POVERTY MAPPING IN THE PHILIPPINES

By

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ABSTRACT

With the overarching concern to reduce poverty of almost all countries around the world, the need for smaller area poverty statistics comes to fore. The National Statistical Coordination Board (NSCB), the agency tasked to generate official poverty statistics released the first official poverty statistics at the provincial level, with previous estimates issued only at the national and regional levels. This is to help identify the poor provinces for the Kapit-Bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social Services (KALAHI-CIDSS) -Kapangyarihan at Kaunlaran sa Barangay poverty program of the Government. In addition to the official statistics, there are a number of ongoing efforts to generate other poverty indicators with disaggregation below the provincial level. A number of poverty mapping initiatives are being undertaken to provide a wider perspective on the poverty situation in the Philippines and assist Government in its effort to come up with effective poverty intervention programs. This paper presents some of these efforts, focusing on the poverty mapping initiatives of the NSCB, which uses a composite index approach. It also cites the problems experienced by the NSCB in developing the poverty maps. Recommendations on how to improve future poverty mapping efforts are also given.

POVERTY MAPPING IN THE PHILIPPINES [1]

By

Estrella V. Domingo [2]

I. INTRODUCTION

The Philippine Government continues to emphasize poverty alleviation as part of its overarching goal. International organizations have also recognized the need to reduce poverty incidence within the next decade. In the Millennium Development Goals, the aim is to reduce extreme poverty by half by 2010.

In this worldwide concern to reduce poverty, the role of poverty statistics cannot be overemphasized. In the Philippines, a major problem at present is reaching the poor to address their specific needs, which calls for poverty statistics at the smaller level of geographic disaggregation: provincial, municipal, city and barangay. To identify the poor and their needs, data on their social conditions are important.

In response to this need for smaller area information on the poor and their social conditions, the Philippines has embarked on a number of location specific poverty measurement efforts. On January 15, 2003, the National Statistical Coordination Board (NSCB) released for the first time official poverty statistics at the provincial level, with previous estimates issued only at the national and regional levels to help identify the poor provinces. The pressing need of the implementors of the Kapit-Bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social Services (KALAHI-CIDSS)[3]-Kapangyarihan at Kaunlaran sa Barangay Project to identify the poorest provinces and other government programs that depend on provincial poverty data to deliver services to the poor was the primary consideration in releasing the provincial poverty statistics. However, these statistics do not show where the poor are in the different provinces (municipal-level) as well as their social conditions (sectoral), which are needed to plot effective poverty reduction programs.

Other initiatives involved the use of poverty maps. Some of these were done under the banner of the Philippine Statistical System (PSS) while other studies were handled by academic researchers.

This paper describes briefly two selected poverty mapping initiatives in the Philippines, both of which have not been put to full use yet because these are still being developed, problems in data, and also their unofficial status. The focus of this paper, however, is on the poverty mapping methodology adapted by the NSCB, the agency mandated to generate official poverty statistics in the Philippines. The paper discusses in detail the NSCB poverty mapping which applies the composite index approach. It describes the sources of data and methodology used as well as limitations of the NSCB study. In addition, the paper presents the problems encountered in undertaking poverty mapping including recommendations to improve the Philippine efforts.

II. NSCB's POVERTY MAPPING INITIATIVES [4]

To further serve the needs of local planners and policy makers, the NSCB produced prototype poverty maps for the provinces of Laguna and Albay in 2002 as part of the Poverty Mapping Study under the Project on Re-engineering the Government Statistical Services – Phase II. Poverty maps make possible the integration of data from various sources such as surveys and administrative-based data and from different disciplines such as social, economic and environment data. Since different dimensions of well-being can be examined and integrated, these maps serve as very useful tools to local government units (LGUs) as well as local chief executives, particularly in identifying priority areas that should benefit from anti-poverty programs and interventions.

A. What is Poverty Mapping?

Poverty mapping is the spatial representation and analysis of indicators of human well-being and poverty (Henninger and Snel). They do not only provide the means by which social and economic indicators can be integrated but also the vehicle whereby biophysical information can be presented. Thus, poverty maps provide a systematic and analytical picture of poverty. In several countries in Africa, Asia and Latin America, poverty maps have been widely used in their fight against poverty.

