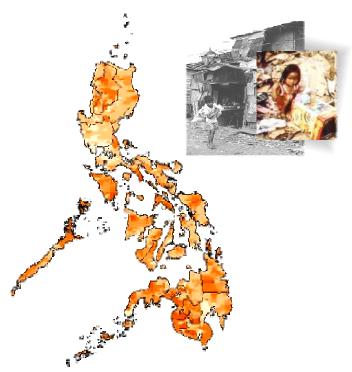
# Estimation of Local Poverty in the Philippines

### November 2005





Republika ng Pilipinas PAMBANSANG LUPON SA UGNAYANG PANG-ESTADISTIKA (NATIONAL STATISTICAL COORDINATION BOARD) http://www.nscb.gov.ph



in cooperation with

The WORLD BANK

#### FOREWORD

This report is part of the output of the Poverty Mapping Project implemented by the National Statistical Coordination Board (NSCB) with funding assistance from the World Bank ASEM Trust Fund.

The methodology employed in the project combined the 2000 Family Income and Expenditure Survey (FIES), 2000 Labor Force Survey (LFS) and 2000 Census of Population and Housing (CPH) to estimate poverty incidence, poverty gap, and poverty severity for the provincial and municipal levels.

We acknowledge with thanks the valuable assistance provided by the Project Consultants, Dr. Stephen Haslett and Dr. Geoffrey Jones of the Statistics Research and Consulting Centre, Massey University, New Zealand. Ms. Caridad Araujo, for the assistance in the preliminary preparations for the project; and Dr. Peter Lanjouw of the World Bank for the continued support.

The Project Consultants prepared Chapters 1 to 8 of the report with Mr. Joseph M. Addawe, Rey Angelo Millendez, and Amando Patio, Jr. of the NSCB Poverty Team, assisting in the data preparation and modeling. Chapters 9 to 11 were prepared mainly by the NSCB Project Staff after conducting validation workshops in selected provinces of the country and the project's national dissemination forum.

It is hoped that the results of this project will help local communities and policy makers in the formulation of appropriate programs and improvements in the targeting schemes aimed at reducing poverty.

RAL

CHORCHING GOH Task Manager The World Bank

**ROMULO A. VIROLA** Secretary General **National Statistical Coordination Board** 

#### SUMMARY

We produce small-area estimates of poverty in the Philippines at provincial and municipal levels by combining survey data with auxiliary data derived from the 2000 census. Estimates of poverty are produced for both expenditure-based and income-based measures. We explore the use of a single predictive model for the whole country in comparison with the fitting of separate models within each region. A single overall model also containing urban / rural and regional effects is found to be adequate for predicting log average per capita household income and log per capita household expenditure, and the poverty measures derived from it at municipality level have on the whole acceptably small standard errors. Maps of all the small-area estimates are given in an Appendix.

# Contents

1. Introduction	. 1
2. Methodology	. 5
3. Data Sources	11
4. Implementation	14
5. The ELL Methodology as Applied to Philippine Data	20
6. Results for Income-based Measures	23
7. Results for Expenditure-based Measures	28
8. The Poorest Forty Provinces	31
9. Project Validation Exercises	34
10. National Dissemination Forum	37
11. Conclusions	40
References	41
Appendices	
A. Auxiliary variables	43
B. Regression results	48
C. Summary of income based small-area estimates	51
D. Summary of expenditure based small-area estimates	55

E. Poverty maps	58
F. Validation Form	65
H. Municipal level small-area estimates	69

# 1. Introduction

### 1.1 Background

The Millennium Declaration adopted by the member countries of the United Nations in 2000 called for the halving of world poverty by the year 2015. The measurement of poverty by national statistical systems as well as by international agencies makes a key contribution to the Millennium Development Indicators being used to monitor progress towards these goals. Whilst the Philippines, with an official poverty incidence of 27 percent, is not one of the poorest countries, there exists within this ecologically and culturally diverse country a wide spatial disparity in poverty rates.

Alleviation of the effects of poverty in these pockets of high incidence is an important and much-discussed government policy. The Kapit-Bisig Laban sa Kahirapan (KALAHI) Project aims to improve the poverty reduction efforts of the government, but the resources allocated to it need to be targeted towards the geographic and administrative areas where the need is greatest in order to have maximum effect.

The National Statistical Coordination Board (NSCB) of the Philippines has for some years been producing estimates of the incidence of poverty at regional level. There has been however an increasing demand from policy makers and planners for a more disaggregated set of poverty statistics so that aid programs could be more effectively targeted to the areas in most need. In response to this the NSCB released in 2003 estimates of poverty at provincial level, based on the 2000 Family Income and Expenditure Survey (FIES)<sup>1</sup>. Because of the small sample sizes at this level, the standard errors of these estimates were sometimes quite large. The statistical methodology of small-area estimation allows the possibility of improving on the precision of these estimates, and even for allowing a finer level of disaggregation to municipality level, by combining the survey data with information from a recent census.

### **1.2** Geographic and administrative units

The Philippines in 2000 was composed of 79 provinces and 4 districts in the National Capital Region (NCR), which were grouped into 16 regions including the NCR. Provinces are composed of municipalities, which are themselves divided into smaller units called barangays. Each barangay can be designated as urban or rural, with rural barangays corresponding to villages. Approximately 50 percent of the population live in rural barangays. Most municipalities contain both urban and rural barangays, but the NCR region is entirely urban. Table 1.1 shows the hierarchy of geographic and administrative units in the Philippines, and their approximate size in terms of number of households and number of barangay, based on the 2000 census.

<sup>&</sup>lt;sup>1</sup> The 2000 provincial poverty thresholds used as basis in coming up with the SAE estimates are the old/unrevised 2000 estimates since the revised 2000 provincial poverty thresholds were not yet released at the time when the SAE estimates were being generated.

	Region	Province	Municipality	Barangay	Household
Census contains	16	83	1623	41926	15275046
Mean no. households	954690	184037	9412	364	1
Min no. households	263851	3489	24	1	
Mean no. barangays	2620	505	26		
Min no. barangays	1172	29	1		

 Table 1.1 The number and size of administrative units at different levels

These figures play an important role in determining the level of disaggregation possible. The precision of a small-area estimate for a municipality depends on the number of barangay and the number of households. We can see from the table that municipalities contain on average about 9400 households and 26 barangays, but there are some small municipalities comprising, for example, a single barangay and only 24 households. This suggests that while municipal-level estimation may be achievable in general, there will be some municipalities where the estimates are very imprecise, with large standard errors.

#### **1.3 Poverty maps**

The statistical technique of small-area estimation (Rao, 1999; Ghosh and Rao, 1994) provides a way of improving survey estimates at small levels of aggregation, by combining the survey data with information derived from other sources, typically a population census. A variant of this methodology has been developed by a research team at the World Bank specifically for the small-area estimation of poverty measures (Elbers, Lanjouw and Lanjouw, 2001, 2003). The ELL method has been implemented in several countries including Thailand (Healy, Jitsuchon and Vajaragupta, 2003), Cambodia (Fujii, 2003), Bangladesh (Jones and Haslett, 2003), Vietnam (Minot, Baulch and Epprecht, 2003), South Africa (Alderman, Babita, Demombynes, Makhata and Ozler, 2001) and Brazil (Elbers, Lanjouw, Lanjouw and Leite, 2001). The methodology is described in detail in the next section. Outputs, in the form of estimates at local level together with their standard errors, can be combined with GIS data to produce a series of "poverty maps" for the whole country, giving a graphical summary of which areas are suffering relatively high deprivation.

Our main purpose in producing such maps is to aid the planning of social intervention programmes. They could in addition prove useful as a research tool, for example by overlaying geographic, social or economic indicators.

#### **1.4** Measures of poverty

Poverty is a complex phenomenon with many dimensions, including insufficient access to nutrition, health, education, housing and leisure (Sen, 1985). For purposes of monitoring and comparison it is necessary to reduce this complexity to a single measure or set of statistics. The three Millennium Development Indicators relating to poverty recognize the need for international comparability while maintaining enough flexibility for individual counties to adapt the methodology to their own situation and data sources. These three measures take the monetary approach developed by the World Bank, in which poverty is defined as a shortfall in the level of income or consumption from a poverty line. Further details are given by Ravallion and Chen (1997, 2004).

One methodological controversy concerns the choice of income or consumption as the indicator of welfare. Consumption expenditure is perhaps more difficult to measure precisely, but income is thought to suffer from under-reporting bias. Both have the disadvantage of including only private resources and omitting publicly provided goods and services. Official poverty statistics in the Philippines are income-based so we take that approach here, but we also calculate, for comparison, estimates based on consumption.

Another source of divergence lies in the construction of the poverty line. Official poverty statistics in the Philippines follow a cost-of-basic-needs (CBN) approach, in which poverty lines are calculated to represent the monetary resources required to meet the basic needs of the members of a household, including an allowance for non-food consumption. First, a food poverty line is established, being the amount necessary to meet basic food requirements. Then a non-food allowance is added. In the NSCB's current methodology poverty lines are estimated at provincial level separately for urban and rural areas. Basic food requirements are defined using area-specific menus (by region and urban-rural disaggregation) comprising low-cost food items available locally and satisfying minimal nutrition requirements. The nutritional requirements were determined by the Food an Nutrition Research Institute (FNRI). Currently, these are based on 100 percent adequacy for RDA for protein and energy equivalent to an average of 2,000 kilocalories per capita, and 80 percent adequacy for the other nutrients. The provincial food thresholds are determined by using regional menus and provincial prices in accordance with NSCB Resolution No. 1, Series of 2003. Finally an allowance for non-food expenditure is made by dividing by a "food expenditure to total basic expenditure" (FE/TBE) ratio, estimated from survey data. For further details see Virola and Encarnacion (2003) and NSCB (2003).

The basic unit for measuring income or consumption is the household, but poverty incidence may be calculated on a per household or on a per person basis. Some implementations of the CBN approach include adjustments for the age and gender of household members and for economies of scale within the family. This is not done in official poverty statistics in the Philippines, and has not been done here.

Because different countries make different choices regarding the details of the CBN method, this raises questions about the comparability of poverty measures between countries. An alternative approach, which is arguably better for international comparisons is to define poverty incidence as the proportion of the population living on less than \$1 a day. More precisely, a person is deemed poor if their average daily consumption expenditure is below \$1.08 in 1993, converted to local currency using the current Purchasing Power Parity (PPP) rate. This gives a poverty line, which is applied uniformly to everyone in the country.

Thus in both the CBN and "\$1-a-day" approaches, poverty measures are functions of household per capita income or expenditure. *Poverty incidence* for a given area is defined as the proportion of individuals living in that area who are in households with an average per capita expenditure below the poverty line. *Poverty gap* is the average distance below the poverty line, being zero for those individuals above the line. It thus represents the resources needed to bring all poor individuals up to a basic level. *Poverty severity* measures the average squared distance below the line, thereby giving more weight to the very poor. These three measures can be placed in a common mathematical framework, the so-called FGT measures (Foster, Greer and Thorbeck, 1984):

$$P_{\alpha} = \frac{1}{N} \sum_{i=1}^{N} \left( \frac{z - Y_i}{z} \right)^{\alpha} \cdot I(Y_i < z)$$

$$(1.1)$$

where N is the population size of the area,  $Y_i$  is the income or expenditure of the *i*th individual, z is the poverty line and  $I(Y_i < z)$  is an indicator function (equal to 1 when expenditure is below the poverty line, and 0 otherwise). Poverty incidence, gap and severity correspond to  $\alpha = 0$ , 1 and 2 respectively.

