coordinate with, and be monitored by, the NSCB and NSO to ensure the integrity and validity of the data gathered and thus ensure comparability. Figure 9 below summarizes the proposed process for an institutionalized local economic development and competitiveness data gathering.

Figure 9. Proposed Process of Institutionalized Data Gathering



C. Future Steps

Together with the process currently being undertaken through the NCC and its RCCs, the INVEST project will likewise test the indicator system in its three (3) project sites of Batangas City, Iloilo City and Cagayan de Oro City. Although indicator validation has taken place in two of these cities, the actual data gathering for the indicator system have yet to be fully implemented. The results of the INVEST test will provide a sort of natural experiment allowing comparisons with other non-INVEST cities and municipalities in the eventual computed results. In addition, a companion opinion survey for business groups and local chambers will be implemented to complement the results of the research on indicators. The same survey will be pilot-tested in the three cities of INVEST. A cross-validation of the results of these researches can provide a broader and yet focused perspective on how to sustain and institutionalize the local competitiveness and economic development indicator system. An important long-term imperative is the capacity building of LGUs on handling and processing business registration data beyond counting. These datasets should be part of open access information and analysis. Future project should help LGUs develop these capacities.

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ANNEX A:

The National Competitiveness Council (NCC) - Basis for Competitiveness Implementation and Current Process

The NCC is tasked by E.O. 44 (s2011) towards enhancing and upgrading the Philippine Competitiveness ranking in various global initiatives. It acts as the primary body to execute steps to improve the country's international competitiveness ranking. Consequently, the NCC has organized its regional counterparts, the RCCs to facilitate in implementing this task. One of the activities of the RCCs is to gather indicators at the regions that correspond to the competitiveness rankings beyond those that are being collected by the national government agencies. The rationale for this is that indicators should be collected at the local levels and that it can be aggregated up to the national level. Similarly, the approved framework looks at the seamless connection of indicators from the local to the national levels (see Figure 1).

The key outcome of having a standard set of indicators across localities up to the national level is that aggregated data can be further standardized into an index where cities and municipalities can be compared regardless of location. In a way, the rankings will help contribute to identify strengths and weaknesses among localities and serve as a sort of incentive mechanism. However, in a practical manner, the RCC will not be able to collect the indicators from all localities under its regions. It is proposed that the best approach to implement data collection is to concentrate on cities and alternatively, first class municipalities in the regions. Considering that these cities and large municipalities are the drivers of provincial and even regional economic growth. Hence, it was agreed to conduct a workshop with all the RCCs in Cebu City on 18-19 February 2013. The purpose of the workshop is to clarify with the RCCs the following:

- a) Objectives of the data gathering
- b) Framework of data gathering
- c) Indicators to be gathered at the cities
- d) Steps on how to compute the index

The RCC workshop has led to a finalized list of local city or first class municipality indicators to be gathered by the different regions (see Appendix F). It was also agreed that some of the indicators may not be readily available and thus, each region has to adjust accordingly using a longer list of alternatives. This is in consideration of the distinctness of each locality. Specifically, the RCC will use data of 2012 and comparing it with 2011 for all information in regard to business registrations. Other information will use the latest available data such as those relating to governance in the Local Government Performance and Management System (LGPMs).

Annex B

Highlights of the Indicator Validation Exercise In Batangas City

During the field activities in Batangas City, the following were visited:

- Business Processing and Licensing Office
- Public Market Office
- City Planning Office (Statistics Division)
- City Engineering Office
- DILG City Director's Office
- Accounting Office
- Local PNP Investigation Office
- Public Information Office
- DRR Office
- Local LTFRB
- Batangas City Pier office
- Land Transportation Office
- City Budget Office
- Transportation Development and Regulatory Office (TDRO)
- Local DOH

The whole-day validation activity showed that the majority of the indicators in the list is easily available and annually updated at the local level. However, data is presented in "count" form. Should the indicators be used, there is an apparent need to process some of the data to arrive in the desired form, e.g., ratios and percentages.

A. Indicators for Economic Dynamism

The table below shows the detailed results of the validation made for the indicators for economic dynamism. Majority of the data for the SIZE OF ECONOMY and GROWTH OF ECONOMY AND INVESTMENTS are available at the BPLO. Personnel interviewed mentioned that the data are encoded in a unique database that allows them to access data easily. The database may also be viewed in excel format, thus allowing cross tabulations. The data is updated as applicable, that is, when a new form is submitted. Monthly/ annual reports are generated.

Although these are available, the veracity of the data for EMPLOYMENT cannot be vouched for. The government personnel involved commented that the numbers may not be the actual counts because these are based on the number "declared" by the business owners.

Meanwhile, under the FINANCIAL DEEPENING category, gathering the data for the computation of the percentage of business-related loans to total loans in banks and the number of approved loans to total loan applications in banks/microfinance institutions/cooperatives may be difficult on confidentiality and data security concerns. According to the BSP's Financial Report Package for Banks (Updated January 2012), banks are required to report to the BSP on the total loans they had granted and one of its sections stipulates that loans must be classified into applicable sectors/business types. However, industry practitioners claimed that what is reported to are data on total loans and receivables per bank. The data is no longer broken down into the banks' individual branches. ey informants said that it is the prerogative of individual banks but these bans most probably would not allow the disclosure of the information.

Annex B.1. Sources, Status and Frequency of Collection/Updating of Data for Indicators of Elements of Economic Dynamism

Elements of Economic Dynamism	Indicators	Sources	Status	Frequency of Collection/Updating
Size of economy	1. Number of annual business registrations (new and renewal)	BPLS Form	Data is available in the BPLO.	Data is updated as applicable and an annual report is generated.
	2. Number of non-official businesses and number of non-official businesses as a percentage of total registered businesses	List of market stall owners	Data is available in the BPLO and Public Market Office.	Data is updated as applicable and an annual report is generated.
	3. Capitalization of registered businesses, both total and per sector	BPLS Form	Data is available in the BPLO.	Data is updated as applicable and an annual report is generated.
	4. Gross sales of businesses whose registrations had been renewed	BPLS Form	Data is available in the BPLO.	Data is updated as applicable and an annual report is generated.
	5. Total number of registered and non-official businesses (1+2)	BPLS Form	Data is available in the BPLO.	Data is updated as applicable and an annual report is generated.
	6. Number of businesses paying local taxes	BPLS Form Treasurer's Office	Data is available in the BPLO.	Data is updated as applicable and an annual report is generated.
Growth of Economy and Investments	1. Total capital of newly registered businesses	BPLS Form	Data is available in the BPLO.	Data is updated as applicable and an annual report is generated.
	2. Change from past year in the total capitalization of businesses whose registrations had been renewed	BPLS Form	Data is available in the BPLO.	Data is updated as applicable and an annual report is generated.
	3. Change from the past year in the total gross sales of businesses whose registrations had been renewed	BPLS Form	Data is available in the BPLO.	Data is updated as applicable and an annual report is generated.
	4. Number of groceries (supermarkets), hardware/construction	BPLS Form, Observation	Data is available in the BPLO and City Planning Office.	Data is updated as applicable and an annual report is generated. (CPDO) Information