Poverty maps have become more popular due to many reasons (Henninger and Snel):

1. Poverty maps are powerful tools for visualizing the location of the poor and in describing their conditions.
2. Poverty maps help in identifying priority areas and how to target anti-poverty programs.
3. Poverty maps make possible the integration of data from various sources such as surveys and administrative-based data and from different disciplines such as social, economic and environmental

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[4] This section draws from the paper of Virola, Romulo A., Gañac, Virginia N., Cabrales, Roy Z., and Suan, Eric B. 2002. NSCB Initiatives in Poverty Mapping. National Statistical Coordination Board.

data. Thus, different dimensions of well being can be examined and integrated.

4. Identifying spatial patterns with poverty maps can provide insights in the reasons affecting specific aspects of poverty.

5. Poverty maps can be vital tools for empowering the local populace to actively participate in the identification and conceptualization of anti-poverty initiatives.

6. Poverty maps, aside form highlighting, problems areas, can also show the distribution and condition of assets or resources that can be utilized for poverty reduction, such as markets, road networks, school, health facilities, etc.

In addition, a well-articulated framework for poverty mapping can be a powerful tool for statistical coordination.

B. The Methodology

The NSCB conducted an experimental work on poverty mapping in only two provinces, Laguna and Albay, given the limited available resources. The two provinces selected are where the NSCB has Regional Divisions that can provide the necessary coordinative mechanisms.

The following steps were undertaken in the development of the poverty mapping methodology.

1. Determination of the purpose and expected use of the poverty maps.

Guided by the requirements of Government planners, policy makers and implementors, the poverty maps were intended to meet the following objectives:

- to develop maps useful for locating the poor, identifying their characteristics/describing their conditions;
- to serve as basis for prioritizing areas which need immediate attention based on selected indicators; and
- to serve as basis for determining the appropriate intervention programs.

2. Determination of the frameworks to be used as the basis for selecting the indicators of poverty

The determination of the framework is important because this will define the coverage of the indicators of poverty that will be used in the poverty maps. It started by adapting the official definition of poverty based on Republic Act (RA) 8425, otherwise known as the Social Reform and Poverty Alleviation Act, which defines poor as individuals and families whose income fall below the poverty threshold as defined by the government and/or cannot afford in a sustained manner to provide their basic needs of food, health, education, housing and other amenities of life. Among the relevant

frameworks (see NSCB 2001) that were considered were the Human Development Index (HDI); the KALAHI and the Minimum Basic Needs (MBN). Having decided on the appropriate framework, other factors were considered such as the availability of the same data at the municipal level for both of the pilot provinces as well as the completeness of data. The availability of the same set of data for Albay and Laguna was necessary for comparability across the two provinces.

The MBN framework (see MBN Technical Working Core Group 1986) with its three major concerns of survival, enabling and security, was chosen because this was deemed to contain indicators that are already being measured and collected at the municipal level, the framework having been in place for several years now. This is an important consideration because the desired poverty maps can be prepared only if municipal data are available.

3. Selection of Input Data

While the MBN covers 33 indicators for its three main concerns, only 26 indicators were initially considered for reasons of availability and "completeness". However, upon closer study and based on the survey conducted to elicit the comments of experts, this list of indicators was further trimmed down for reasons of parsimony since some of the indicators were thought to be highly correlated, while other data were not available at the municipal level. Experts whose opinions were consulted included those for the Philippine Institute of Development Studies; DSWD; University of the Philippines (UP) School of Economics; Food and Nutrition Research Institute (FNRI); and the National Economic and Development Authority (NEDA). After a careful assessment of the data available and based on the suggestions gathered form the survey of experts, the following indicators were selected.