In this report we estimate all six values (three measures for each of income-based CBN and expenditure-based \$1-a-day) at both provincial and municipal levels. These estimates are then imported into a GIS system to produce provincial and municipal poverty maps.

# 2. Methodology

We present in this section a brief overview of small-area estimation and the ELL method. Details of the implementation in the Philippines are given in Section 4.

#### 2.1 Small area estimation

Small area estimation refers to a collection of statistical techniques designed for improving sample survey estimates through the use of auxiliary information (Ghosh and Rao, 1994; Rao, 1999; Rao, 2003). We begin with a target variable, denoted Y, for which we require estimates over a range of small subpopulations, usually corresponding to small geographical areas. (In this report Y is either per capita income or per capita expenditure). Direct estimates of Y for each subpopulation are available from sample survey data, in which Y is measured directly on the sampled units (households). Because the sample sizes within the subpopulations will typically be very small, these direct estimates will have large standard errors so will not be reliable. Indeed, some subpopulations may not be sampled at all in the survey. When the same auxiliary variable is available for both surveyed and census households, they can under some circumstances be used to improve the estimates, giving lower standard errors. These variables can, to some extent, be supplemented by subgroup means from the census, which are added to the corresponding surveyed household information before the survey based regression model is fitted.

In the situations examined in this report, X represents shared variables that have been measured for the whole population, either by a census or via a GIS database. A matrix relationship between Y and X of the form

### $Y = X\beta + u$

can be estimated using the survey data, for which both the target variable and the auxiliary variables are available, either at household level or as subgroup means at a higher level of aggregation. Here  $\beta$  represents the regression coefficients giving the effect of the X variables on Y, and u is a random error term representing that part of Y that cannot be explained using the auxiliary information. If we assume that this relationship holds in the population as a whole, we can use it to predict Y for those population units for which we have measured X but not Y based on the sample estimate of  $\beta$ . Small-area estimates based on these predicted Y values will often have smaller standard errors than the direct estimates, even allowing for the uncertainty in the predicted values, because they are based on much larger samples. Thus the idea is to "borrow strength" from the much more detailed coverage of the census data to supplement the direct measurements of the survey.

#### 2.2 Clustering

The units on which measurements have been made are often not independent, but are grouped naturally into clusters of similar units. Households tend to cluster together into villages or other small geographic or administrative units, which are themselves relatively homogenous. Put simply, households that are close together tend to be more similar than households far apart. When such structure exists in the population, the regression model above can be more explicitly written as

$$Y_{ii} = X_{ii}\beta + h_i + e_{ii}$$
(2.1)

where  $Y_{ij}$  is a scalar which represents the measurement on the *j*th unit in the *i*th cluster,  $h_i$  the error term held in common by the *i*th cluster, and  $e_{ij}$  the household-level error within the cluster. The relative importance of the two sources of error can be measured by their respective variances  $\sigma_h^2$  and  $\sigma_e^2$ . Ghosh and Rao (1994) give an overview of how to obtain small-area estimates, together with standard errors, for this model.

We note that the row vector of auxiliary variables  $X_{ij}$  (which when collected together for all i and j constitute X) may be useful primarily in explaining the household-level variation, or the cluster-level variation. The more variation is explained at a particular level, the smaller the respective error variance,  $\sigma_h^2$  or  $\sigma_e^2$ . The estimate for a particular small area will typically be the average of the predicted Y's in that area. Because the standard error of a mean gets smaller as the sample size gets bigger, the contribution to the overall standard error of the variation at each level, household and cluster, depends on the sample size at that level. The number of households in a small area will typically be much larger than the number of clusters, so to get small standard errors it is of particular importance that the unexplained cluster-level variance  $\sigma_h^2$  should be small. Two important diagnostics of the model-fitting stage, in which the relationship between Y and X is estimated for the survey data, are the  $R^2$  measuring how much of the variability in the sampled Y is explained by the corresponding rows of X, and the ratio  $\sigma_h^2 / (\sigma_h^2 + \sigma_e^2)$ measuring how much of the unexplained variation is at the cluster level. Cluster-level or subgroup means derived from the census but applied to the survey data should be particularly useful in lowering this ratio, although some care is required not to use too many cluster means for this purpose because (being cluster averages) they mask rather than explain household level variation.

Another important aspect of clustering is its effect on the estimation of the model. The survey data used for this estimation cannot be regarded as a random sample, because they have been obtained from a complex survey design involving stratification and cluster sampling. To account properly for the survey design requires the use of specialized statistical routines (Skinner, Holt and Smith, 1989; Chambers and Skinner, 2003) in order to get consistent estimates for the regression coefficient vector  $\beta$  and its variance  $V_{\beta}$ .

#### 2.3 The ELL method

The ELL methodology was designed specifically for the small-area estimation of poverty measures based on per capita household expenditure. Here the target variable *Y* is log-transformed expenditure, the logarithm being used to make more symmetrical the highly right-skewed distribution of untransformed expenditure. It is assumed that measurements on *Y* are available only from a survey.

The first step is to identify a set of auxiliary variables that are in the survey and are also available for the whole population. It is important that these should be defined and measured in a consistent way in both data sources. These are supplemented with the cluster submeans and GIS variables relevant to each household to form X. The original Elbers et al. procedure involved fitting the survey data using a two stage least squares procedure with a simple equicorrelated covariance structure, and an algebraic adjustment that does not properly account for the sample survey weights which are inverse selection probabilities (Elbers et al., 2003). An alternative method (e.g. Skinner et al., 1989), which allows better incorporation of the sample survey weighting, is to fit model (2.1) to the survey data by least squares, using the relevant submatrix from X and a robust estimator for the covariance, and incorporating aspects of the survey design via direct use of "expansion factors" or inverse sampling probabilities for each sampled household. The residuals  $\hat{u}_{ij}$  from this analysis are used to define cluster-level residuals  $\hat{h}_i = \hat{u}_{i.}$ , the dot denoting averaging over *j*, and household-level residuals  $\hat{e}_{ij} = \hat{h}_i - \hat{u}_{ij}$ .

It is assumed that the cluster-level effects  $h_i$  all come from the same distribution, but that the household-level effects  $e_{ij}$  may be heteroscedastic. This is modelled by allowing the variance  $\sigma_e^2$  to depend on a subset Z of the auxiliary variables:

$$g(\sigma_e^2) = Z\alpha + r$$

where g(.) is an appropriately chosen link function,  $\alpha$  represents the effect of Z on the variance and r is a random error term. Fujii (2003) uses a version of the more general model of Elbers et al. involving a logistic-type link function, fitted using the squared household-level residuals:

$$\ln\left(\frac{\hat{e}_{ij}^2}{A - \hat{e}_{ij}^2}\right) = Z_{ij}\alpha + r_{ij}$$
(2.2)

From this model the fitted variances  $\hat{\sigma}_{e,ij}^2$  can be calculated and used to produce standardized household-level residuals  $\hat{e}_{ij}^* = \hat{e}_{ij} / \hat{\sigma}_{e,ij}$ . These can then be mean-corrected to sum to zero, either across the whole survey data set or separately within each cluster.

In standard applications of small-area estimation, the estimated model (2.1) is applied to the known X values in the entire population to produce predicted Y values, which are then averaged over each small area to produce a point estimate, the standard error of which is

inferred from appropriate asymptotic theory. In the case of poverty mapping, our interest is not directly in Y but in several non-linear functions of Y (see section 1.4). The ELL method obtains unbiased estimates and standard errors for these by using a bootstrap procedure.

#### 2.4 Bootstrapping

Bootstrapping is the name given to a set of statistical procedures that use computergenerated random numbers to simulate the distribution of an estimator (Efron and Tibshirani, 1993). In the case of poverty mapping, we construct not just one predicted value

$$\hat{Y}_{ij} = X_{ij}\hat{\beta}$$

(where  $\hat{\beta}$  represents the estimated coefficients from fitting the model) but a large number of alternative predicted values for each household

$$Y_{ii}^{b} = X_{ii}\beta^{b} + h_{i}^{b} + e_{ii}^{b}$$
,  $b = 1, \dots B$ 

in such a way as to take account of the variability of the predicted values. We know that  $\hat{\beta}$  is an unbiased estimator of  $\beta$  with variance  $V_{\beta}$ , so we draw each  $\beta^{b}$  independently from a multivariate normal distribution with mean  $\hat{\beta}$  and variance matrix  $V_{\beta}$ . The cluster-level effects  $h_{i}^{b}$  are taken from the empirical distribution of  $h_{i}$ , i.e. drawn randomly with replacement from the set of cluster-level residuals  $\hat{h}_{i}$ . To take account of heteroscedasticity in the household-level residuals, we first draw  $\alpha^{b}$  from a multivariate normal distribution with mean  $\hat{\alpha}$  and variance matrix  $V_{\alpha}$ , combine it with  $Z_{ij}$  to give a predicted variance and use this to adjust the household-level effect

$$e_{ij}^{b} = e_{ij}^{*b} \times \sigma_{e,ij}^{b}$$

where  $e_{ij}^{*b}$  represents a random draw from the empirical distribution of  $e_{ij}^{*}$ , either for the whole data set or just within the cluster chosen for  $h_i$  (consistently with the mean-centring of section 2.3).

Each complete set of bootstrap values  $Y_{ij}^b$ , for a fixed value of *b*, will yield a set of smallarea estimates. In the case of poverty estimates of income and expenditure, we exponentiate each *Y* to give predicted expenditure  $E_{ij} = \exp(Y_{ij})$ , then apply equation (1.1). The mean and standard deviation of a particular small-area estimate, across all *b* values, then yields a point estimate and its standard error for that area.

#### 2.5 Interpretation of standard errors

The standard error of a particular small-area estimate is intended to reflect the uncertainty in that estimate. A rough rule of thumb is to take two standard errors on each side of the point estimate as representing the range of values within which we expect the true value to lie. When two or more small-area estimates are being compared, for example when deciding on priority areas for receiving aid, the standard errors provide a guide for how accurate each individual estimate is and whether the observed differences in the estimates are indicative of real differences between the areas. They serve as a reminder to users of poverty maps that the information in them represents estimates, which may not always be precise.

The size of the standard error depends on a number of factors. The poorer the fit of the model (2.1), in terms of small  $R^2$  (the percentage of total variance explained by the model), or large  $\sigma_h^2$  or  $\sigma_e^2$ , the more variation in the target variable will be unexplained and the greater will be the standard errors of the small-area estimates. The population size, in terms of both the number of households and the number of clusters in the area, is also an important factor. Generally speaking, standard errors decrease proportionally as the square root of the population size. Standard errors will be acceptably small at higher geographic levels but not at lower levels. If we decide to create a poverty map at a level for which the standard errors are generally acceptable, there will be some, smaller, areas for which the standard errors are larger than we would like.

The sample size used in fitting the model is also important. The bootstrapping methodology incorporates the variability in the estimated regression coefficients  $\hat{\alpha}$ ,  $\hat{\beta}$ . If the sample size is small these estimates will be very uncertain and the standard errors of the small-area estimates will be large. This problem is also affected by the number of explanatory variables included in the auxiliary information, *X* and *Z*. A large number of explanatory variables relative to the sample size increases the uncertainty in the regression coefficients. We can always increase the apparent explanatory power of the model (i.e. increase the  $R^2$  from the survey data) by increasing the number of *X* variables, or by dividing the population into distinct subpopulations and fitting separate models in each, but the increased uncertainty in the estimated coefficients may result in an overall loss of precision when the model is used to predict values for the census data. We must take care not to "over-fit" the model.