Elements of Economic Dynamism	Indicators	Sources	Status	Frequency of Collection/Updating
Employment	suppliers, fast-food restaurants			is/may be found in the SEPP which is updated annually.
	5. Percentage of the number of unoccupied stalls to the total number of rental stalls in public markets	City Market Administration	Data is available in the Main Market Office.	Data is updated annually.
	6. Number of construction permits approved for businesses and non-business entities and change from past year	LGU Engineering Office	Data is available in City Engineering Office.	Data is updated as applicable and annual reports are available.
	7. Number of lodging houses, inns and/or hotels	BPLS Form	Data is available in the BPLO (database), City Tourism Office, and CPDO (SEPP).	BPLO data is updated as applicable; the City Tourism Office: List is available; and the SEPP at the CPDO is updated annually.
	1. Number of jobs created by newly-registered businesses	BPLS Form	Data is available in the BPLO.	Data is updated annually.
	2. Number of persons employed by businesses whose registration had been renewed	BPLS Form	Data is available in the BPLO.	Data is updated annually.
	3. Total number of jobs in the locality classified per type of business/sector and by gender	BPLS Form,	Data is available in the BPLO	Data is updated annually.
	4. Percentage share of total Jobs in the locality to the total working age population	Census Data of NSO	Data is not available in the LGU but is available in the NSO.	Only data disaggregated per sector is available.
Prices	1. Cost of utilities (electricity/kwh, water/ccm and basic telco)	Records of utility companies	Data Available in CPDO	Data is updated annually.
	2. Average change in monthly rental of registered businesses from past year and/or average change in market stall rentals	BPLS Form	Data is available in City Market Administration.	Data is updated as applicable and annual records are available.
		Public Market Office		
3. Prices of rice (per kilo), egg (per piece), sugar (per kilo), and kerosene (per liter); as well	Public Market Office	Data is available in ther City Market Administration	Data is updated annually.	

Elements of Economic Dynamism	Indicators	Sources	Status	Frequency of Collection/Updating
	as their change from past year			
Financial Deepening	1. Percentage of business-related loans to total loans granted by banks	Reports to BSP	Data is not available.	
	2. Percentage of number of approved loans to total loan applications in banks/microfinance institutions/cooperatives	BAP, RBAP, CDA, microfinance organizations	Data is not available.	
	3. Number of commercial banks, rural banks, microfinance institutions, cooperatives, and registered lending companies	BPLS forms	Data is available in the BPLO and CPDO.	Data is updated annually.
Productivity	1. Total gross sales as a share of total number of persons employed	BPLS forms	Data is available.	Data is updated as applicable.
	2. Number of professional board passers from locality and/or net secondary school graduation rate	PRC for board passers and local DepEd for secondary school data	Data is available.	Data is updated annually.
Business Groups and Associations	1. Number of organized business groups in the locality	LGU record of recognized organizations (Sanggunian approvals)	Data is available in the CPDO.	Data is updated annually.
	2. Number of associations (industry, skill-based and professional groups such vendor's organizations, transport associations, aside from local chambers and business-cultural associations)		Data is available in the CPDO.	Data is updated annually.

B. Indicators for Government Efficiency

The majority of the data needed for the indicators for government efficiency may be retrieved from the local DILG offices. As required, these offices produce an annual report and the LGPMS Report and its companion LPGMS Utilization Conference Report. A Utilization Conference is held to identify and result the gaps found in the LGPMS.

As of this date, none of the existing projects are funded by external donors/grants; all projects are funded by GOP as reported by the CPDO. However, in the event that this is applicable, data may be located in the CPDO, City Accounting Office and/or City Engineering Office, depending on the project management office assigned

Data on the length of time in processing requests is not available because the BPLO no longer includes this in its database. This data set can be included again in the BPLO data bank; however, the processing time for applications for the renewal of business registration varies and is not under the control of the office since this is dependent on the completeness of documents submitted by the applicants.

Meanwhile, the CPDO claims not to be fully aware of the automation of relevant processes. They reported that each department has its own system of storing, processing and retrieval of data that is independent of those of other departments. No study was made to collate/ list the automated processes.- In contrast, the local PNP piloted in 2011 a new system of storing data called the "e-blotter". Records prior to 2011 are not available in the system

Upon visiting the education and health departments, they cannot pinpoint which assessment we are pertaining to. This needs to be more specific.

Annex B.2. Sources, Measurement Type, Status and Frequency of Collection/Updating of Data for Indicators of Elements of Government Efficiency

Elements of Government Efficiency	Indicators	Measurement Types	Sources	Status	Frequency of Collection/Updating
Transparency and Accountability	1. Transparency scores in LGPMS, which include the following indicators: a. Presence of a Public Information Office b. Extent of communication media in updating local government plans c. Accessibility of public documents	Scale	LGPMS Report	Data is available in the DILG City Director's office.	Data is updated annually.
	2. Accountability score in the LGPMS, which include the following indicators: a. Effectiveness of the LGU's Financial Management System b. Functionality of the LGU's Bids and Awards Committee c. Timely liquidation of cash advances d. Availability of status reports on actions taken by the LGU on COA audit findings	Scale	LGPMS Report	Data is available in the DILG City Director's office.	Data is updated annually.
	3. Participation scores in the LGPMS, which include the following indicators: a. Representation of CSOs in local special bodies b. Presence of a feedback mechanism to generate citizen views c. Involvement of CSOs in the implementation of LGU programs and projects	Scale	LGPMS Report	Data is available in the DILG City Director's office.	Data is updated annually.

Elements of Government Efficiency	Indicators	Measurement Types	Sources	Status	Frequency of Collection/Updating
Public Finance	1. Value of LGU savings/debt and ratio of LGU savings/debt to total LGU revenue (locally generated, IRA and other non-revenue sources)	Level and percentage	BLGF data	Data is available in the City Accounting Office (Income statement, trial balance sheet, etc).	Data is updated as applicable while records are filed annually.
	2. IRA as a share of total LGU revenue	Level and percentage	BLGF data	Data is available in the City Accounting Office (Income statement, trial balance sheet, etc).	Data is updated as applicable while records are filed annually.
	3. Level of Real Estate and Business taxes and ratio of Real Estate and Business taxes to total LGU tax collected	Level and Percentage	BLGF data	Data is available in the City Accounting Office (Income statement, trial balance sheet, etc).	Data is updated as applicable while records are filed annually.
	4. Number of projects and level of funding by external donors for local development	Number and level	Planning and Development Office of LGU/Budget Office	-	-
Recognition of Performance/ Governance	1. Number of awards conferred to the locality	Number	Planning and Development Office	Data is available in the CPDO.	Data is updated as applicable. Data may also be located in the SEPP.
	2. Number of scores improved (service areas, i.e., administrative, social, economic, environmental and fundamentals of good governance) in the LGPMS from past rating	Number	LGPMS database	Data is available in the DILG City Administrator's Office.	Data is updated annually in their monitoring report
	3. Performance rating in the results of education and health assessments	Score	DepEd and DoH	-	-

Elements of Government Efficiency	Indicators	Measurement Types	Sources	Status	Frequency of Collection/Updating
Responsiveness to Business	1. Length of time to apply/renew business, construction and related permits (total new applications)	Number of days based on date of application	BPLS records on date of application to approval	-	-
	2. Presence of a local investment office	Scale	Observation	Data is available.	
	3. Completion of the Local Investment Code	Scale	BPL Office	Data is available.	
	4. Availability of an updated and functioning website	Scale	Web	Data is available.	Data is updated as applicable.
	5. Number of LGU services that are automated	Number	Planning and Development Office	-	-
Basic Government Services	1. Number of reported thefts and crimes in the locality	Number	Local PNP	Data is available in the local PNP Investigation Office.	Data is updated as applicable.
	2. Ratio of policemen/firemen to total population	Ratio	Budget Office	Data is available in the CPDO and Public Information Office.	Data is updated annually,
	3. Solid waste disposal facilities	Scale	ENRO		
	4. Number of higher education Institutions in the locality (public and private)	Number	BPLS/ Observation	Data is available in the CPDO (statistics division, SEPP).	Data is updated annually.
	5. Number of health facilities in the locality (public and private, health centers and hospitals)	Number	BPLS/ Observation	Data is available in the CPDO (statistics division, SEPP).	Data is updated annually.
	6. Presence of a local DRRMO and a local Disaster Preparedness Plan	Scale	ENRO	Plans are available in the local DRR office. The CPDO is given a copy.	Data is updated annually/ as applicable.