In Laguna, the following twelve indicators were identified:

- NUTRITION
  % of underweight children 6-59 months old
  % of underweight children 7-12 years old
  Newborns with birthweight less than 2.5 kgs
- HEALTH
  Infant mortality rate
  Ratio of population to health workers
- WATER AND SANITATION
  % of households with access to safe water
- PEACE AND ORDER
  Crime rate against persons
  Crime rate against property
- BASIC EDUCATION
  Participation rate in elementary schools
  Completion rate in elementary schools
  Literacy rate

- PEOPLE'S PARTICIPATION
  % of registered voters who actually voted

In Albay, the following are the thirteen indicators:

- NUTRITION
  % of underweight children 7-12 years old
  % of underweight children under 7 years old
  Newborn with birthweight less than 2.5 kg
- HEALTH
  IMR
  Mortality rate at age >50 years old
  Ratio of population to health workers
- WATER AND SANITATION
  % of households with access to safewater
- PEACE AND ORDER
  % of abused women and children
  Crime rate against person
  Crime rate against property
- BASIC EDUCATION
  Participation rate in elementary schools
  Completion rate in elementary schools
- PEOPLE'S PARTICIPATION
  % of registered voters who actually voted

4. Computation of poverty indicators at the provincial and national levels

COMPUTATION OF THE INDICATORS AT THE PROVINCIAL LEVEL

The poverty mapping methodology developed by the NSCB was distinct from other poverty mapping activities being undertaken by other agencies. The indicators from the Minimum Basic Needs framework for the three major concerns of survival, security, and enabling were collected at the municipal level from the Provincial Planning and Development Offices (PPDOs) in both provinces. Data submitted were carefully assessed and validated to check the data quality in terms of consistency and presence of outliers/extreme values.

The methodology involved the computation of a composite index out of the indicators for the components of the three major MBN concerns of SURVIVAL, SECURITY, and ENABLING. The component indexes are derived as the means (or simple arithmetic average) of their respective indicators. Thus, the HEALTH INDEX would be the average of the infant mortality rate and ratio of population to health workers. The composite POVERTY INDEX is then obtained as the unweighted arithmetic average of the indexes for the three major components.

It must be noted, however, that the initial list of indicators were not uniformly stated, such that, some indicators would move up to portray a favorable situation and move down to show an unfavorable situation while other indicators would behave in the opposite direction. For example, lower Infant Mortality Rates (IMRs) would be favorable but lower school participation rates would be unfavorable. Thus, the indicators were restructured so that movements in one direction would have similar meanings. To do this, the complement of some indicators was adopted, such as, the complement of the school participation rate would be school non-participation rate.

Next, the individual indicators were converted into unit-less measures since these indicators were not expressed in the same units and, therefore, could not be aggregated. For example, the IMR is expressed as the number of infant deaths per 1,000 livebirths, while school participation rates are in terms of percentages. Conversion into unit-less measures of the indicators is done by first deriving the provincial values of the indicator or the national values of the indicators. The municipal values of the indicators are then divided by the provincial values if the comparison is to be made among municipalities of the same province   All the resulting quotients are called INDEXES.

It would have been desirable to compare the municipal values against a provincial target that might have been specified in the provincial development plan or against a standard set by the concerned agency, such as the Department of Health or the Department of Education.   In this exercise, in the absence of a set provincial target, the provincial value of the indicator was used as the basis for the comparison among the municipalities. No weights were used to derive the provincial value as raw data were available. The provincial value is simply derived as the ratio of the total of the municipal values to the total relevant population. All the municipal indicators were then compared against this provincial value to convert the municipal indicators into unitless values so they can be aggregated to derive the composite index at the provincial level.

The use of the provincial value against which the situation of the municipalities are compared enables the users to rank the performance of the municipalities within the province for each of the indicators.

COMPUTATION OF THE INDICATORS AT THE NATIONAL LEVEL

If the comparison is to be made among all municipalities in the country, the municipal values can be divided by a national target set by the concerned agencies. Or in the absence of a national target, the over-all average value for all municipalities is used in place of the national target. Another way of comparing the situation of the municipalities would be to use a national average from administrative data. More specifically, listed below

are the variables for which national averages from the concerned agencies were sourced:

- Newborn with birthweight less than 2,500 grams (DOH)
- Crime rate (PNP)
- Elementary participation rate (DepEd)
- Elementary completion rate (DepEd)
- Registered voters who actually voted (Comelec)

The following variables were sourced from surveys/censuses:
- Underweight children less than 6 years old (FNRI)
- Moderately and severely underweight children 7-12 years old (FNRI)
- Access to safewater. (1990 CPH)

On the other hand, the infant mortality rate was taken from the Technical Working Group (TWG) on Mortality Statistics of the NSCB. However, the data refer to 1995.

For the other indicators for which the national average as discussed above is not available, the national average is taken as the average for all the municipalities of Laguna and Albay.