There will be some uncertainty in the estimates, and indeed the standard errors, due to the bootstrapping methodology, which uses a finite sample of bootstrap estimates to approximate the distribution of the estimator. This could be decreased, at the expense of computing time, by increasing the number of bootstrap simulations B; despite the computational issues, B is generally chosen sufficiently large to ensure the standard error associated with using the bootstrap is small.

Finally, the integrity of the estimates and standard errors depends on the fitted model being correct, in that it applies to the population in the same way that it applied to the

sample. This relies on good matching of survey and census variables to provide valid auxiliary information. We must also take care to avoid, as much as possible, spurious relationships or artefacts which appear, statistically, to be true in the sample but do not hold in the population. This can be caused by fitting too many variables, but also by choosing variables indiscriminately from a very large set of possibilities. Such a situation could lead to estimates with apparently small standard errors, but the standard errors would be spurious because they do not include the error associated with model uncertainty. For this reason the final step in poverty mapping, field verification, is extremely important.

## 3. Data Sources

### 3.1 Family Income and Expenditure Survey (FIES), 2000

The National Statistics Office (NSO) of the Philippines conducts a Family Income and Expenditure Survey every three years, collecting information on household income, expenditure and consumption in addition to socio-demographic characteristics. Selected households are interviewed in two separate operations, each covering a half-year period, in order to allow for seasonal patterns in income and expenditure. For FIES 2000 the interviews were conducted in July 2000, for the period January 1 to June 30, and January 2001 for the period July 1 to December 31.

The sample design for FIES 2000 used a multi-stage stratified random sampling technique. Barangays are the Primary Sampling Units (PSUs) and these are stratified into urban or rural within each province and selected using systematic sampling with probability proportional to size. Large barangays are further divided into enumeration areas and subjected to further sampling before the final stage in which households are systematically sampled from the 1995 Population Census List of Households. This gave a nominal total sample size of 41000 households. The FIES survey forms part of the Integrated Survey on Households first organized in 1985, and is carried out as a rider on the Labour Force Survey (see next section).

Tuble bit befueture								
	Region	Province	Municipality	Barangay	Household			
FIES contains	16	81	1250	3370	39544			
Mean no. households	2471.5	488.2	31.6	11.7				
Min no. households	1391	93	4	2				
Mean no. barangays	210.6	41.6	2.7					
Min no. barangays	119	8	1					

Table 3.1 Structure of FIES 2000 at various levels

Because the sample size at a particular level has an important bearing on the precision of estimates at that level, we present in Table 3.1 a summary of the coverage of FIES at various levels and the mean, minimum and maximum number of households at each level. Note that a few households are omitted from this table because of missing data values. FIES was designed to give reliable direct estimates at regional level, and we can see that for that purpose it is quite adequate. Below that level not all areas are covered: about 25 percent of all municipalities are not sampled and even for the sampled municipalities the sample sizes become too small for direct estimation to be useful.

Since the barangays sampled in FIES 2000 are derived from the 1995 census, they are not entirely compatible with those of the 2000 census. At barangay level boundaries occasionally change and new barangays are created. At municipal level the situation is more stable, but even here we find some municipalities which in the intervening years have moved between provinces. The new province of Compostela Valley has been

created within Region 11, and the municipalities of Cotabato City and Marawi City have moved from Region 15 (ARMM) to form a new province in Region 12. These changes cause some difficulties in the merging of the survey and census data sets, but can be resolved by using consistent boundary assignments for survey and census when calculating small area estimates..

An NSCB report based on FIES (NSCB, 2003) gives countrywide, regional and provincial estimates of poverty as defined in section 1.4, together with their coefficients of variation (standard error divided by or relative to the mean). It also gives details of the calculation of the official poverty lines A list of the auxiliary variables available or derivable from the FIES database and matchable to census data is given in Appendix A.1. The target variables available in FIES and used in this study are monthly per capita income and monthly per capita expenditure, averaged at the household level.

#### 3.2 Labour Force Survey (LFS), 2000

The Labour Force Survey has evolved from a series of surveys dating back to 1956, which collect data on the demographic and socioeconomic characteristics of the population over 15 years old. It is conducted on a quarterly basis by the NSO by personal interview, using the previous week as a reference period. Being part of the Integrated Survey of Households (NSCB, 2000), the July 2000 and January 2001 surveys used the same sample of households as the 2000 FIES. Thus the two data sets can be merged to form a richer set of variables for matching with the census data, as shown in Appendix A.1.

#### 3.3 Census, 2000

The 2000 Census of Population and Housing was the 11<sup>th</sup> national census conducted by the NSO. This full census is conducted every 10 years, with a Census of Population at 5-year intervals. A common questionnaire is completed by all households, with an extended questionnaire being given to a random sample of about 10 percent overall. Sampling for this 10 percent follows a systematic cluster design, with the sampled fraction being 100 percent, 20 percent or 10 percent depending on the size of the municipality. This "long form" census data, in contrast to the "short form" data from all households, provides a richer set of variables, but unfortunately the barangay indicators are not included in the long census form which limits their potential in explaining barangay-level variation in the target variables income and expenditure.

	Region	Province	Municipality	Household
Long Form contains	16	83	1623	1511718
Mean no. households	94482	18213	931	
Min no. households	28618	1624	24	

Table 3.2 Structure of 10 percent Long Form Census at various levels

Note: Barangay level counts are unavailable.

Enumeration was carried out by approximately 44000 enumerators during 1-24 May, the official census night being 1<sup>st</sup> May 2000. In conjunction with the enumeration of the population, a mapping operation was undertaken to update regional boundaries. The population on census night was declared to be 76.5 million.

Table 3.2 shows the coverage of the 10 percent long form census sample. By comparison with Table 1.1 we can see that all municipalities are present but at the barangay level and at finer levels complete information is not available. In addition there are some municipalities with quite small numbers of sampled households.

Census variables in both the short and long form were averaged at municipal level to create new data sets that could be merged with both the survey and census data. In the case of the long form variables the sample weights for the selection of the 10 percent sub-sample were incorporated into the calculation of the means. A list of these census mean variables is given in Appendix A.2. A few of these variables had missing values for one municipality. These were originally imputed using multiple regression to allow them to be used in searching for the best regression model, but were later dropped as they were found not to be useful for modelling income or expenditure.

# 4. Implementation

#### 4.1 Selection of auxiliary data

The auxiliary data X used to predict the target variable Y can be classified into two types: the survey variables, obtainable or derivable from the survey at household or individual level, and the location variables applying to particular larger geographic units. The latter include averages of census variables at a particular level.

As noted earlier, it is important that any auxiliary variables used in modelling and predicting should be comparable in the estimation (survey) data set and the prediction (census) data set. In the case of survey variables, we begin by examining the survey and census questionnaires to find out which questions in each elicit equivalent information. In some cases equivalence may be achieved by collapsing some categories of answers. For example the categories recording educational attainment are different in the census and survey data, but by focussing on broader categories of no education, elementary education, highschool and college we were able to produce education variables which were comparable. When common variables have been identified the appropriate statistics are compared for the survey and census data. In the case of categorical data we compare proportions in each category: for numerical data, such as household proportion of children, we compare the means and standard deviations. For this purpose confidence intervals can be calculated for the relevant statistics in the survey data set, taking account of the stratification and clustering in the sample design. The equivalent statistic for the census data should be within the confidence interval for the survey. In some cases variables were dropped at this stage. For example, tenure status (own, rent, rent free with consent or rent free without consent) was found not to match sufficiently well. Other researchers have noted problems with this variable (Tiglao, 2004).

The inclusion of location effect variables should be straightforward since they can be merged with the survey and census data using indicators for the geographical unit to which each household or individual belongs. This can be problematic in practice however, because of changing boundaries and the creation of new provinces, municipalities and barangays. The FIES survey and the 2000 census used different barangay classification so that it was not possible to merge with both survey and census in a comparable way at barangay level. Furthermore there was no barangay information in the census long-form. As an alternative, municipal-level census means were calculated for both short- and long-form census variables and these merged successfully with the survey data. Even at municipal level there were difficulties, particularly in Mindanao region with the creation of provinces 82 (Compostela Valley) and 98 (Marawi City and Cotabato City). We used the Census 2000 coding in all cases, recoding the survey data to make it compatible.

Once all usable auxiliary data have been assembled, it may be necessary to delete some case or variables where there are missing values or outliers. In our case the educational attainment of the spouse was missing in a large number of households where a spouse was present, so this variable, although possibly useful in the regression modelling, had to be dropped.

#### 4.2 First stage regressions

The selection of an appropriate model for (2.1) is a difficult problem. There are a large number of possible predictor variables (100 at household level and 45 municipal means: see Appendix A), with inevitably a good deal of multicollinearity. Some of these are numerical (e.g. famsize), some represent different values of a categorical variable (e.g. hms\_sing, hms\_mar, etc denoting marital status of head of household) and some are ordered categories (e.g. fa\_xs to fa\_xxxl denoting floor area). If we also include two-way interactions there are well over a thousand variables to choose from. (A "two-way interaction" is the product of two basic or "main-effect" variables). Squares or other transformations of numerical variables could also be considered. As noted in section 2.5, we must be careful not to over-fit, so the number of predictors included in the model should be small compared to the number of observations in the survey, but there is also the problem of selecting a few variables from the large number available which appear to be useful, only to find (or even worse, not find) that an apparently strong statistical relationship in the survey data does not hold for the population as a whole.

The search for significant relationships over such a large collection of variables must inevitably be automated to a certain extent, but we have chosen not to rely entirely on automatic variable selection methods such as stepwise or best-subsets regression. For reasons, see for example Miller (2002), especially the discussion in chapter 3. We have, in general, instead adopted the principle of hierarchical modelling, in which higher-order terms such as two-way interactions are included in the model only if their corresponding main-effects are also included. Thus we begin with main-effects only, and add interaction and nonlinear terms carefully and judiciously. We look not just for statistical significance but for a plausible relationship. For example, the effect of household size on log expenditure was expected to be nonlinear, with both small and large households tending to have larger per capita expenditure. The square of household size, centred around the mean, was added and found to be significant.

Some implementations of ELL methodology have fitted separate models for each stratum defined by the survey design. This has the advantage of tailoring the model to account for the different characteristics of each stratum, but it can increase the problem of over-fitting if some strata are small. Fujii (2003) used three separate models in Cambodia: rural, urban and Phnom Penh. Healey at al. (2003) fitted 76 different models for Thailand, one for each province. Jones and Haslett (2003) used what was essentially a single model for Bangladesh, but with different intercept terms for each of the five districts and some interactions to allow for differences between urban and rural effects. Minot, Baulch and Epprecht (2003) report that for Vietnam they initially tried separate models for each province, but because of the instability of the estimates and lack of interpretability of some of the coefficients they finally settled on two models, one for urban areas and one for rural, with different intercepts for each region. Believing this issue to be an important

determinant of the quality of the estimates, as well as a fruitful area for research, we tried two different approaches and compared them.