C. Indicators for Infrastructure

The following were observed during the field visits:

- The government agencies involved in the delivery of services to the transportation sector reported that they do not have control of the unregistered public and private transportation. They also added that terminals are well managed compared before and thus stricter measures are applied to prevent use of these facilities by unregistered transportation vehicles, public transportation vehicles.
- The CPDO explained that they previously planned to undertake a Barangay Development Planning exercise which would have included the collection of data on the availability of utilities. The exercise, however, did not push through because of budgetary constraints.
- It was observed that the internet rate per hour ranges from Php 20- 25.
- Data on the number of cellular sites and cable lines are available in the SEPP. However, data on coverage per locality is available with the local ICT operators.

Annex B.3. Sources, Measurement Type, Status and Frequency of Collection/Updating of Data for Indicators of Elements of Infrastructure

Elements of Infrastructure	Indicators	Measurement Types	Sources	Status	Frequency of Collection/Updating
Basic Infrastructure	1. Size of the local road network, with roads being classified as national, provincial, and municipal roads, and according to type/road condition assessment (Size of infrastructure)	Length in kilometers	DPWH, LGU Engineering Office	Data is available.	Data is updated/collected as applicable.
	2. Travel time from Poblacion/CBD to major ports nearest to the LGU (Quality of infrastructure)	Time in hours/minutes	LGU/ validation of locals	Data is available in the LTFRB.	Data is updated annually where applicable.
	3. Number of regular flights/boat trips in major ports per day	Number	Transportation offices	Data available in the Batangas City Port office	Data is updated annually where applicable.
	4. Number of registered public transportation vehicles by classification (buses, taxis, jeepneys, tricycles, habal-habals)	Number	BPLS form, Transport associations	Data is available in the BPLO and TDRO.	Data is updated annually.
	5. Number of non-registered public transportation vehicles	Number	Observations at terminal	Data is not available.	
	6. Total number of registered and non-registered public transportation vehicles as part of total number of vehicles in LGU	Percentage	BPLS form, Transport associations	Data is available in the LTO.	Data is updated annually.
	7. Number of registered public and private vehicles	Number	Nearest LTO	Data is available in the LTO.	Data is updated annually.
	8. Percent of households in LGU with connection to basic utilities: water and electricity to total number of households	Percentage	Utility companies	Data is not available.	
	9. Average hours of availability of electricity and water per day	Percentage	Utility companies and observation,	Data is not available.	

Elements of Infrastructure	Indicators	Measurement Types	Sources	Status	Frequency of Collection/Updating
			NEA and LWUA websites		
Technology Infrastructure	1. Number of internet cafes and gadget-related stores and services	Number	BPLS data and observation	Data is available.	Data is updated annually.
	2. Price per hour rental of internet time	Value	Observation	Data is available.	There is no definite frequency of data updating.
	3. Gross sales of computers and IT related products	Value	BPLS data	Data is available.	Data is updated annually/ as applicable.
	4. Number of internet/broadband, cellular, landline phone and cable post-paid subscribers	Number	Local phone and cable companies	Data is available.	Data is updated as applicable.
	5. Number of cellular sites and cable lines (per sq m) in the locality	Number	Local telephone and cable operators	Data is available in the TDRO.	
	6. Total enrolment in skills courses	Number	Local TESDA and PESO		
Social Infrastructure	1. Total number of higher education institutions	Number	LGU data, CHED, and observation	Data is available in the CPDO.	Data is updated annually.
	2. Number of elementary and high school buildings	Number	DepED	Data is available in the CPDO.	Data is updated annually.
	3. Share of social infrastructure spending to total infrastructure spending	Percentage	Budget Office of LGU/BLGF	Data is available in the City Budget Office.	Data is updated annually (included in the budget). It is specifically found in Special Education Fund budget.
	4. Number of public and private hospitals	Number	Local Health Office	Data is available in CPDO and the local DOH office.	Data is updated annually.

Elements of Infrastructure	Indicators	Measurement Types	Sources	Status	Frequency of Collection/Updating
	5. Number of enrolled students to total number of teachers in public and private schools	Number/ Percentage	Local DepED	Data is available in the TDRO.	Data is updated annually.

Annex C

Highlights of the Indicator Validation Exercise in Iloilo City and the Municipality of Cabatuan, Iloilo

A. Comments on the indicators

1. Economic Dynamism

- a. The number of new business registrations would be easy to obtain. However, the value of newly-registered businesses may only be indicative as it could be limited to capitalization; asset sizes may be difficult to obtain.
- b. The economy of most municipalities is largely agricultural. Would the exclusion of employment, unemployment and underemployment rates in the farming sector not make this indicator weak?
- c. In cities like Iloilo, with more than 100 banks, getting the % (on average) may be difficult.
- d. It would be easier to obtain the rate of growth in appraisal value of real estate
- e. This may be broken down into two indicators: 1) number of organized business groups in the LGUs and 2) participation in trade fairs. It is possible in some cases that a business organization exists and yet does not participate in trade fairs. Another point for consideration is the definition of "business organization". While there are chambers of commerce and business clubs in cities, there are usually none in municipalities. But there are vendors' associations, transport associations, etc.
- f. The indicator "number of HEIs in the locality" may be applicable mainly in cities since most HEIs are in cities and capital towns, although a few municipalities host extension campuses/branches of these institutions.
- g. The indicators "number of banks," "number of registered businesses," "average cost of power," and "average cost of water" are also used by the IMD's World Competitiveness Yearbook and the Asian Institute of Management Policy Center in the conduct of its biennial Philippine Cities Competitiveness Ranking Project.
- h. The Indicator "number of construction permits" is also used by the World Bank.

2. Government Efficiency

- a. The scores of the LGUs in the annual LGPMS are objective indicators of certain dimensions of Government Efficiency.
- b. The indicator "Presence of One-stop Business and investment Promotion Office" may have to be rephrased in such a way that it covers offices with different names yet performing essentially the same functions.
- c. The indicator "doctors per 100,000 population" may be expanded to include nurses, midwives and other health workers. Redefined as such, it could be a more effective indicator at the level of municipalities.