In the computation of the national average, the same procedure is followed as in the derivation of the provincial values as described in the previous section.

5. Producing the POVERTY MAPS

The municipal indexes are plotted on the maps using a GIS software. Maps are made for the individual indicators, the composite indexes and the over-all poverty index.

Five intervals are used in the maps. Two intervals with ranges 0-49 % and 50-99% represent the performance of the municipalities whose achievements are better either the provincial or the national values. The 100-150% range would include the municipalities with performance at least equal to but not more than one-and-a-half times the provincial/national value. Similarly the 150-199 % and 200% and over ranges would indicate the municipalities which are worse than the provincial situation.

The poverty maps follow different color schemes. In the case of the Philippines, it applied both monochromatic shades of green and a dichromatic red to green. In the case of the first two pilot provinces (Laguna and Albay), the monochromatic green was used such that the darker shades of green would portray a better situation than the lighter shades of green. For the color scheme of the poverty maps of the poorest 44 provinces, the dichromatic red to green was used. This is to better distinguish the difference between the municipalities and readily identify municipalities that need intervention.

Having five intervals, two classes are in the shades of red, two are in the shades of green and one that is in the middle uses the shade of light yellow. The gray color is used to portray an area without data/missing data. The two intervals of 0-49% and 50-99% uses the shades of green, using a darker shade of green for 0-49% and a lighter shade of green for 50-99%. Thus, a darker shade of green portrays the best situation as compared to other municipalities of the province. The light yellow shade is portrayed with the values 100-149%. This range is within the provincial index which is 100, meaning indexes less than 100 indicates a better situation than the overall performance of the province. Those indexes that have a higher value than 100 indicates a worse situation that the provincial performance. Two intervals are used for this, the 150-199% and the 200 and above interval. These last two intervals use the shades of red that portrays a worse situation or an alarming performance of the municipality. The darker shade of red is used for the 200 and above interval so that it would give the viewer an instant picture which area has an alarming situation or has the worst situation among the municipalities within the province.

The maps for Albay have been included as Appendix A, the maps for Laguna as Appendix B and Maps of Zamboanga del Norte as Appendix C.

C. Limitations of the Study

1. The message of the maps depends on the data quality, accuracy and completeness. If data are relatively complete in coverage or accurately compiled, then a true picture of the performance of the municipalities is portrayed by the maps. However, incomplete data can actually give a different picture of the performance of the municipalities.

2. Due to the unavailability of data for some indicators at the national level, their national level values are derived as the average of Laguna and Albay only.

3. The ranking of the municipalities is relative only to the performance of the municipalities in the province/region. A "bad" performance of a municipality in a province/region could still be "good" if the general level of performance of the municipalities in the cited region/country is "bad" or below par. An alternative is to use a standard or a target as the basis for comparing the performance of the municipalities across space.

4. The indicators/indexes have been given equal weights in coming up with a composite indicator/index.

D. On-Going Activity - Poverty Mapping for the Poorest 44 Provinces

The NSCB envisions to replicate the poverty mapping efforts initiated in Laguna and Albay to all the provinces. Thus, as early as March 2003, communications were sent to the LGUs requesting for data on selected indicators. Based on data gathered, the production of maps for the poorest 44 provinces of the country will be completed by October this year. In 2004, the NSCB intends to come up with poverty maps covering the rest of the provinces.

Twenty-four (24) of the poorest 44 provinces have already submitted the data requirements (as of August 5, 2003). Interestingly, the provinces of Guimaras and Compostela Valley also submitted data for their provinces although they were not included in the list of poorest 44 provinces. In the case of Guimaras, poverty maps for their province were presented during the launching of the 1st Provincial Statistical Information Center in May 2003. On the other hand, Compostela Valley was considered since its mother province, Davao del Norte is included in the list of poorest 44. (See Apendix D)

III. OTHER POVERTY MAPPING EFFORTS

The Philippine Government with assistance from donor organizations continues its search for poverty measures that will guide its intervention strategies/programs to benefit directly the poor. This has led to the development of various poverty mapping methods that can address the data need of the policy makers and implementors of Government poverty reduction programs.