First the country was divided into 31 domains, each domain comprising the urban or rural barangays of one region. (There were 16 regions but one, NCR, has no rural barangays). An initial model was fitted to the whole country, using the combined FIES/LFS data and selecting variables based on plausibility of the estimated relationship as well as statistical significance. Census means were not used at this stage, but we were still able to achieve an  $R^2$  over 60 percent. The purpose of this stage was to identify a reduced subset of useful variables and hence diminish the risk of including spurious relationships through automatic selection from a large pool of candidates. We then tried a "domain-based" approach, fitting separate models for each domain but chosen from the reduced variable set, and a "global" approach, expanding out our initial model to include separate intercepts in each domain. In both approaches census means were added to reduce the cluster-level residual variation, but their use was kept to a minimum, as they were only available at municipal level and therefore likely to lead to spurious relationships, because the number of candidate census means is comparatively large relative to the number of sampled municipalities. Although our final model was a single model, it was in fact a compromise between the global and domain-based approaches, with a strong emphasis on the global but with a few coefficients in the global model being allowed to vary through the use of interaction terms (see Appendix B.1 and B.2 for the final models for log income and log expenditure respectively). The models for income and expenditure are very similar, suggesting that it might be worthwhile modelling both variables simultaneously. Both models show similar residual variation at barangay level, but log expenditure appears to be less variable at household level.

The discussion above has focused on model parameters rather than small area estimates per se, but it is important and useful to distinguish two essentially different aspects when comparing two small area models, namely the similarity of (subset of) parameters (i.e. regression coefficients) in the two models, and the similarity of their small area estimates. Small area estimates can be very similar for what may appear to be two different models based on parameter estimate comparison, especially where one such model is over-fitted and contains the same effects (but not necessarily the same parameter estimates) as in the first model plus a further group of unnecessary or redundant parameters. In this case the redundant parameters add little to (and may even detract from) both the predictions themselves and their accuracy, when the predictions are amalgamated into small area estimates. Further, a single or global model containing relatively few interaction effects (e.g. rural / urban by region) rather than having completely separate models for each region, despite having a number of parameters that are common for all regions, may nevertheless provide very different small area estimates across regions and in rural areas in comparison with urban ones.

Many regional models are consequently not necessary in order to have different small area estimates in different regions where something more akin to a single model (which differs from the pure single model in incorporating a small set of interaction terms) is adequate, especially since the necessarily smaller sample sizes in subgroups make fitted multiple, domain based models comparatively more unstable.

The model debate between a 'single model' and 'multiple models' often represents the difference as a dichotomy, with a single model at one end of the spectrum and 'multiple models' at the other. In fact, even the multiple model option can be expressed as a single model, albeit one with interactions terms between a set of model indicators and every model term in all the models that make up the collection. The best fit is not likely to be at either extreme of the spectrum. However, parsimony and the problem of small sample sizes in each of the multiple models affecting parameter accuracy, suggest that models, which are closer to the single model are the better alternative.

In our own model, there are required interaction terms so that in this sense our model is not the extreme single model, although it is rather nearer to that end of the spectrum. There are domain specific constants, urban/rural effects and also the corresponding interaction terms. The domain-specific constants, or intercepts, in our models can be seen to be quite similar, although the differences were statistically significant overall. The intercepts for the rural areas were significantly lower than the corresponding urban intercepts in each region, indicating as expected a generally lower average per capita income and expenditure in the rural barangays. For the income model, the impact of the variables coed and fa\_xxxl (which relate to college level education and the largest floor area classification respectively) was found to be different in the urban and rural areas, and the impact of the education variables hsed and coed was reduced in ARMM.

As mentioned earlier, we departed from the usual ELL implementation in our use of a single-stage, robust regression procedure for estimating model (2.1), rather than the two-stage procedure of ordinary least squares followed by estimation of a variance matrix for generalized least squares. This gives the advantages of properly accounting for the survey design and obtaining consistent estimates of the covariance matrices in a single step (Skinner et al., 1989; Chambers and Skinner, 2003). These covariance matrices were saved, along with the parameter estimates and both household- and cluster-level residuals (as defined in section 2.3), for implementation of the prediction step.

#### 4.3 Heteroscedasticity modelling

Like Healy (2003) we amended the regression model (2.2) for the household-level variance to prevent very small residuals from becoming too influential. We used a slightly different amendment:

$$L_{ij} \equiv \ln \left(\frac{\hat{e}_{ij}^2 + \delta}{A - \hat{e}_{ij}^2}\right) = Z_{ij}\alpha + r_{ij}$$

where  $\delta$  is a small positive constant and *A* is chosen to be just larger than the largest  $\hat{e}_{ij}^2$ (e.g.  $\delta = 0.0001$ ,  $A = 1.05 \times \max \hat{e}_{ij}^2$ ). These choices can be justified empirically by graphical examination of the  $L_{ij}$ , which should show neither abrupt truncation nor extreme outliers. The predicted value of the household-specific variance, using the delta method, then becomes:

$$\sigma_{e,ij}^{2} = \left[\frac{AB_{ij} - \delta}{1 + B_{ij}}\right] + \frac{1}{2}\hat{\sigma}_{r}^{2}\left[\frac{(A + \delta)B_{ij}(1 - B_{ij})}{(1 + B_{ij})^{3}}\right]$$

where  $B = e^{Z\alpha}$ . The variance models fitted for log income and log expenditure are shown in detail in Appendices B.3, B.4 respectively. There was actually very little heteroscedasticity and this step could arguably have been omitted. However it was noticeable that in the domain-based models there were some variables, which were consistently being selected for their significance, so it was thought better to include this aspect of the model in all models tested, even though the effects are slight. Again the models for income and expenditure are very similar, as can be seen from comparison of the parameter estimates in Appendices B3 and B4.

#### 4.4 Simulation of predicted values

Simulated values for the model parameters  $\alpha$  and  $\beta$  were obtained by parametric bootstrap, i.e. drawn from their respective sampling distributions as estimated by the survey regressions. Simulation of the cluster-level and standardized household-level effects  $h_i$  and  $e_{ij}^*$  presents several possible choices. A parametric bootstrap could be used by fitting suitable distributions (e.g. Normal, *t*) to the residuals and drawing randomly from these. We chose here a non-parametric bootstrap in which we sample with replacement from the residuals, i.e. from the empirical distributions. Other implementations have chosen to truncate these distributions by deleting extreme values from the residuals, a procedure which produces smaller standard errors. We have not done this. Graphical examination of the two sets of residuals showed that the distributions were long-tailed but there was no compelling justification for eliminating the tail values nor was there an obvious cut off point. Another choice is whether to resample the  $e_{ij}^*$  from the full set or only from those within the cluster corresponding to the chosen  $h_i$ . We chose the latter, so when mean-correcting the standardized residuals (see section 2.3) we used

$$\hat{e}_{ij}^{*} = \hat{e}_{ij} / \hat{\sigma}_{e,ij} - \frac{1}{n_i} \sum_{j=1}^{n_i} \hat{e}_{ij} / \hat{\sigma}_{e,ij}$$

A total of 100 bootstrap predicted values  $Y_{ij}^{b}$  was produced for each unit in the census and for each target variable, as described in section 2.4.

#### 4.5 **Production of final estimates**

Since a log transform was applied in modelling income and expenditure, we first undo this transformation by exponentiating, e.g. predicted expenditure  $E_{ij}^b = e^{Y_{ij}^b}$ . The predicted values can then be accumulated at the appropriate geographic level. We used primarily municipal and provincial levels, but in addition produced separate estimates for urban and rural poverty estimates at provincial level. Regional level estimates were also produced for comparison with the FIES-based estimates.

For the income and expenditure information the census units are households and the target variables per capita average values, so the accumulation needs to be weighted by household size. Thus for example the formula for  $P_R^b$  the *b*th bootstrap estimate of poverty incidence ( $\alpha = 0$  in equation 1.1) in area *R* is amended to:

$$P_R^b = \sum_{ij \in R} n_{ij} \cdot I(E_{ij}^b < z) / \sum_{ij \in R} n_{ij}$$

where  $n_{ij}$  is the size of household ij in R.

The 100 bootstrap estimates for each region, e.g.  $P_R^1 \dots P_R^{100}$  were summarized by their mean and standard deviation, giving a point estimate and a standard error for each area.

# 5. The ELL Methodology as Applied to Philippine Data

As noted earlier, like in Bangladesh (Jones and Haslett, 2003), we have departed from the ELL methodology in a few important ways.

The strategy for choosing appropriate regression models for the target variable is not usually made explicit, but it would appear that other authors have used separate models in each stratum, with sometimes a large number of strata, and that variables have been selected from a very large pool of possibilities including all interaction terms. Modelfitting criteria such as adjusted  $R^2$  or AIC will penalize for fitting too many variables, but do not make proper account when there are a large number of variables to select from. Cross-validation, in which primary sampling units are deleted in turn, might be useful here. We have fitted a single model for the whole population, supplemented by important regional interaction terms, including interaction terms only when the corresponding main effects are also included and looking carefully at the interpretability of the estimated effects, i.e. whether the model makes sense. This is a time-consuming procedure but we believe it leads to more stable parameter estimation and more reliable prediction, especially since it uses all the data rather than comparatively small data subsets for model fitting. It seems reasonable to suppose that the structural effects of most factors on the target variable will be similar in all areas, with perhaps some modulation between rural and non-rural areas by region and some difference between regions on a simple additive basis (these correspond to fitting region by urban/rural effects). Furthermore there exists prior knowledge on which factors are likely to affect the target variable, and this can be incorporated informally into the model selection. A more formal way of doing this would be through a Bayesian analysis, but like in the case of Bangladesh (Jones and Haslett, 2003), this is beyond the scope of the present work.

The use of specialized survey regression routines in the initial model fitting has distinct advantages, since it incorporates properly the survey design therefore giving a consistent estimate of the covariance matrix. The usual ELL approach of modelling the covariance matrix for each cluster does not properly account for the within-cluster correlations, since the joint sampling probabilities are not used. The specialized routines overcome this by using a robust methodology, essentially collapsing the covariance matrix within clusters. A possible disadvantage is that it may give poor estimates if used for small subpopulations with few clusters, and this has repercussions for stability of multiple models given the comparatively small sample sizes used to fit each model in the relevant set of multiple models. The actual weighting of the survey observations is complex not only because of the survey design but also because the target variable is often a per capita average. Alternatively, if individual data are used, these will be correlated when from the same family. A conservative approach here might be to use household averages. Correct modelling of the variance structure is an area where more theoretical research work is still needed.

The benefits of the ELL methodology accrue when interest is in several nonlinear functions of the same target variable, as in the case here of six poverty measures defined

on household per capita expenditure. If only a single measure were of interest it might be worthwhile to consider direct modelling of this. For example small area estimates of poverty incidence could be derived by estimating a logistic regression model for incidence in the survey data. Ghosh and Rao (1994) consider this situation within the framework of generalized linear models. If on the other hand there are several target variables which might be expected to be strongly correlated, such as height-for-age and weight-for-age, it might increase efficiency to use a multivariate model rather than separate univariate regressions as was noted in Jones and Haslett (2003).