3. Infrastructure

- a. The "road network/density" is easy to obtain. This may, however, be broken down into national roads, provincial roads, municipal roads and barangay roads. The types of roads (concrete, asphalt, gravel, etc.) may also be factored in. The indicator may be limited to concrete roads only.
- b. Presence and access (of and to seaports and airports) may be two separate indicators. Presence is rather limiting (as there usually is just one airport or international seaport on an island (like Panay) which constitutes several provinces,

- cities and municipalities. Access, however, can be easily measured in terms of travel time from the LGU to the seaport or airport.
- c. The number of households in an LGU with electricity and/or water would be easy to determine, and consequently, the percentage of households having such, based on the active consumers directory of the electric cooperative/water district serving a particular LGU. However, instead of determining percentage of population, we should use percentage of total households. As regards sanitation, there usually is NSCB data on households with/without toilets.
 - d. The indicator “percent of population with access to the Internet” may be limited to post-paid internet connections; in municipalities and even in some small cities, pre-paid internet connections (e.g., Smart Bro, Globe Tattoo) predominate. It may therefore not be an effective measure of Internet connection.
 - e. The indicator on mobile phone use may be limited to post-paid mobile phone subscriptions. There would be a problem tracking the number of people with pre-paid mobile phone subscriptions, which appears to be more than those with post-paid mobile phone subscriptions.
 - f. The modes of public transport to be included in the indicator “frequency of public transport” should be made clear.
 - g. The availability of higher education institutions in the LGU may not be an effective indicator in municipalities. While there are extension campuses/branches of HEIs in some municipalities, HEIs generally operate in cities or capital towns.

B. Suggested indicators/alternative indicators (from other sources)

1. Economic Dynamism

- a. Instead of the number of HEIs, it is suggested that net secondary enrolment be used. Net secondary enrolment is defined as “enrollment of the official age group for secondary education expressed as a percentage of the corresponding population” (USAID/PRB, "Population and Economic Development"). This could be good replacement indicator for "professional board passers from HEIs in the LGU". HEIs are mostly located in cities, rarely in towns.
- b. Minimum wage rate and cost of fuel may be used as additional indicators of Economic Dynamism (particularly “cost of doing business”) (AIM Policy Center, PCCRP).
- c. The indicator “average cost of space rental in the Central Business District” as used by the AIM PCCRP may also be adopted but must be contextualized in the realities of the municipalities, where CBDs may refer to the public market.
- d. “Average number of taxpayers” may also be considered as another indicator of economic dynamism (Doing Business in the Dominican Republic).

2. Government Efficiency

- a. The annual scores/standings of LGUs in the LGPMS may be used for relevant dimensions of Government Efficiency. (DILG-LGPMS)

3. Infrastructure

- a. Access to ports may be measured in terms of travel time from the city hall/municipal hall/provincial capitol of an LGU to the port (as used in the AIM PCCRP);
- b. NCSB/NSO data may be used for the indicator on sanitation.
- c. The availability of hospitals in municipalities may not be a very effective measure. It is suggested that in addition to hospitals, DOH-accredited health centers be counted in, as well. (DOH).

- d. Another indicator could be the number of registered PUVs per 1,000 people (World Bank).

Annex D

Highlights of Indicator Validation with NGAs in Batangas City

The validation conducted with the NGA offices resulted in alternative sources of information being identified. Most of the data required are available at the NGAs, although these come in the form of national totals. If regional data is preferred, the NGAs recommended that data be gathered from the LGU's regional counterparts.

The other data sources may be:

- NSO- Labor force Survey, Annual Survey of Philippine Businesses and Industry(Wholesale and Retail), Philippine Year Book
- NSCB- Philippine Statistical Year Book

The other offices which may provide data:

- DOE, DOT, NEDA, BIR

The validation exercise in among NGAs Batangas City also resulted in the NGAs not recommending the inclusion of the following indicators in the system:

ECONOMIC DYNAMISM:

- Number of non- officially business and as a percentage of registered business - the NGAs commented that they only have control over those who register their businesses and that there may be studies done on the subject but specific data as to count or prevalence is not regularly gathered.
- For tourism (number if tourists- local and foreign per tourist site and revenues collected from tourists spot, i.e. entrance fees/ number of hotels, lodging/restaurants - Concerns were raised regarding areas/ regions/LGUs that are basically not tourist spots. Given that, the study would like to come up with a common list of indicators that could measure economic development across all LGUs/regions, the inclusion of this indicator was not recommended.

GOVERNMENT EFFICIENCY:

- Length of time to apply/ renew business – It was noted that, although the application date may be recorded, the length of time for the processing of the application is dependent on the completeness of the records/requirements submitted by the applicants. The NGAs also reported that they do not have this data in their possession.
- Number and level of funding by external donors for improvement of local development – It was pointed out that just as in the case of Batangas City, not all localities receive funding from external donors for their projects, most of which are funded from local resources. Moreover, it was mentioned in the interviews that most external donors course their funding through specific national agencies which, in turn, determine the recipient locality.

Based on the learnings from the validation exercises in Batangas and with NGAs, the following are recommended to make the indicator list more specific and therefore more appropriate:

GOVERNMENT EFFICIENCY:

- Compliance to national policies on environment, sustainable development, anti-red tape, transparency initiatives, disaster preparedness - According to those interviewed, the indicators presents to be appropriate measures of local economic development however, there are LGUs that are not as advanced (technologically capable) as others but still exert efforts in complying with policies mentioned above. To be more specific, a minimum standard may be set.
- Availability of Website – It was suggested that instead of the availability of a website, th contents of the website be made the indicator, considering that most LGUs have websites already. A minimum standard for website content was also recommended. The interviewees also noted the increasing use by LGUs of social media sites as supplements to the website. It was noted that social media networks make the LGUs more reachable and that interaction is possible. Posting on such sites also entail little or no costs compared to maintaining a website.
- Performance rating in the results on education and health assessments – The interviewees asked what specific education and health assessments the study was referring to.

Annex E

Highlights of Indicator Validation with NGAs and Chambers in Iloilo City and the Municipality of Cabatuan

The proposed indicators were validated with the regional offices of the NSO, DTI, and NSCB. In Iloilo City, validation interviews were also conducted with the Iloilo Chamber of Commerce and Industry, Inc., headed by Mr. Joemarie Agriam, as well as with the Iloilo Business Club, led by Mr. Juan Jose Jamora III, through its Executive Director, Ms. Ma. Lea Lara. In Cabatuan, the interview was conducted via telephone with Mrs. Amelita Maroma, president of the Cabatuan Chamber of Commerce and Industry.

The following observations were gathered:

1. The Iloilo Chamber of Commerce and Industry, Inc. Does not have its own database. It relies on DTI, where it holds office, for its information needs.
2. The Iloilo Business Club also has limited information on economic indicators. It draws information from the Iloilo City Government and DTI-Iloilo.
3. The Cabatuan Chamber of Commerce and Industry has just been revived. It has only 11 active members. It does not have an office, much less a database.
4. Data at the DTI is mostly at the provincial and key city levels; certain indicators need to be disaggregated by municipality.
5. DTI has data on exports, classification of industries by size, number of establishments registered by major industry division and by location (province and key city), as well as initial capitalization and asset sizes of registered businesses.
6. DTI has data on registered internet cafes and Internet service providers.
7. The National Telecommunications Commission has the data on cell sites.
8. The NSO has data on labor force and employment, family income and expenditures, consumer price index, monthly inflation rates, classification of families by source of income and income class, poverty threshold and incidences, housing, and population.
9. The NSCB has data on the following indicators but only at the provincial and city levels: number of registered business establishments; total investments generated through business registrations; value of private building construction (residential and non-residential); number of hotels, hotel rooms and accommodation facilities; number of private and government hospitals; number of Department of Health facilities (i.e., health centers and barangays health stations); number of households with access to safe water and sanitary toilets; number of higher education institutions; student-teacher ratio in public elementary and high schools; employment by sector and sex; number of registered motor vehicles; length of national bridge by type and national roads by surface type; telephone distribution, number of cell sites; airport movement, airline passenger movement and volume of airport cargoes; number of municipalities and barangays energized; electric power rates; water

supply status; water rates; revenue collection performance by province, city, and municipality; Internal Revenue Allotment (IRA) profile by province; statement of income and expenditures by province, city and municipality; number of banks by type and by province; selected balance sheet accounts (including loan portfolio) by banking group; volume of crime by type and by LGU (province and city only); policemen-population ratio; firemen-population ratio.