A. Poverty Mapping and Targeting- Dr. Arsenio Balicasan, et al.

One initiative on poverty mapping came from the academe (Dr. Balicasan, et. al.) in 1997, which aimed primarily at developing a selection criteria and methodology for ranking municipalities for an upcoming Government intervention project (KALAHI-CIDSS Project). The study was focused on developing variables that are closely linked to poverty income measures, with the end in view of identifying proxy indicators. The following indicators were used to ascertain correlates of poverty:

- location;
- dwelling characteristics;
- family characteristics; and
- ownership of durable goods.

The poverty correlates along with other income indicators contained in the 1994 Family Income and Expenditures Survey (FIES) are expected to be incorporated in the Annual Poverty Indicators Survey (APIS) developed by

the National Statistics Office (NSO). Using Ordinary Least Squares (OLS) regression techniques, the study identified some correlates which are argued to be promising proxy indicators of household welfare levels as follows:

    a. location (region, province) of household residence;
    b. type and number of private establishments in barangays where household is located;
    c. housing attributes (type of roof, wall, toilet, water source);
    d. age composition and schooling attainment of household members, sector of employment of household members;
    e. class of work of household members;
    f. sex and marital status of household head; and
    g. ownership of durable goods (vehicle, electrical appliances).

This method combines modeling and composite indices and the results become the basis for ranking municipalities by the Department of Social Welfare and Development (DSWD) under its KALAHI-CIDSS program.

B. Targeting the Poor in the Philippines – Dr. Zita VJ. Albacea and Dr. Arturo Y. Pacificador, Jr. [5]

Still addressing the need for more geographic specific poverty data, another poverty mapping study was undertaken under the NSO-Asian Development Bank (ADB) Technical Assistance on Improving Poverty Monitoring Surveys. The study was done by Albacea and Pacificador with the objective of providing an alternative to survey-based approach in estimating small area (provincial) poverty incidence.

Estimation of poverty incidence of the smaller geographic areas is usually constrained by the available data from nationwide survey. Instead a model-based approach can be used to obtain small area estimates. The model is formulated using nationwide survey and census data sets to produce small area poverty incidence.

The Study combined FIES (conducted every three years) data which includes income and expenditure variables as well as characteristics of the household and household head with Census of Population and Housing (CPH) data which collects population and housing counts and their characteristics. Administrative data was also factored as predictors in the model which can make the model useful even in years when nationwide surveys like the FIES are not conducted. Both the FIES and CPH were last conducted in 2000 and contained common characteristics, which were used to identify possible correlates of poverty incidence with the province as the small area unit. The FIES data on these common variables can be used primarily to identify possible predictors to model poverty incidence.

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[5] This section draws from the paper of Albacea, Zita VJ. and Pacificador, Jr., Arturo Y. 2003. Targeting the Poor. NSO-ADB TA 3656.

The CPH data on characteristics of the barangay served as indicators of the living conditions of the households within the community. These characteristics were then correlated to the poverty status of the household. The correlates formed the basis for determining indices that can serve as predictors of the model. The model is applied at the household unit level to predict per capita household expenditures (including an error estimate).

These household unit data can then be aggregated to small statistical areas (community, barangay) to obtain robust estimates of the percentage of households living below the poverty line. These community based poverty incidences are later linked to a mapping system to generate poverty maps showing the spatial distribution of poverty. The study is still in the process of comparing the result of the model-based estimates with the design-based estimates and has not done any poverty maps as yet.

IV. CURRENT APPLICATIONS OF THE POVERTY MAPPING INITIATIVES IN THE PHILIPPINES

Poverty mapping can be a powerful tool for analyzing poverty. This is used for various purposes, i.e. for identifying and understanding the causes of poverty, to assist program development and policy formulation, and to guide allocation of anti-poverty investments and expenditures.

In the case of the Philippines, poverty maps are being developed to serve as basis for Government to carry out its poverty reduction programs. These are intended to provide the necessary measurement tools to identify where the poor are, analyze their poverty status and needs, and determine how poverty assistance can be delivered effectively. However, despite the numerous poverty mapping initiatives, in general, most of these are one-time studies and have remained as research studies and have not been put to use for government policy and intervention programs.