From a theoretical perspective, the best (i.e. most efficient) small-area estimator uses the actual observed *Y* when it is known, i.e. for the units sampled in the survey, and the predicted *Y* values otherwise. The resulting estimator can be thought of as a weighted mean of the direct estimator from the survey only, and an indirect estimator derived from the auxiliary data, the relative weights being determined by the squared standard errors of the two estimates. In practice it may be impossible, for confidentiality reasons, to identify individual households in the survey and match them to the census, but there is perhaps still some basis for using a weighted mean of the two estimates and thereby increasing precision. Further it is perhaps not best practice to resample unconditionally from the empirical distribution of the cluster-level residuals for those clusters, which are present in the survey. An alternative would be to resample each of these parametrically from an estimated conditional distribution.

The provision of standard errors with the small-area estimates is seen as important because it gives the user an impression of how much accuracy is being claimed. All small area estimation standard errors are however conditional on the model being correct, and this is why choice of model is so crucial. Simply looking at standard errors produced by the software for various models (since these are conditional) can give too rosy a picture, especially where models used use only a subset of the data and many explanatory variables. The effect of models uncertainty needs to be considered, especially where sample sizes for models (as often is the case with multiple models) are small and parameter estimates relatively unstable. Ultimately decisions are to be made on which areas should receive the most aid, so it is important that this information be given to users in a way that is most useful for this purpose. It is not clear exactly how the standard error information should be incorporated into estimates, especially for maps where only one measure can be mapped at a time. In choosing a measure or a map, much depends on what decision needs to be made. Often a number of different measures are relevant, so that atlases of various different poverty measures and their uncertainty would be of considerable value.

Small area estimation models are often based solely on economic measures. There are certain aspects of poverty (e.g. health) that have not been included, not because it is not possible in principle, but because (as in many other countries) the Philippine census focuses strongly on economic rather than health measures. To some extent, the absence of health information is compensated technically by using random effect models, which take into account the missing (health) variables. However, the technical adjustment is not as good as having the census health variables, and there is some possibility that the sound

small area estimates of poverty based on economic variables do not also provide the best possible poverty estimates based on health.

Small area estimation of poverty remains an important topic. The theoretical issues that arise from the various practical constraints deserve more research. Nevertheless, the methodology is already sufficiently well developed that useful small area estimates, at a level not previously possible using survey data alone, are now available to improve targeting of a range of poverty alleviation programmes in the Philippines.

### 6. Results for Income-based Measures

#### 6.1 Regional level

The results for the three poverty measures (incidence, gap and severity) were first accumulated at the regional level. Regional estimates of urban and rural poverty were also calculated.

Region	Survey-based (FIES)		SAE (domain-ba	SAE (domain-based models)			SAE (global model)		
	Poverty Incidence	SE	Poverty Incidence	SE	Z	Poverty Incidence	SE	Z	
NCR	0.0771	0.0061	0.0693	0.0051	-0.9818	0.0829	0.006	0.6780	
CAR	0.3817	0.0184	0.3610	0.0120	-0.9419	0.3825	0.0159	0.0342	
Region I	0.3558	0.0195	0.3427	0.0123	-0.5705	0.3397	0.0124	-0.7004	
Region II	0.3168	0.0253	0.3354	0.0127	0.6584	0.3553	0.0144	1.3227	
Region III	0.2089	0.0123	0.2240	0.0080	1.0258	0.2347	0.0075	1.7862	
Region IV	0.2619	0.0120	0.2812	0.0059	1.4482	0.2923	0.0066	2.2238	
Region V	0.5281	0.0208	0.4990	0.0126	-1.1991	0.4948	0.0133	-1.3507	
Region VI	0.4572	0.0159	0.4160	0.0097	-2.2117	0.4340	0.0092	-1.2627	
Region VII	0.3831	0.0199	0.3708	0.0119	-0.5312	0.3965	0.0118	0.5816	
Region VIII	0.4529	0.0237	0.4376	0.0114	-0.5796	0.4449	0.0163	-0.2751	
Region IX	0.4555	0.0264	0.4512	0.0144	-0.1447	0.4718	0.0185	0.5029	
Region X	0.3993	0.0220	0.4007	0.0172	0.0485	0.3822	0.0155	-0.636	
Region XI	0.3691	0.0219	0.3633	0.0101	-0.2431	0.3656	0.0144	-0.1346	
Region XII	0.5361	0.0213	0.5332	0.0118	-0.1181	0.5157	0.0131	-0.8163	
ARMM	0.6446	0.0250	0.6120	0.0160	-1.0975	0.6337	0.0171	-0.3602	
Caraga	0.5020	0.0230	0.5287	0.0119	1.0359	0.5064	0.0153	0.1618	

Table 6.1 Comparison of regional-level estimates of poverty incidence

Table 6.1 shows the comparison of the estimates of poverty incidence using the FIES survey, the domain-based model approach, and the single global model. Our FIES estimates are based on our combined FIES/LFS data set so differ slightly from the FIES-based estimates given by NSCB (NSCB, 2003). The standard errors for the FIES estimates are adjusted for the sampling design using a design-based robust procedure (svyprop in Stata). The standard errors for the small-area estimates (SAEs) are derived from the bootstrap procedure described in Section 2.4. It can be seen that the standard errors of the two SAE methods are similar to each other but in all cases smaller than those from FIES. The reduction however is not as great as might be expected given the very large number of households in each region in the census data. This is largely because of the uncertainty in the model (i.e. the  $\beta$  coefficient in Equation 2.1), particularly the domain-specific intercepts, which are not averaged out across the regions so that increased number of households in domains does not decrease standard errors as much as would otherwise be expected.

The differences between the SAEs and corresponding FIES estimates have been summarized by Z-scores representing the standardized distance between them:

$$Z = \frac{\text{SAE estimate} - \text{FIES estimate}}{\sqrt{(\text{SAE standard error})^2 + (\text{FIES standard error})^2}}$$

These suggest overall agreement between the FIES estimates and the SAEs. One out of sixteen of the global SAE estimates, and one of the domain-based estimates, are more than two standard errors away from the corresponding FIES estimate, but this is not unusual for sixteen multiple comparisons. Both SAEs give larger estimates of poverty incidence for Region IV and smaller estimates of poverty incidence for Region V, when compared to FIES. This does not mean that the SAEs are "wrong", since the FIES estimates are subject to sampling error and may in some cases be further from the true values. The SAEs also gives a lower estimate for ARMM, although all three methods put ARMM as the poorest region. The domain-based approach, as expected, gives results at regional level which are on average a little closer to the FIES estimates, since they are tailored more closely to match FIES at domain level.

More detailed results, giving poverty gap and severity at regional level as well as an urban/rural breakdown, are presented in Appendices C.1 and C.2. Here we find that the greatest disparity between the estimates is in the urban areas, but that this difference can be adequately modelled by including different rural/urban effects for each region within a single model. Poverty incidence is much higher in the rural areas, as are poverty gap and severity. Poverty gap and severity are considerably worse in ARMM than in the rest of the country, for both urban and rural areas.

#### 6.2 **Provincial level**

The NSCB has released provincial level estimates of poverty incidence (NSCB, 2003), while pointing out that some of them had rather high coefficients of variation (CV) or standard error estimate. We compare below the FIES-based estimates for the 83 provinces with our small-area estimates using the global model. A full listing of the SAEs, with an urban/rural breakdown, is given in Appendix C.3. A map of these provincial poverty incidence estimates is shown in Appendix E.1.

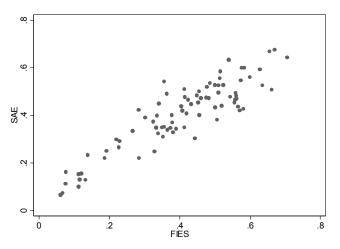


Figure 6.1 FIES versus SAE poverty incidence estimates for 83 provinces

_	Survey-base	d (FIES)		SAE		
	Poverty Incidence	SE	CV	Poverty Incidence	SE	CV
Mean	0.4060	0.0425	0.1174	0.4046	0.0174	0.0485
SD	0.1611	0.0162	0.0527	0.1430	0.0055	0.0231
Min	0.0614	0.0098	0.0450	0.0655	0.0072	0.0239
Max	0.7060	0.1041	0.3988	0.6753	0.0323	0.1381

 Table 6.2 Summary of provincial-level estimates of poverty incidence

It is noticeable that the standard errors (SE) and coefficients of variation (CV) are much lower for the SAEs. The FIES sample sizes at provincial level tend to be too small for accurate estimation, with the CV averaging over 10 percent. In contrast the CV of the SAEs averages less than 5 percent. The small-area estimates are slightly lower on average than the FIES estimates, but the individual estimates are sometimes larger, sometimes smaller. A normal plot of the Z-scores of the differences (as defined in Section 6.1) suggests broad agreement between the two. The one large discrepancy (the upper-right point in Figure 6.2) is for Province 14 (Bulacan) for which the estimated incidence is about 8 percent using FIES and 16 percent by SAE.

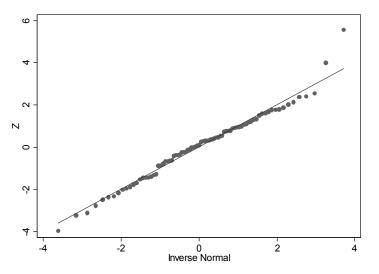


Figure 6.2 Normal plot of Z-scores of difference between FIES and SAE estimates

#### 6.3 Municipal level

A summary of the small-area estimates and their standard errors and CV's for the 1623 municipalities is given in Table 6.3 for poverty incidence, gap and severity. The average standard error for the poverty incidence estimates is about 4 percent, which is considerably less than the variation between the estimates (standard deviation about 17%), and so these estimates can on the whole be considered precise enough for making poverty comparisons between municipalities. The precision of these estimates at municipal level is in fact a little better than the FIES estimates at the more aggregated provincial level.

Table		mannerp		mates		
	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
Mean	0.4549	0.0428	0.1505	0.0216	0.0666	0.0123
SD	0.1689	0.0143	0.0726	0.0094	0.0371	0.0064
Min	0.0274	0.0050	0.0051	0.0012	0.0015	0.0004
Max	0.8968	0.1973	0.4403	0.0904	0.2565	0.0594

Table 6.3 Summary of municipal-level estimates

Where the standard errors are large, this is mostly because the corresponding municipalities are small in population size. Figure 6.3 shows the relationship between the size of the municipality and the standard error of the estimate, with size on a log scale to make the figure more compact. The general effect is for standard error to decrease as municipality population (i.e. size) increases.

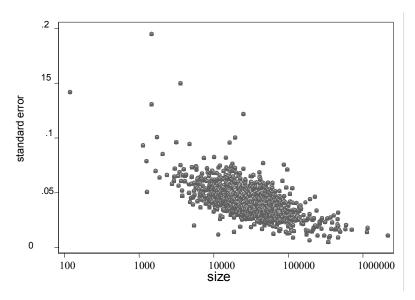


Figure 6.3 Plot of standard errors against municipal size

Another factor influencing the size of the standard errors is the size of the estimate itself. Figure 6.4 shows how the standard errors are related to the estimates, and shows the quadratic form expected. An alternative measure of precision would be the coefficient of variation, which measures the standard error in proportion to the size of the estimate. The CV's for poverty incidence are very skewed, ranging from 3 percent to 60 percent, with a median of 9.5 percent, but most of the very large CV values are for municipalities with very low poverty incidence. For making comparisons between municipalities the standard errors are more appropriate, hence our main focus on these.

A map of the estimated poverty incidence estimates for the 1623 municipalities is in Appendix E.2. Poverty gap and severity are mapped in Appendices E.3, E.4 respectively.