10. Under the Economic Dynamism (Growth of Economy and Investments) factor, it is suggested that instead of just looking at the number of hotels/lodging houses/inns, the indicator should consider accreditation by the Department of Tourism (DOT), and to include the number of DOT-accredited restaurants as well. The suggested indicator is: Number of DOT-accredited hotels/inns/lodging houses and restaurants.
11. The data on education (social infrastructure) is obtained by LGUs from the Department of Education, the Commission on Higher Education, and the Technical Education and Skills Development Authority. Information is available on the number of classrooms, but not on the number of buildings.
12. Under the Government Efficiency (basic government services) factor, LGUs get data from the Philippine National Police on crime statistics. It should be noted, however, that while the proposed indicator speaks only of “incidence of theft and **crime**” (?), PNP data are more specific. If the proposed indicator counts incidences of theft, how about robbery, which is a graver form of a crime against property? If the proposed indicator covers incidences of murder, how about homicide and serious physical injuries? “Crime” in the proposed indicator should be “murder,” as adopted from the AIM Philippine Cities Competitiveness Ranking Project.
13. The NSCB also has data on volume of crime by type (index and non-index) and by location. However, data disaggregation on crime is only at the provincial and city level.
14. Under the Infrastructure (Basic Infrastructure) factor, the number of flights may be obtained from the Department of Transportation and Communication – Civil Aeronautics Administration of the Philippines (DOTC-CAAP), while the number of boat trips may be gotten from the Maritime Industry Administration (MARINA).
15. Under Infrastructure (Basic Infrastructure), the number of registered vehicles may be obtained from Land Transportation Office (LTO). On the other hand, the number of authorized public utility vehicles (PUVs) is with the Land Transportation Franchise Regulatory Board (LTFRB).
16. Other observations:
 - a. In the case of Iloilo City, as could be in other urbanizing centers in the country, the number of informal settlers appears as a significant indicator of social infrastructure (housing).
 - b. The indicator “number of public and private hospitals” may be applicable only in cities and capital towns. It is suggested, as learned from the NSCB, that another indicator for health services (as social infrastructure) be used: Number of DOH facilities (health centers/barangays health stations) in the LGU.

- c. The chambers have expressed their need for regularly update data, particularly those relating to the cost of doing business: space rental cost, cost of power, and cost of water.

Annex F

Original List of Indicators for Validation at the Local Level⁴

A. Rationale

Estimating local development continues to be a challenge in the Philippines. The lack of a standard set of basic indicators that is available at the local level, i.e., municipality, city and province, makes the task a difficult one. Adding the critical component of local competitiveness has made the estimation all the more cumbersome as more factors need to be considered. To overcome these challenges, we have developed a framework that attempts to harmonize the estimation of local economic development and that of competition into one. A review of all the significant international and national competitiveness rankings, surveys and city-level studies revealed that three (3) essential factors – Economic Dynamism/Performance, Government Efficiency, and Infrastructure – need to be considered. These factors are broad enough to allow for a certain level of standardization and aggregation from the local to the national level. Specifically, the factors can capture the following elements:

1. Under Economic Dynamism/Performance – size of economy, growth of economy and investments, employment, prices, productivity, business groups, financial deepening;
2. Under Government Efficiency – transparency and accountability, public finance, recognition of performance/governance, responsiveness to business, and basic government services; and
3. Under Infrastructure – basic infrastructure, technology infrastructure, and social infrastructure.

B. Developing an Index and Assigning Weights

Within these different elements, we can identify specific corresponding indicators. We can develop an index of local economic development and competitiveness by assigning equal weights to each of the essential factors, with each one accounting for 1/3 of the total index. Ideally, to avoid creating bias, the number of indicators for each factor should at least be equal. However, considering that we are assuming each factor to have equal weights and that each factor will have different types of elements to consider, we will have to assign weights for each based on the total number of indicators per element. For example, the factor Economic Dynamism has nine (9) elements. Each indicator identified for one element will have to be weighted to the total number of indicators for the whole factor. With this perspective, we can avoid limiting the number of indicators and making them equal per factor.

The next step is to identify indicator/s per element per factor. Ideally, the indicators that will be identified are quantitative and can be standardized into ratios and/or growth rates for comparability purposes. Apart from being quantitative in nature, the main characteristics (adapted from CEDOS and BERL) of the indicators are:

⁴ Draft prepared by Alvin Ang with the assistance of Jigger Latoza and Shai Esguerra

1. Few in number, in that they must be focused and limited to the essential ones without affecting the objective;
2. Easy to collect, in that they should be readily available or easily gathered at the local level for timeliness and consistency;
3. Easy to understand; and
4. Effective measures of performance, in that they should create impact for the community.

The following tables contain the proposed indicators for each of the elements of the factors. At present these are unbalanced and need to be validated at the local level. During validation, it is possible that some may be removed or replaced. Thus, it is likely that some elements will have more indicators than the others. Nonetheless, careful consideration will be given to the measurement aspects to ensure that the indicators will be designed to capture essential weights without tilting the impact balance on one factor and that it is equal among the three.

Table Annex F.1. Measurement Types and Sources of Indicators of Various Elements of Economic Dynamism/ Performance

Elements of Economic Dynamism	Indicators	Measurement Types	Sources
Size of economy	1. Number of annual business registrations (new and renewal)	Number	BPLS Form
	2. Number of non-official businesses and number of non-official businesses as a percentage of total number of registered businesses	Number and Percentage	List of market stall owners
	3. Total capitalization of all registered businesses and capitalization of all registered businesses per sector	Value in PhP	BPLS Form
	4. Gross sales of businesses whose registration had been renewed	Value in PhP	BPLS Form
	5. Total number of registered and non-official businesses (1+2)	Number	BPLS Form
	6. Number of businesses paying local taxes	Number	BPLS Form/ Treasurer's Office
Growth of Economy and Investments	1. Total capitalization of newly-registered businesses	Value in PhP	BPLS Form
	2. Change in total capitalization from past year of businesses whose registrations had been renewed	Percentage	BPLS Form
	3. Change in total gross sales from past year of businesses whose registrations had been renewed	Percentage	BPLS Form
	4. Number of groceries (supermarkets), hardware/construction suppliers, and fastfood restaurants	Number	BPLS Form, Observation
	5. Percentage of number of unoccupied stall to total number of rental stalls in public markets	Percentage	Public Market Office
	6. Number of construction permits approved for businesses and non-business entities and change from past year in the said number	Number and Percentage	LGU Engineering Office
	7. Number of lodging houses, inns and/or hotels	Number	BPLS Form
Employment	1. Number of jobs created by newly-registered businesses	Number	BPLS Form
	2. Number of persons employed by businesses whose registration had been renewed	Number	BPLS Form
	3. Total jobs in the locality per type of business/sector and by gender	Number	BPLS Form,
	4. Total jobs in the locality as a ratio of the total working age population	Percentage	Census data of NSO