The NSCB poverty mapping approach intends to provide the means to help Government in locating the poor, identifying their characteristics/describing their conditions to carry out its poverty reduction programs effectively. This approach is easier to implement and understand. It appears to better capture the multi-dimensional nature of human well-being. Despite the problems in data, more poverty maps are now being constructed to cover the 44 poorest provinces using the NSCB approach. The poorest 44 provinces were identified by the NSCB in undertaking its follow-up poverty mapping activities since provinces in this list are considered the priority areas for fund allocation from the KALAHI-CIDSS Project. These maps serve as very useful tools to LGUs as well as local chief executives, particularly in identifying priority areas that should benefit from anti-poverty programs and interventions

On the other hand, the Balisacan, et. al study are now being used by the KALAHI-CIDSS Project to rank municipalities in the poorest 44 provinces

using the poverty correlates identified. The main objective of the KALAHI-CIDSS Project is to strategize the effective allocation of resources.

The small area estimation that is being tried by Albacea and Pacificador is still a work in progress. The model-based approach is being considered as a potential alternative approach to come up with small area poverty statistics (provincial, municipal, barangay), in the light of the limitations of nationwide surveys to produce accurate provincial/municipal level poverty statistics.

V. PROBLEMS

Measuring poverty in the Philippines is a challenge considering the many varied concerns of users and aggravated by the inadequate data support. The immediate concern now is how to reach the poor for Government to effectively provide the kind of assistance that the poor needs which calls for poverty maps at the municipal and down to the barangay level. This leads to the demand for smaller geographic area poverty statistics.

The problems that are currently faced by agencies that measure poverty are discussed below.

A. Standard/guidelines for undertaking poverty mapping

While the estimation of official poverty statistics in the Philippines follows an official provincial poverty estimation methodology approved by the NSCB Executive Board, poverty mapping efforts still has no standard/official methodology being implemented by the PSS.

Given that there is no international definitive guidelines in poverty monitoring/measurement at present, which countries can follow to produce internationally comparable poverty statistics, a number of indicators/poverty maps are being developed addressing differing concerns which put a lot of pressure on the statistical system and on available resources.

B. Different Levels of Commitment

The poverty maps as developed by NSCB is intended to be picked up by LGUs to be used for their own poverty programs. One constraint faced by the NSCB is the different levels of appreciation by local government officials as well as local chief executives. They do not fully understand the use of these maps and are not willing to invest on them. Further, commitment in terms of data support are lacking for some provinces/municipalities which makes the work difficult since the indicators are covered primarily from MBN indicators which are collected by them. Besides, only 5th and 6th class municipalities are required to collect MBN

indicators. Also, the LGUs are in the best position to validate the results of the poverty maps in their respective areas, i.e., if they are interested to apply poverty maps in drawing up their plans/programs to address poverty.

C. Need for Capacity Building on Poverty Mapping

Poverty mapping is relatively new in the Philippines, and training on this is urgently needed. This requires training on concepts and methods, which for some require more advanced statistical knowledge like econometrics and statistical modeling, how to deal with available data, how to construct maps using GIS, and how to use these maps. An appreciation seminar is needed for users specifically local government officials so that they would further recognize the need for them to regularly collect the poverty indicators and have a better understanding of poverty maps and integrate these in their planning and implementation programs.

D. Need for Data at the Lower Level of Disaggregation

Poverty mapping is data intensive and requires reliability in data used. In the case of the Philippines, the FIES can only provide poverty statistics at the provincial level. Other data are taken from different data sources since present nationwide surveys and censuses do not provide all the details needed. Data being collected by the LGUs and other administrative-based data are utilized to further serve the data needs of policy-makers and program implementers.

E. Need to Integrate Poverty Mapping Initiatives in the Philippines

Aside from the poverty mapping activities initiated by the NSCB, most poverty mapping are done by individual researchers either commissioned by the Government or as private research efforts. With the amount of investments going to poverty mapping work, this should be integrated by the Government, specifically by a statistical agency such as the NSCB, to coordinate all these efforts to rationalize and avoid duplication.

F. Need to Increase Awareness on Poverty Mapping

While the Government has already underscored the need to implement poverty mapping activities (since they utilized poverty mapping results in allocating funds for the KALAHI-CIDSS Project), the LGUs on the other hand has not yet fully understood and appreciated the use of poverty maps. This was illustrated in the LGUs' response to the NSCB's initiative in producing poverty maps for them where they would only need to submit data for selected indicators that they are collecting. Only 24 of the poorest 44 provinces responded/supported this activity.