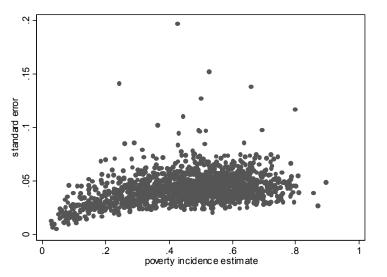


Figure 6.4 Municipal-level poverty incidence estimates and their standard errors

### 7. Results for Expenditure-based Measures

#### 7.1 One dollar a day

The PPP equivalent of \$1-a-day is 597.21 pesos per month, or 7166.52 pesos per year (World Bank, personal communication). This is considerably less than the NSCB's official poverty lines, which range from about 8000 to 17000 pesos per year with typical values of about 11000 pesos. Thus the estimates of poverty incidence using the \$1-a-day measure are very low compared to the official NSCB estimates. The estimated incidence for the whole country is 14.0 percent (SE=0.384%) using FIES and 14.1 percent (SE=0.251%) by our small-area method.

Regional estimates are shown in Table 7.1. The match with FIES is shown to be quite good. Comparing with the income-based measures of Chapter 6, we can see that not only are the incidences much lower here, but the comparisons between regions present a different picture. ARMM no longer appears to be one of the poorest regions, whereas Regions VIII and IX now have the highest incidence of poverty. These differences are caused largely by the use of a single poverty line rather than domain-specific lines. Separate estimates for urban and rural at regional level are given in Appendix D.1.

-	Survey-based (FIES)		SAE (globa	SAE (global model)		
Region	Poverty Incidence	SE	Poverty Incidence	SE	Z	
NCR	0.0011	0.0006	0.0023	0.0005	1.6263	
CAR	0.1095	0.0145	0.1252	0.0095	0.9014	
Region I	0.0855	0.015	0.0938	0.006	0.5112	
Region II	0.0887	0.0164	0.1408	0.0107	2.6666	
Region III	0.0215	0.0055	0.0328	0.0025	1.8827	
Region IV	0.0659	0.0083	0.0731	0.0038	0.7947	
Region V	0.2282	0.0192	0.2184	0.0134	-0.4185	
Region VI	0.1586	0.0137	0.1657	0.0096	0.4242	
Region VII	0.2601	0.0191	0.2464	0.0132	-0.5903	
Region VIII	0.3038	0.0233	0.3096	0.0177	0.1975	
Region IX	0.3197	0.0263	0.3436	0.0172	0.7611	
Region X	0.2473	0.0208	0.2401	0.0145	-0.2838	
Region XI	0.1874	0.0202	0.1891	0.0128	0.071	
Region XII	0.2664	0.0223	0.2757	0.0129	0.3609	
ARMM	0.1671	0.0194	0.2297	0.0195	2.2808	
Caraga	0.2392	0.0227	0.2591	0.0174	0.694	

 Table 7.1 Comparison of regional-level estimates of poverty incidence

At provincial level (see Table 7.2) we find that a few of the FIES-based estimates are zero, i.e. there were no sampled households in these provinces for which per capita

expenditure was below \$1 a day. This is a consequence of having a poverty line which is in the lower tail of the distribution of per capita expenditure. (The standard errors of zero for these estimates are not really valid). The small-area estimates for these provinces are small but non-zero: the regression-based approach will estimate the lower tail of the expenditure distribution more accurately, provided that the model is valid.

_	Survey-based (FII	ES)	SAE				
	Poverty Incidence	SE	Poverty Incidence	SE			
Mean	0.1724	0.0345	0.1830	0.0142			
SD	0.1240	0.0218	0.1119	0.0074			
Min	0.0000	0.0000	0.0013	0.0007			
Max	0.4380	0.1243	0.4165	0.0333			

Table 7.2 Summary of provincial-level estimates of poverty incidence

A full listing of the 82 provincial estimates, with an urban/rural breakdown, is given in Appendix D.2. There is considerable difference between the urban and rural parts, with poverty incidence much higher in the latter. A municipal map of the \$1-a-day estimates is given in Appendix E.5, with a provincial map in Appendix E.6. The municipal estimates range from almost zero to 65 percent, and the average standard error of the 1623 estimates is 0.035.

#### 7.2 Two dollars a day

Because the \$1-a-day measure results in generally very low incidence in the Philippines, we have also considered the \$2-a-day poverty measure, which equates to a poverty line of 14333.04 pesos per annum. This is at the higher end of the official domain-based poverty lines used by NSCB. The estimated incidence for the whole country is now 48.2 percent (SE=0.453%) using FIES and 48.5 percent (SE=0.256%) by SAE. A comparison at regional level is given in Table 7.3, showing a good match and, as expected, small standard errors for the SAEs.

Region	FIES		SA	E (global mo	del)
	Poverty Incidence	SE	Poverty Incidence	SE	Z
NCR	0.0838	0.007	0.0736	0.0053	-1.1737
CAR	0.4748	0.0212	0.4849	0.013	0.4051
Region I	0.5055	0.0195	0.4889	0.0113	-0.7374
Region II	0.5465	0.0255	0.5533	0.0156	0.2278
Region III	0.2936	0.0133	0.3173	0.0088	1.4827
Region IV	0.3235	0.0121	0.3476	0.0062	1.7712
Region V	0.6881	0.0191	0.6581	0.011	-1.3597
Region VI	0.603	0.0136	0.5791	0.0095	-1.4433
Region VII	0.6274	0.0188	0.6347	0.0102	0.3376
Region VIII	0.7191	0.0181	0.7364	0.0116	0.8067
Region IX	0.708	0.0211	0.7501	0.0103	1.7946
Region X	0.6269	0.0217	0.65	0.0128	0.9178
Region XI	0.5907	0.0201	0.5852	0.0135	-0.2236
Region XII	0.7166	0.0179	0.7084	0.0106	-0.3941
ARMM	0.8075	0.0192	0.7995	0.0138	-0.336
Caraga	0.6867	0.018	0.7006	0.014	0.6099

Table 7.3 Comparison of regional-level estimates of poverty incidence

A comparison at provincial level (see Figure 7.1) shows that the FIES and SAE estimates are for the most part quite similar, with a correlation of 0.945. Small-area estimates for the 1623 municipalities range from 2 percent to 97 percent, with an average of 63 percent. The average standard error of these municipal estimates is about 3.8 percent.

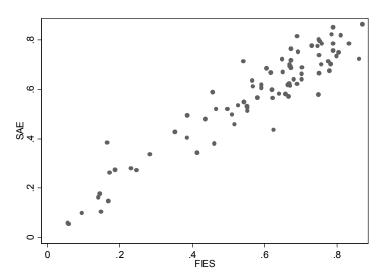


Figure 7.1 FIES versus SAE \$2-a-day poverty incidence estimates for 83 provinces

### 8. The Poorest Forty Provinces

The poverty estimates derived from the small area model can be used for a number of additional purposes. Together with the standard errors derivable form the bootstrap, and the bootstrap replications themselves, these additional statistics can be used for assessment of poverty with associated measures of uncertainty, conditional on the small area model itself.

One such statistic is an assessment of the Philippines' 40 poorest provinces.

The methodology here is to take the 100 bootstrap replications, calculate the provincial poverty rate for each province for each replication, and assess the percentage of replications for which each province appears in the 40 poorest. This percentage can be expressed as a probability. Some provinces are among the 40 poorest in every bootstrap replication, others never among the 40 poorest, and a few provinces are intermediate.

There is a clear distinction between the  $41^{st}$  and  $42^{nd}$  province, so assessing the 41 poorest provinces is a simpler task. Given the small difference between the  $40^{th}$  and  $41^{st}$ , it is difficult to use these results as a strong justification for including one province and not the other, but the difference between the  $41^{st}$  and  $42^{nd}$  is substantial.

Some statistical notes about the use of this list and about small area estimates in general are given in section 5.

Region	Province	Poverty Incidence	Rank (Poorest=1)	Probability In Poorest 40
ARMM	Sulu	0.6753	1	1.0000
ARMM	Maguindanao	0.6687	2	1.0000
Region V	Masbate	0.6429	3	1.0000
Region XI	Saranggani	0.6328	4	1.0000
Caraga	Agusan del Sur	0.5994	5	1.0000
Region XII	Sultan Kudarat	0.5986	6	1.0000
ARMM	Lanao del Sur	0.5923	7	1.0000
Region IV	Oriental Mindoro	0.5848	8	1.0000
ARMM	Tawi tawi	0.5596	9	1.0000
Region XII	Cotabato	0.5553	10	1.0000
CAR	Mountain Province	0.5460	11	1.0000
Region IV	Palawan	0.5422	12	1.0000
-	Occidental Mindoro	0.5356	13	1.0000
-	Zamboanga del Norte	0.5274	14	1.0000
-	Northern Samar	0.5264	15	1.0000
CAR	Ifugao	0.5262	16	1.0000
Caraga	Surigao del Norte	0.5260	17	1.0000
Region VIII	-	0.5190	18	1.0000
Region XI	Davao Oriental	0.5099	19	1.0000
Region IV	Romblon	0.5075	20	1.0000
Caraga	Surigao del Sur	0.5000	21	1.0000
Region V	Sorsogon	0.4953	22	1.0000
Region VI	Capiz	0.4936	23	1.0000
-	Negros Oriental	0.4902	24	1.0000
CAR	Kalinga	0.4830	25	0.9800
	Lanao del Norte	0.4827	26	1.0000
Region IV	Marinduque	0.4777	20	1.0000
Region IX	Basilan	0.4770	28	0.9400
Region V	Albay	0.4741	29	1.0000
Region VI	Antique	0.4724	30	1.0000
Region V	Camarines Sur	0.4724	30	1.0000
-	Camiguin	0.4723	32	0.9000
Region X Region VI	Aklan	0.4695	33	0.9000
-		0.4644	33	
Region XI				0.9200
Region VII		0.4536	35	0.8500
Region VIII		0.4536	36	0.8300
	Apayao	0.4485	37	0.6600
Region IX	Zamboanga del Sur	0.4468	38	0.7600
Region V	Catanduanes	0.4399	39	0.6300
Region X	Bukidnon	0.4379	40	0.5200
-	Eastern Samar	0.4370	41	0.5600
Region VI	Negros Occidental	0.4321	42	0.3700
CAR	Abra	0.4270	43	0.3200
Region VI	Guimaras	0.4222	44	0.3500
Region V	Camarines Norte	0.4206	45	0.2200
Region IV		0.4191	46	0.1000
Region VIII	Leyte	0.4077	47	0.0300

Table 8.1 Ranking of Provinces by poverty incidence

Table 8.1	Ranking of Provinces by poverty incidence (cont.)							
Region	Province	Poverty Incidence	Rank (Poorest=1)	Probability In Poorest 40				
Region VI	lloilo	0.4007	48	0.0000				
Caraga	Agusan del Norte	0.4000	49	0.0400				
Region IV	Aurora	0.3985	50	0.0300				
Region II	Cagayan	0.3899	51	0.0000				
Region X	Misamis Occidental	0.3818	52	0.0000				
Region III	Nueva Ecija	0.3728	53	0.0000				
Region VIII	Southern Leyte	0.3696	54	0.0000				
Region I	llocos Sur	0.3512	55	0.0000				
Region II	Isabela	0.3493	56	0.0000				
Region XI	South Cotabato	0.3489	57	0.0000				
Region VII	Cebu	0.3478	58	0.0000				
Region I	Pangasinan	0.3462	59	0.0000				
Region I	La Union	0.3431	60	0.0000				
Region XI	Davao	0.3378	61	0.0000				
Region IV	Batangas	0.3339	62	0.0000				
Region II	Quirino	0.3277	63	0.0000				
Region X	Misamis Oriental	0.3238	64	0.0000				
Region VII	Siquijor	0.3102	65	0.0000				
Region II	Nueva Vizcaya	0.2991	66	0.0000				
Region I	llocos Norte	0.2916	67	0.0000				
Region XI	Davao del Sur	0.2647	68	0.0000				
CAR	Benguet	0.2509	69	0.0000				
Region III	Tarlac	0.2482	70	0.0000				
Region II	Batanes	0.2338	71	0.0000				
Region III	Pampanga	0.2204	72	0.0000				
Region III	Zambales	0.2196	73	0.0000				
Region III	Bulacan	0.1622	74	0.0000				
Region III	Bataan	0.1556	75	0.0000				
Region IV	Rizal	0.1532	76	0.0000				
Region IV	Laguna	0.1297	77	0.0000				
Region IV	Cavite	0.1287	78	0.0000				
NCR	1st Disrict	0.1133	79	0.0000				
NCR	3rd District	0.0999	80	0.0000				
NCR	4th District	0.0729	81	0.0000				
NCR	2nd District	0.0655	82	0.0000				

Table 8.1 Ranking of Provinces by poverty incidence (cont.)