Prices	1. Cost of utilities (electricity/kwh, water/ccm, and basic telco)	Value	Records of utility companies
	2. Average change in monthly rental of registered businesses from past year and/or average change in market stall rentals	Percentage	BPLS Form, Public Market Office
	3. Prices of rice (per kilo), egg (per piece), sugar (per kilo), and kerosene (per liter) and their change from past year	Value and Percentage	Public Market Office
Financial Deepening	1. Percentage of business-related loans to total loans granted by banks	Percentage	Reports to BSP
	2. Percentage of approved loans to total loan applications in banks/microfinance institutions/cooperatives	Percentage	BAP, RBAP, CDA, microfinance organizations
	3. Number of commercial banks, rural banks, microfinance institutions, cooperatives, and registered lending companies	Number	BPLS forms
Productivity	1. Total gross sales as a share of total number of people employed	Percentage	BPLS forms
	2. Total number of professional board passers from locality and/or net secondary school graduation rate	Number and/or percentage	PRC for board passers and local DepEd for secondary school data
Business Groups and Associations	1. Number of organized business groups in the locality	Number	LGU record of recognized organizations (Sanggunian Approvals)
	2. Number of associations (industry, skill-based and professional groups such vendor's organizations, transport associations, aside from local chambers and business-cultural associations)	Number	

Table Annex F.2. Measurement Types and Sources of Indicators of Various Elements of Government Efficiency

Elements of Government Efficiency	Indicators	Measurement Types	Sources
Transparency and Accountability	1. Transparency score in LGPMS which include the following indicators: a. Presence of Public Information Office b. Extent of Communicating mediums to update local government plans c. Accessibility to public documents	Scale	LGPMS Report
	2. Accountability score in LGPMS which include the following indicators: a. Effectiveness of LGU's Financial Management System b. Functionality of Bids and Awards Committee c. Timely liquidation of Cash Advances d. Availability of status report on actions taken by the LGU on COA audit findings	Scale	LGPMS Report
	3. Participation Score in LGPMS which include the following indicators: a. Representation of CSOs in Local Special Bodies b. Presence of Feedback Mechanism to generate citizen views c. Involvement of CSOs in implementation of LGU programs and projects	Scale	LGPMS Report
Public Finance	1. LGU savings/debt and as a share to total LGU revenue (locally generated, IRA and other non-revenue sources)	Level and percentage	BLGF data
	2. IRA as a share to total revenue of LGU	Level and percentage	BLGF data
	3. Level of Real Estate and Business taxes to total LGU tax collected	Level and Percentage	BLGF data
	4. Number of projects and level of funding by external donors for local development	Number and level	Planning and Development Office of LGU/Budget Office
Recognition of	1. Number of awards conferred to the locality	Number	Planning and

Performance/ Governance			Development Office
	2. Number of scores improved (service areas, i.e., administrative, social, economic, environmental and fundamentals of good governance) in the LGPMS from past rating	Number	LGPMS database
	3. Performance rating in the results of education and health assessments	Score	DepEd and DoH
Responsiveness to Business	1. Length of time needed to secure new and renewed business, construction and related permits (total new applications)	Number of days based on date of application	BPLS records
	2. Presence of a local investment office	Scale	Observation
	3. Completion of a Local Investment Code	Scale	BPL Office
	4. Availability of an updated and functioning website	Scale	Web
	5. Number of LGU services that are automated	Number	Planning and Development Office
Basic Government Services	1. Number of reported thefts and crimes in the locality	Number	Local PNP
	2. Ratio of policemen/firemen to total population	Ratio	Budget Office
	3. Solid Waste Disposal facilities	Scale	ENRO
	4. Number of public and private higher education institutions in the locality	Number	BPLS/ Observation
	5. Number of public and private health facilities in the locality (health centers and hospitals)	Number	BPLS/ Observation
	6. Presence of a local DRRMO and a local Disaster Preparedness Plan	Scale	ENRO

Table Annex F.3. Measurement Types and Sources of Indicators of Various Elements of Infrastructure

Elements of Infrastructure	Indicators	Measurement Types	Sources
Basic Infrastructure	1. Size of the road network in the locality, with roads being classified as national, provincial, municipal and based on type/road condition assessment (Size of infrastructure)	Length in kilometers	DPWH, LGU Engineering Office
	2. Travel time from the poblacion/CBD to major ports nearest to the LGU (Quality of infrastructure)	Time in hours/minutes	LGU/ validation of locals
	3. Number of regular flights/boat trips in major ports per day	Number	Transportation offices
	4. Number of registered public transportation vehicles by classification (buses, taxis, jeepneys, tricycles, habal-habals)	Number	BPLS form, Transport associations
	5. Number of non-registered public transportation vehicles as observed	Number	Observations at terminal
	6. Number of registered and non-registered public transportation vehicles to total number of vehicles in LGU	Percentage	BPLS form, Transport associations
	7. Number of registered public and private vehicles	Number	Nearest LTO
	8. Percentage of households in LGU with connection to basic utilities: water and electricity to total number of households	Percentage	Utility companies
	9. Average hours of availability of electricity and water per day	Percentage	Utility companies and observation, NEA and LWUA websites
Technology Infrastructure	1. Number of internet cafes and gadget-related stores and services	Number	BPLS data and observation
	2. Per hour rental of internet time	Value	Observation
	3. Gross sales of computers and IT-related products	Value	BPLS data
	4. Number of internet/broadband, cellular, landline phone and	Number	Local phone

	cable post-paid subscribers		and cable companies
	5. Number of cellular sites and cable lines (per sq km) in the locality	Number	Local telephone and cable operators
	6. Total enrolment in skills courses	Number	Local TESDA and PESO
Social Infrastructure	1. Total number of higher education institutions	Number	LGU data, CHED and observation
	2. Number of elementary and high school buildings	Number	DepED
	3. Share of social infrastructure spending to total infrastructure spending	Percentage	Budget Office of LGU/BLGF
	4. Number of public and private hospitals	Number	Local Health Office
	5. Number of enrolled students to total number of teachers in public and private schools	Number/ Percentage	Local DepED

Annex G.

Final List of Indicators

FACTOR	INDICATORS			DEFINITION
A. Economic	a. Economic Efficiency	b.	c. Source	
Size of economy	a.1 Number of annual business registrations (new and	number	BPLS Form	Total number of firms registered (new and renewal)
	a.2 Amount of Money in Circulation (city level)	Value in PHP	BSP	sum of money circulating in the locality as validated by BSP
	a.3 Total Capital of newly registered and renewal business	Value in PHP	BPLS Form (can be	sum of capital for both new and renewal business
Growth of Economy and	a.4 Change in Gross Sales (Total) of registered business (Renewal) from past year	Percentage	BPLS Form	Growth of Total Gross Sales of past year registered businesses
	a.5 Change in the Number of construction permits and/or occupancy permits approved for business and non-business	Percentage	LGU Building Official, BPLS Form	Growth in number of all business permits issued by the LGU
Employment	a.6 Number of jobs created for new registration	Number	BPLS Form	Sum of all employees of newly registered business from past year
Cost of Living	a.7 Cost of Living (main measure should be the provincial or city inflation rate) - alternatively use electricity per kwh, water per cubic meter, rent per sq m in commercial center)	Inflation is percentage;	Local NSO office or Provincial NSO (to include other	Inflation rate of city/province; utilities' cost based on actual charge by companies
Financial Deepening	a.8 Number of commercial banks, rural banks, microfinance institutions, cooperatives and registered lending companies	number	BPLS forms/local CDA/BSP	sum of all financial institutions in the BPLS forms <i>c/o associations</i>
Productivity	a.9 Gross Sales/Revenue (Total) past year as a share of Total employed past year(in registration) <i>gross sales in revenues</i>	Value in PHP	BPLS forms	sum of total sales/revenues of renewal business as a share of total employed last year in BPLS database
Business Groups and Associations	a.10 Number of organized business groups (including industry, skill and professional and sectoral associations) in	Number	LGU record of recognized organizations	number of recognized organizations based on the list of LGUs