VI. RECOMMENDATIONS

With the growing importance of poverty maps as a tool to fight poverty and considering the problems faced by countries in undertaking poverty mapping, the paper lines up the following recommendations to be taken up immediately or in the medium term to effectively address poverty.

A. Best practices for producing poverty maps

Considering the multi-dimensional nature of poverty concerns and the complex statistical and conceptual issues associated with poverty, the development of an internationally accepted set of standards in producing poverty maps may be difficult to achieve. Thus, it is suggested that a compendium of good practices on poverty mapping, at least for the Region, be prepared.

This can ensure acceptability of results and allow comparatively of results across countries in the Region. This can rationalize or limit donor–driven/ ad hoc efforts which most often are one-time projects whose results are being used by Government in their poverty reduction programs.

The guideline can contain a universal definition of poverty, concepts and definition, methodologies for data collection and measuring various poverty concerns which countries can use as basis for drawing up their statistical program on poverty.

B. Use of Small-Area Estimation Approach for generating smaller geographic area poverty statistics (Municipality, Barangay, Cities)

Given the limited resources of countries to undertake nationwide surveys specifically for poverty measurement, small-area estimation approach can be developed instead in the medium term to provide smaller geographic area poverty incidence.

However, to make sure small area estimation would generate good results, major sources of data (i.e., censuses, surveys, and other administrative-based data) need to be improved. It is important that even if a sound small area estimation methodology is developed, the purpose for doing such would be defeated if quality of data inputs required would not be met.

C. Use of Composite Indices for Poverty Mapping

While small area estimation can provide more reliable and accurate poverty statistics, the requirements of this approach are relatively rigorous and this can work well in countries with regular and comprehensive national censuses and surveys.

In the meantime, the use of composite indices for poverty mapping is recommended where small-area estimation is still being developed. This is more intuitive, easily understood and requires less advanced statistical knowledge than small area. However, one has to be careful in setting the weights, which can influence the outcome of the indices. Sometimes determining the weights can be arbitrary and theoretically unsound.

D. Collection of a core set of indicators

To further make the comparison of the social situation of the poor in municipalities within and across provinces, a core set of indicators should be collected by the LGUs. This would improve the consistency of the composite indices produced since components that make up the composite indices of one municipality to another will be the same.

Further, the Department of Interior and Local Government issued Memorandum Circular No. 2003-92 entitled, "Policy Guidelines for the Adoption of the Core Local Poverty Indicators in Planning" on April 29, 2003. The LGUs could build up on this so that data needs of the Government would be generated and collected regularly.

E. Improvement of Data

Any poverty mapping methodology can be sensitive to the quality of data used. Given the quality of available poverty data at present, this has to be improved (resources willing) to make it more useful to users. It must be credible, accessible, understandable, timely and can be cross-referenced for consistency with other sets of related official statistics.

F. Responsibility of Statistical Agencies for Poverty Mapping/Statistics

Identifying the appropriate agency to institutionalize poverty mapping is required. There is a proliferation of poverty mapping studies in countries but determining which one to use is a decision that is left to the users at present. This creates confusion. Statistical agencies should take on the responsibility of producing poverty maps to avoid biases in the results.

G. Dialogue Between the Statisticians doing Poverty Mapping and the Users

To ensure use and support for poverty maps, the government policy and decision makers and implementers of poverty programs should be convinced of its usefulness. Thus, poverty maps should be able to address the requirements of the users. To enhance awareness on the part of the statisticians on the data needs of the users, there should be dialogues between the users and the statistical agencies who will do the poverty maps.

H.   Training

Recognizing the usefulness of poverty mapping and given the extensive and difficult work involved as well as the absence of an international standard for poverty statistics, it is important to train the statistical agencies who will do poverty mapping. It is also suggested that the data source agencies be provided with training on poverty mapping, specifically on the data requirements.   To sustain the use of poverty mapping, policy makers and decision makers should have full understanding of its uses.

I.   Networking

Exchange of information/experiences among countries in the Region will boost and facilitate the use of poverty mapping. This can be done through the web, with UNESCAP as the focal point.

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