## 9. Project Validation Exercises

We conducted provincial validation exercises in order to assess the acceptability and consistency of the SAE estimates generated with the available indicators at the municipal level as well as with the expert opinion and assessment of key informants. These activities were conducted in two provinces (Batanes and Palawan) of Luzon, representing Northern and Southern Luzon, respectively, one each for Visayas (Bohol) and Mindanao (Surigao del Norte). Participants come from the local government units, the academe and non-government organizations. The following are the significant learnings gained from the exercises:

#### 9.1. On Workshop Mechanics and Validation Form

The manner of conducting the workshop was continuously improved during the entire series of provincial validation exercises, but majority of the improvements were made after the conduct of the first provincial validation exercises. The following are the improvements made: 1) Conducted the workshop proper as the first activity before proceeding to other topic presentations; 2) modification of the validation form (Appedix F) by adding a detailed description of the ratings to serve as basis for the participants' rating of the municipalities; 3) inclusion of an additional variable in the validation form, i.e., asking the participants if the current situation has improved from the year 2000; 4) instead of indicating the names of the participants in the validation form, the group number was listed, providing confidentiality to respondents.

#### 9.2. On the Workshop Proper

The following are the insights and findings from the workshop presentations:

#### 9.2.1 Official Poverty Statistics

<u>Reasons for Increase in Poverty Incidence</u>. Possible reasons for the increase in poverty incidence level (official estimate) in some of the provinces were discussed as follows: 1) an increase in the poverty incidence level could be an indication that increases in income levels of the residents was not enough to cope up with the price increases that prevailed in the province, 2) due to migration of poor people from other provinces to the province under evaluation.

<u>Varying Views on the Provincial Poverty Statistics</u>. Different views of the participants regarding the present provincial poverty status were observed as follows: (1) Some of the participants from the province of Surigao del Norte whose level of poverty incidence increased seemed not to accept the estimates as appropriate, with the perception that their province is better off than their neighbor province, Agusan del Norte (rank 42). (2) The Palawan participants opined on the possible reasons that could have influenced the present poverty status of the province, such as the possible effects of the Dos Palmas Resort kidnapping incident in the year 2001 on the economy. (3) The participants from Bohol,

with an improved poverty status, showed interest to investigate or check the municipalities as well as the indicators, which showed improvements, along with the municipalities and/or indicators needing improvement. (4) In the province of Batanes, on the other hand, the possible factors that might explain why the province had performed much better than the other provinces were discussed, like the inherent traits and culture of Ivatans (natives of Batanes), being hardworking and progressive minded; as well as the support of the provincial government.

<u>Demand for Provincial Poverty Statistics</u>. Majority of the participants expressed interest on using the interim estimates of the provincial official poverty statistics.

## 9.2.2. Poverty Mapping Project Methodology and Outputs

<u>Variables in the SAE Model</u>. Some indicators included in the SAE model were not useful to a specific province, e.g., multiple type of housing (type\_mult), housing materials (roof\_light, wall\_salvaged), ownership of telephone, and ownership of refrigerator. Likewise, there are many other non-economic indicators (infrastructure, water facility, health related variables and many others) that could have been better determinants of poverty level of a particular municipality. For example, in Palawan, the access road to the municipality of El Nido has made the area more accessible to interventions, thereby, improving its poverty status. On the other hand, the municipality of Espaniola, in the same province, has high infant mortality rate due to unsafe water that causes Ameobiasis, and might have contributed to the worse poverty situation in the area.

<u>Usefulness of SAE Estimates</u>. The participants showed overwhelming interest on the usefulness of the poverty incidence estimates generated by the project. In fact, almost all asked for copies of the municipal estimates and the maps generated so they can use it in their respective units. Some made inquiries on how they can use the methodology in coming up with estimates for other welfare indicators. Some participants also asked for copies of the validation instrument for future utilization in monitoring poverty incidence in their respective provinces.

#### 9.2.3. Validation Workshop Results

<u>SAE Ranks Not Definitive</u>. The results generated from the SAE methodology did not produce a unique ranking of the municipalities. While the poverty incidences were unique, due to sampling errors, it was not possible to establish definitive rankings of municipalities.

<u>Consistency of Participants' Assessment vis-à-vis SAE</u>. In general, the poverty incidence estimates generated or the ranking of the municipalities based on the SAE methodology were consistent with the participants' assessment in almost all of the provinces, except for the province of Bohol, where almost half of the rankings of the participants were quite different from the SAE-based rankings. Opinions were raised on the consistencies or inconsistencies of the estimates with the actual poverty situation of the provinces or municipalities as perceived by the participants.

<u>Possible Reasons for Differences in Rankings</u>. For some of the municipalities with widely varying ranks, issues on the possible reasons of such extreme differences or discrepancies were discussed and for some municipalities, attempts were made to decide on the most appropriate rank of the municipality. Like in the province of Palawan, the municipality of Kalayaan is one of the municipalities with extremely opposing ranks (rank 1 based on SAE, rank 14 based on the participants' assessment). Majority of the participants agreed that the most appropriate rank for the said municipality is the one based on SAE, since all the residents of the area are government employees (almost zero unemployment) whose compensation are above the poverty threshold set for the province.

<u>Reference Period</u>. The major source of discrepancies in the SAE based estimates and the participants' assessment was the difference in reference period, i.e., the SAE model was based on the year 2000 data, while the participants' assessments were based on the present situation. It was observed that in comparison with the poverty status of the municipalities five years ago, majority of them have improved. This could be considered as an indication that somehow the poverty alleviation efforts of the government have a positive impact on some, if not most of the municipalities in the four provinces visited.

#### 9.3. On the Field Validation

We conducted an ocular inspection on some of the municipalities and/or barangays of the four provinces. The following are some of the observations:

<u>Ocular View</u>. Through the field validation activity, i.e., ocular inspection of the municipalities/barangays in the four provinces, some of the workshop results were verified. For example: 1) the municipality of Baclayon in the province of Bohol indeed has both progressive barangays and depressed barangays, and 2) in Batanes, almost all of the houses are made of stone and/or concrete materials, with concrete roads even in the remotest.

<u>Gaining more Insights</u>. This activity has also enabled the Poverty Team to talk with the local officials and gain more insights on the actual poverty situation of the municipalities, e.g., in Batanes, good governance (government transactions are transparent and details on the budget and government spending are posted on the bulletin board in front of the provincial government office, and consultation with the people or the community elders is conducted prior to project implementation in any part of the province) and value for education (Ivatans are fully aware that only education can liberate them from the clutches of poverty) were observed to be some of the major factors that contributed to its progressive economy.

## **10.** National Dissemination Forum

We conducted the National dissemination forum on the project to serve as one of the major activities in line with the celebration of the 2005 National Statistical Month. The forum was conducted to: a) present the project report, providing details on the methodology, variables used, diagnostic tests undertaken, and the results; b) serve as a venue for the exchange of ideas and discussion of the provincial and municipal level poverty estimates produced through the project; and c) develop awareness among national government agencies, the academe, non-government organizations, local government units, and other institutions/organizations of the importance of the poverty mapping methodology and the results generated. The following are the important points raised during the forum:

#### **10.1. On the Poverty Mapping Methodology and Outputs**

<u>Consistency of the small area estimates with the NSCB Official poverty statistics</u>. Included in the draft report distributed during the forum were tables on the comparison of the SAE estimates with the official/survey estimates. The table shows that the estimates were more or less close to each other, not only at the national level but also at the regional level with urban/rural disaggregation. There could be regions that did not match well, but they were within the bounds of acceptable statistical uncertainty.

Regarding the ranking of the poorest forty provinces, there were few provinces that were included in the poorest forty based on the SAE but were not in the official statistics. But in general, the agreements of the rankings were good.

<u>SAE estimates contrary to participants' expectation</u>. It was mentioned that for some provinces (e.g. Basilan with low incidence versus Palawan/Zamboanga del Norte with high incidence) the estimates based on the SAE was contrary to what was expected. But it was explained that based on the value of the standard errors associated with each of the three poverty incidence estimates, the three estimates were actually not different from each other. Although there were provinces for which estimates based on the SAE and the official methodology were not very close, if all provinces would be considered, the two sets of estimates generally matched well. It was also pointed out that these were estimates; hence, variations could not be avoided. Moreover, Basilan was one of the provinces characterized by many households with income very close to the poverty line. Thus, a slight movement in the poverty line could substantially change the poverty incidence. The coefficient of variation for Basilan was also noted as among the highest.

<u>Poverty incidence estimates based on SAE and the prioritization of poorest forty</u> <u>provinces</u>. The prioritization of the poor provinces that are to be provided with poverty alleviation support is largely a political issue. It was noted that the poverty incidence given were estimates and there would always be uncertainty associated with it. The methodology could quantify the uncertainty, but it would never be exact. In making decisions for targeting of interventions, using the estimated ranks of the poorest 40 as basis would be better than to have no basis at all.

At present, the project's output has not yet been considered in the selection of poor provinces in any of the government's poverty alleviation programs.

<u>Variable selection and the SAE model</u>. As in other modelling activities for prediction purposes, sometimes there are variables in the model that have significant coefficients but with counter-intuitive interpretation. Situation of this kind was encountered in the SAE model, as in the case of percentage of employed persons in trade for instance. It is possible though, that this is one of those variables with highly significant effect; hence, its inclusion in the model. Moreover, it should be noted that the said variable is a municipal mean, and based on experience, the effects of municipal means are sometimes contrary to people's expectation. It was also mentioned that some variables may vary across municipalities, hence, there could be some kind of unseen interaction between other variables included in the model and thus, some of the coefficients must be interpreted in conjunction with the other variables.

The principle of parsimony was considered in the choice of the model. It was mentioned that certainly the aim was to use a parsimonious model, but it was quite difficult to look at the contribution of individual variables in the final predictions, because the process to produce the final predictions was a very complex and time consuming process.