FACTOR	INDICATORS			DEFINITION
	b. Government Efficiency			
Transparency and Accountability	b.1 Transparency score in LGPMS which include the following indicators:	Validated LGPMS score	LGPMS Report (DILG-RO)	The DILG has a system of scoring called the LGPMS. All these subcomponents are contained therein and are already validated as published
	b.1.1 Presence of Public Information Office			
	b.1.2 Extent of Communicating mediums to update local government plans			
	b.1.3 Accessibility to public documents			
	b.2 Economic Governance score in LGPMS on entrep, bus and industry promotion	Validated LGPMS score	Annual LGPMS Report (DILG-RO)	Based on the following criteria - these are composite scores with the following sub-indicators so no need for other criteria
	b.2.1 Capacity to generate resources (% real estate and business tax to total LGU tax collected)			
	b.2.2 Quality of civil application system to business sector			
	b.2.3 Processing time of building, business and occupancy permit			
	b.2.4 Quality of direct support services to business, enterprises and industries'			
	b.3. LGU savings/debt as a share to total LGU revenue (locally generated, IRA and other non-revenue sources)			
Public Finance	b.4 Real Estate Tax and Business Tax to total LGU revenues	percentage	BLGF data	sum of real estate and business tax as a share of LGU revenues
Recognition of Performance	b.5 Relevant to Competitiveness Awards Conferred to LGU : eGOV, Galing Pook, Seal of Good housekeeping, Gawad Pamana ng Lahi, Most Business Friendly	Number of Awards	DILG Regional offices	recognize only awards related to governance, efficiency <i>criteria as main consideration</i>
Responsiveness to Business	b.6 Business Registration System for : a) total new application	Number of days and steps	Annual LGPMS Report (on Citizens' Charter), Local DILG Officer and LGU BPLO	
	b) renewal permit	Number of days and steps	Local DILG Officer & LGU	
	c) construction permit	Number of days and steps	Local DILG Officer & LGU BPLO	
	d) Presence of an Investment Promotion Unit/Center	Binary answer (Yes or No)	MPDO/CPDO	The presence of an investment center is a crucial step to signify seriousness in attracting investments from both local and foreign

FACTOR	INDICATORS			DEFINITION
Basic Government Services	b.7 Effective Local DRRMC Plan	Validated score of Seal of Disaster Preparedness	Annual Seal of Disaster Preparedness Report by DILG	Assessment of LGU capacity in terms of preparedness and ability to respond to disaster as evaluated by DILG
	b.8 Crime Incidence	Crime Index (index crime per 100,000 population)	Monthly PNP Report	The Crime index represents the severity or the relative security of a locality. The lower the index, the better it is for the LGU.
		Police to population ratio		Alternative is the number of police to population. The lower the number, the more exposed a locality is to crime.
	b.9 Capacity of Local Secondary Schools	Average Class Size of Secondary Public Schools (Number of students per class)	Local DepEd Report	The average class size represents the capacity of the school to absorb students in terms of facilities. Large class sizes reflect inefficient delivery of education services
	b.10 Availability of Health Services	No. of health manpower /population	Annual LGU Report	This is an indicator of health capacity. A higher share means that LGU is responding to the need for more health manpower

FACTOR	INDICATORS			DEFINITION
	c. Infrastructure			
C. Basic Infrastructure	c.1 Size of local road network as a share of total land area of municipality or city(Size of infrastructure)	ratio	DPWH, LGU Engineering Office	Determines extent of localities interconnectiveness
	c.2 Travel Time from Center/CBD to Major Ports nearest to the LGU (Quality of infrastructure) (<i>domestic, international</i>)	Time in hours/minutes	LGU/ Validation of Locals	
	c.3 Percent of annual investment in Infrastructure local institutions in locality	Percentage	MPDO/CPDO	Indicator of total infrastructure as priority investments by the LGU
	c.4 Number of Registered Vehicles (public and private) servicing the area	Number	Nearest LTO	Sum of all vehicles to determine traffic
	c.5 Percent of households in LGU with connection to basic utilities: a) capacity for local landline b)water c)electricity, and d) internet	Percentage	Utility companies/ MPDO CPDO	Sum of connected households to total households which is an indication of service availability and price of utilities
	c.6 Average hours of availability of electricity and water per day	Percentage	Utility companies and observation,	
Technology Infrastructure	c.7 No. of Cellsites	Number	Observation	Indicator of need, skills and affordability of internet services
	c.8 Total number of ATM in the locality	Number	Observation/actual count	indicator of financial sophistication
Social and Tourism Infrastructure	c.9 Ratio of hospital bed/population (<i>primary, tertiary hospitals</i>)	Ratio	DOH/local health office	Indicator of health response capacity
	c.10 Number of hotel rooms and restaurants	<i>Number vs population</i>	DOT/local tourism	indicator of tourism absorptive capacity

Appendix H

Developing the Indicator System into a Useful Index of Local Competitiveness and Development

The identified indicators will prove to be useful if they can be compared across levels of governance. Ideally, the municipal-level indicators can be aggregated to form clusters of indicators for different nearby municipalities. These clusters can then be aggregated into province-level clusters of indicators which, in turn, can be aggregated into region-level clusters. Region-level clusters can then be aggregated into the national-level cluster of indicators. The same can be done for cities and cluster of cities. The aggregated levels can then serve as a close approximation of the municipal, city, provincial, regional, and national GDP.

Even without aggregation, a completed set of indicators for each locality can be compared across similar levels. This way, municipalities, cities, provinces, and regions can be ranked based on the results of the indicators. The indicators, however, need to be processed as a summative index for ranking to be possible.

Prior to the processing of indicators as a summative index, the following needs to be carefully considered:

1. ***Distribution of weight across the three factors.*** Based on a review of the different rankings and competitiveness analyses currently in use, it would seem that the factors of Governance and Infrastructure combined are considered as the basic competitiveness factors while Economic Dynamism can independently cover the essence of local economic development. Thus, all three factors can account for 33.3% each of the index.
2. ***Distribution of weight across indicators.*** Each of the 30 indicators is given a weight of 3.3%. This will result in a total of 99.9%. Therefore, the highest score will be 100 or 100% as the index is summative.
3. ***Standardization of different types of data.*** To facilitate the summation of scores across indicators expressed in various forms, such as percentages, growth rate levels, numbers, and peso values, the following rules are proposed:
 - a. Percentages should be directly multiplied with the contribution factor.

Example:

$$\text{Percentage Change in Gross Sales of Business Renewals (from past year)} = 50\% \times 3.3\% = 0.0165$$

- b. Numbers, values and scales should be subjected to the following formula (as used in the computation of HDI):

Average or actual result less minimum of cohort sample divided by the maximum (a target) less the minimum of cohort sample multiplied by contribution factor.

Examples:

Number of Annual Business Registrations = 100 (actual registrants this year) less 20 (number of registrants recorded in the past year) divided by 120 (target number of registrants by the LGU) less 20 (number of registrants recorded in the past year) multiplied by 0.033 (3.3%) = 0.0264

Transparency Score in LGPMS (The highest score in LGPMS is 5 and lowest is 1) = 4.3 (actual score in transparency) less 3 (minimum score of comparable LGU in transparency) divided by 5 (maximum score of comparable LGU in transparency) less 3 (minimum score of comparable LGU in transparency) multiplied by contribution factor of 0.033 (3.3%) = 0.02145

- c. In case any of the identified 30 core indicators are not applicable or available in some LGUs, alternative indicators that resemble the information on the core list can be used.
- d. Using 100% as the outcome measurement makes it easier for LGUs to monitor performance at a comparable level. It is better not to label any results below 75% as a failure. The outputs should be reported as they are and let the LGUs affected respond to the results accordingly.
- e. Independently, each LGU will not be able to score its index. However, each LGU will have an opportunity to develop a database from these indicators as they can be collected quarterly. The collected data can in turn be analyzed using trends and growth rates to compare movements across time.
- f. Furthermore, as the indicators are collected regularly, the computation of the contribution of each indicator can be adjusted. Similarly, the same will apply to the weights for each indicator.

A sample computation of a completed index based on the core indicators is available in Excel file at H.1

The index needs to be computed by an institution that will compile all the statistics from different localities. The National Competitiveness Council (NCC), with its network of RCCs, and in cooperation with the regional DTI offices, can serve as this institution. NCC is at the forefront of analyzing data on competitiveness and is already rolling out regional level competitiveness indicators. Furthermore, for purposes of long term comparability, the index should be tracked by a permanent institution and not a task force. The NCC may tap the proposed subcommittee on local competitiveness and economic development at the regional level to assist in the local validation of the index results and to facilitate reporting. It should also work closely with the NSO and the NSCB

at the national level in fine-tuning the index until a considerable level of consistency and standardization of results have been achieved by the local reporting units.

APPENDIX H.1

SAMPLE COMPUTATIONS FOR THE INDEX BASED ON THE DETAILS IN APPENDIX H⁵

A. Economic Dynamism:	a. Economic Efficiency					COMPUTATION	% SHARE
		2011	2012	2013	target		
Size of economy	a.1 Number of annual business registrations (new and renewal)	60	70	85	85	0.033	3.30%
	a.2 Amount of Money in Circulation (city level)	100000	130000	155000	160000	0.028	3.30%
	a.3 Total Capital of newly registered and renewal business	200000	260000	300000	310000	0.026	3.30%
Growth of Economy and Investments	a.4 Change in Gross Sales (Total) of registered business (Renewal) from past year	60000	80000	100000	105,000	0.008	3.30%
	a.5 Change in the Number of construction permits and/or occupancy permits approved for business and non-business	45	60	78	80	0.030	3.30%
Employment	a.6 Number of jobs created for new registration	800	1000	1200	1250	0.026	3.30%
Cost of Living	a.7 Cost of Living (main measure should be the provincial or city inflation rate) - alternatively use electricity per kwh, water per cubic meter, rent per sq m in commercial center)	0.09	0.08	0.07	0.05	0.030	3.30%
Financial Deepening	a.8 Number of commercial banks, rural banks, microfinance institutions, cooperatives and registered lending companies	12	15	20	21	0.028	3.30%
Productivity	a.9 Gross Sales/Revenue (Total) past year as a share of Total employed past year(in registration) <i>gross sales in revenues over no. of employment</i>	75	80	83	84	0.028	3.30%
Business Groups and Associations	a.10 Number of organized business groups (including industry, skill and professional and sectoral associations) in the locality	8	14	17	18	0.025	3.30%
		economic dynamism				0.261	

⁵ This sample is generated using excel software.

b. Government Efficiency		COMPUTATION				% SHARE	
		2011	2012	2013 target			
Transparency and Accountability	b.1 Transparency score in LGPMS which include the following indicators:	4	4.2	4.9	5	0.029	3.30%
	b.1.1 Presence of Public Information Office						
	b.1.2 Extent of Communicating mediums to update local government plans						
	b.1.3 Accessibility to public documents						
	b.2 Economic Governance score in LGPMS on entrep, bus and industry promotion	3	4.5	4.9	5	0.026	3.30%
	b.2.1 Capacity to generate resources (% real estate and business tax to total LGU tax collected)						
	b.2.2 Quality of civil application system to business sector						
	b.2.3 Processing time of building, business and occupancy permit						
	b.2.4 Quality of direct support services to business, enterprises and industries'						
	b.3. LGU savings/debt as a share to total LGU revenue (locally generated, IRA and other non-revenue sources)						
Public Finance	b.4 Real Estate Tax and Business Tax to total LGU revenues	0.40	0.60	0.60	0.50	0.020	3.30%
Recognition of Performance	b.5 Relevant to Competitiveness Awards Conferred to LGU : eGOV, Galing Pook, Seal of Good housekeeping, Gawad Pamana ng Lahi, Most Business Friendly	2	5	9	10	0.026	3.30%
Responsiveness to Business	b.6 Business Registration System for :						
	a) total new application	5	4.5	4.2	4.1	0.008	1.1%
	b) renewal permit	3	2	1	1	0.011	1.1%
	c) construction permit	12	10	8.5	8	0.008	1.1%
	d) Presence of an Investment Promotion Unit/Center						

Basic Government Services	b.7 Effective Local DRRMC Plan	0.9	0.92	0.99	1	0.029	3.30%
	b.8 Crime Incidence	0.01	0.009	0.0055	0.005	0.029	3.30%
	b.9 Capacity of Local Secondary Schools	55	53	50	49	0.025	3.30%
	b.10 Availability of Health Services	0.1	0.12	0.133	0.135	0.029	3.30%
			governance			0.240	

c. Infrastructure		COMPUTATION				% SHARE		
		2011	2012	2013	target			
C. Basic Infrastructure	c.1 Size of local road network as a share of total land area of municipality or city(Size of infrastructure)	0.005	0.006	0.0095	0.01	0.029	3.30%	
	c.2 Travel Time from Center/CBD to Major Ports nearest to the LGU (Quality of infrastructure) (<i>domestic, international</i>)	80	70	60	60	0.033	3.30%	
	c.3 Percent of annual investment in Infrastructure local institutions in Locality	0.6	0.65	0.7	0.7	0.0231	3.30%	
	c.4 Number of Registered Vehicles (public and private) servicing the area	500	550	650	675	0.026	3.30%	
	c.5 Percent of households in LGU with connection to basic utilities: a) capacity for local landline b)water c)electricity, and d) internet	0.7	0.75	0.88	0.9	0.029	3.30%	
	c.6 Average hours of availability of electricity and water per day	0.7	0.72	0.8	0.8	0.033	3.30%	
	Technology Infrastructure	c.7 No. of Cellsites	0	2	3	3	0.033	3.30%
		c.8 Total number of ATM in the locality	2	5	10	10	0.033	3.30%
	Social and Tourism Infrastructure	c.9 Ratio of hospital bed/population (<i>primary, tertiary hospitals</i>)	0.01	0.012	0.0125	0.013	0.017	3.30%
		c.10 Number of hotel rooms	200	230	270	275	0.029	3.30%
		infrastructure				0.285		

TOTAL SUMMATIVE SCORE:	
Economic Dynamism	0.261
Governance	0.240
Infrastructure	0.285
raw score	0.786
x 100	79