It was also pointed out that the SAE model only used the variables included in the census and the survey; thus, variables like, inflation rate, access to productive resources, access to government services, and other variables suggested by the participants during the validation workshop and the dissemination forum, were not considered.

<u>Use of poverty lines</u>. The project made use of the income-based and expenditure-based (\$1-a-day and \$2-a-day) poverty lines. It was mentioned that the use of the \$1-a-day and \$2-a-day poverty line was required by the World Bank. As to the method that would give a better estimate of poverty incidence– income-based or expenditure-based poverty line, it was mentioned that there is no certainty on which of the two methods would provide a better estimate.

<u>Intercensal updating</u>. It was pointed out that there would be lots of complexities on the use of the model during intercensal years. On the use of other sources of data in lieu of the census data, like the data from the LGUs, it was mentioned that some complications could come out as other sources of data may not be consistent (e.g., uniformity of concepts and definitions applied) with the census data or survey data and this would bring up more technical issues on the data integration process.

#### **10.2 On the Project Validation Exercises**

<u>Questions included in the validation form</u>. It was mentioned that the questions in the validation form seemed very difficult to answer. Hence, during the validation workshops there were facilitators who guided and explained the concepts to the participants. The participants were free to discuss among themselves and to ask clarifications or questions regarding the different indicators included in the validation form.

<u>Use of administrative data for validation</u>. The project validation workshop was conducted to assess the consistency of the estimates with the perception of the people (represented by the key informants) in various provinces. Thus, the concern was not so much with the consistency of data with other data sets because the small area estimates were already based on a collected set of data. Moreover, the NSCB already had its own record of the municipal level administrative data.

<u>Proliferation of the different information systems</u>. Proliferation of information systems was not raised during the validation exercises but the NSCB is now into another project, still funded by the WB-ASEM Trust Fund, which will formulate an integrated database on poverty statistics. The project would consider the different monitoring systems both at the national and local levels.

<u>Participants of the validation workshops</u>. In the validation exercises, it was observed that there were more participants from the LGUs, than those coming from the NGOs who seem to be the more appropriate participants, since they represent the marginalized sector of the society. This observation was noted for future project related activities.

<u>Widely varying ranks (SAE versus participants' assessment)</u>. There were municipalities with widely varying ranks (high based on SAE and low based on participants' assessment), hence a question was raised as to what municipal rank would prevail. It was explained that the validation exercises were conducted to assess the consistency of the poverty incidence estimates generated from the project with the perception of the workshop participants or the key informants in the provinces, and not necessarily to come up with a decision as to the most appropriate rank estimate to use.

## 11. Conclusion

We have produced small-area estimates of poverty in the Philippines at the municipal level by combining survey data with auxiliary data derived from the complete 2000 short-form and a 10 percent sample of long-form census data. A single model, supplemented by different urban/rural effects within each region was found to be adequate for predicting log average per capita household income and expenditure and the poverty measures derived from them.

The estimates at the provincial level are in general consistent with, but more precise than the official survey estimates. Moreover, the municipal level estimates obtained provided detail at finer level of inequalities within provinces; the estimates have acceptably low standard errors, which are more or less similar with the provincial official survey estimates.

Based on the series of provincial validation exercises conducted, the SAE model-based municipal estimates of poverty incidence were also found to be generally consistent with the participants' assessment; hence, we can consider the SAE methodology acceptable in generating municipal level poverty incidence estimates.

The Philippine small area poverty estimates would be very useful and of considerable benefit for targeting interventions or aid allocation in various areas (provincial or municipal) in the country.

## References

- Alderman H., Babita M., Demombynes G., Makhata N. and Ozler B. (2001). "How low can you go? Combining census and survey data for mapping poverty in South Africa", *Journal of African Economics*, to appear.
- Chambers R.L and Skinner C.J. (eds). (2003). Analysis of Survey Data. John Wiley.
- Efron B. and Tibshirani R.J. (1993). An Introduction to the Bootstrap. Chapman and Hall.
- Elbers C., Lanjouw J. and Lanjouw P. (2003). "Micro-level estimation of poverty and inequality", *Econometrica*, 71, 355-364.
- Elbers C., Lanjouw J.O. and Lanjouw P. (2001). "Welfare in villages and towns: microlevel estimation of poverty and inequality", unpublished manuscript, The World Bank.
- Elbers C., Lanjouw J.O., Lanjouw P. and Leite P.G. (2001). "Poverty and inequality in Brazil: new estimates from combined PPV-PNAD data", unpublished manuscript, The World Bank.
- Foster J., Greer J. and Thorbeck E. (1984). "A class of decomposable poverty measures", *Econometrica*, 52, 761-766.
- Fujii T. (2003). "Commune-level estimation of poverty measures and its application in Cambodia", preprint.
- Ghosh M. and Rao J.K.N. (1994). "Small area estimation: an appraisal", *Statistical Science*, 9, 55-93.
- Hamill P.V.V., Dridz T.A., Johnson C.Z., Reed R.B. et al. (1979). "Physical growth: National Center for Health Statistics percentile". *American Journal of Clinical Nutrition*, 32, 607-621.
- Healy A.J., Jitsuchon S. and Y. Vajaragupta. (2003). "Spatially disaggregated estimation of poverty and inequality in Thailand", preprint.
- Jones, G. and Haslett, S. (2003). *Local Estimation of Poverty and Malnutrition in Bangladesh*. Bangladesh Bureau of Statistics and United Nations World Food Programme.
- Miller, A. (2002) Subset Selection in Regression, 2<sup>nd</sup> edition, Chapman and Hall / CRC
- Minot, N. Baulch, B. and Epprecht, M. (2003). "Poverty and inequality in Vietnam: Spatial patterns and geographical determinants", International Food Policy Research Institute, Washington, D.C. and Institute of Developments Studies, University of Sussex.
- NSCB (2000) *Profile of Censuses and Surveys*. National Statistical Coordination Board, Philippines.
- NSCB (2003) *Philippine Provincial Poverty Statistics*. National Statistical Coordination Board, Philippines.

- Rao J.N.K. (1999). "Some recent advances in model-based small area estimation", *Survey Methodology*, 23, 175-186.
- Rao J.N.K. (2003). Small Area Estimation. John Wiley.
- Ravallion M. and Chen S. (1997) "What can new survey data tell us about recent changes in distribution and poverty?", World Bank Economic Review 11, 357-382.
- Ravallion M. and Chen S. (2004) "How have the world's poorest fared since the early 1980's?", World Bank Economic Observer 19, 141-169.
- Sen, A.K. (1985). Commodities and Capabilities. North-Holland.
- Skinner C.J and Holt D. and Smith T.M.F. (eds) (1989). Analysis of Complex Survey Data. John Wiley.
- Tiglao N.C.C. (2004). "Spatial microsimulation and small area estimation of household characteristics: towards effective geographical targeting of urban poverty in Metro Manila", paper presented at the International Conference on Official Poverty Statistics, Manila 4-6 October 2004.
- Virola R.A. and Encarnacion J.O. (2003) *Official Provincial Poverty Statistics in the Philippines and the Issue of Comparability across Space*. NSCB Technical Papers No. 2003-10.

World Bank (2003). Poverty in Bangladesh: Building on Progress. The World Bank.

World Bank, Chorching Goh: personal communication 22<sup>nd</sup> December 2004.

# Appendices

## Appendix A. Auxiliary variables

A.1 Obtainable or derivable from FIES2000 or LFS

Variable Name	Variable Label
Urb	1 if urban
Famsize	Number of persons in household
Famsizesq	Square of family size
Famsizesqc	Square of mean-adjusted family size
type_sing	1 if type of housing is single house
type_dup	1 if type of housing is duplex
type_mult	1 if type of housing is apart/access/cond/town
type_cia	1 if type of housing is comm/ind/agr
type_oth	1 if type of housing is other
roof_strong	1 if roof is made of strong materials(galvanized iron/aluminum,tile, concrete/clay)
roof_light	1 if roof is made of light materials(cogon/nipa/anahaw)
roof_salvaged	1 if roof is made of salvaged materials(makeshift/improvised)
roof_oth	1 if roof is made of other materials
wall_strong	1 if wall is made of strong materials(concrete/brick/stone, wood, galvanized iron)
wall_light	1 if wall is made of light materials(bamboo/sawali/cogon/n ipa)
wall_salvaged	1 if wall is made of salvaged materials(makeshift/improvised)
wall_oth	1 if wall is made of other materials
lot_own	1 if lot is owned
lot_rent	1 if lot is rented
lot_rentfwc	1 if lot is rent-free with consent of owner
lot_rentfwoc	1 if lot is rent-free without consent of owner
fa_xs	1 if lot floor area is less than 18.6 sq m
fa_s	1 if lot floor area is between 18.6 to 32.5 sq m
fa_m	1 if lot floor area is between 32.5 to 44.6 sq m
fa_l	1 if lot floor area is between 44.6 to 65 sq m
fa_xl	1 if lot floor area is between 65 to 83.6 sq m
fa_xxl	1 if lot floor area is between 83.6 to 139.4 sq m
fa_xxxl	1 if lot floor area is greater than 139.4 sq m
head_male	1 if head is male
no_spouse	1 if no spouse in family
per_kids	Proportion of household (HH) members who are sons/daughters of head
per_61up	Proportion of members ages 61 and up
dom_help	1 if household has domestic help
all_noed	Proportion of all members 10 years and over with no education

A.1 Obtainal Variable Name	ble or derivable from FIES2000 or LFS (cont.) Variable Label
all_eled	Proportion of all members 10 years and over with only elementary education
all_hsed	Proportion of all members 10 years and over with only high school education
all_coed	Proportion of all members 10 years and over with college education
spo_noed	Proportion of spouses with no education
spo_eled	Proportion of spouses with only elementary education
spo_hsed	Proportion of spouses with only high school education
spo_coed	Proportion of spouses with college education
hea_noed	1 if HH head has no education
hea_eled	1 if HH head has only elementary education
hea_hsed	1 if HH head has only high school education
hea_coed	1 if HH head has college education
men_noed	Proportion of male HH 10 years and over with no education
men_eled	Proportion of male HH 10 years and over with only elementary education
men_hsed	Proportion of male HH 10 years and over with only high school education
men_coed	Proportion of male HH 10 years and over with college education
wom_noed	Proportion of female HH 10 years and over with no education
wom_eled	Proportion of female HH 10 years and over with only elementary education
wom_hsed	Proportion of female HH 10 years and over with only high school education
wom_coed	Proportion of female HH 10 years and over with college education
a1014_noed	Proportion of members 10-14 years with no education
a1014_eled	Proportion of members 10-14 years with only elementary education
a1014_hsed	Proportion of members 10-14 years with only high school education
a1014_coed	Proportion of members 10-14 years with college education
a1524_noed	Proportion of members 15-24 years with no education
a1524_eled	Proportion of members 15-24 years with only elementary education
a1524_hsed	Proportion of members 15-24 years with only high school education
a1524_coed	Proportion of members 15-24 years with college education
a25up_noed	Proportion of members over 25 years with no education
a25up_eled	Proportion of members over 25 years with only elementary education
a25up_hsed	Proportion of members over 25 years with only high school education
a25up_coed	Proportion of members over 25 years with college education
head_age	Age of head in years
spouse_age	Age of head's spouse in years
hms_sing	1 if head's marital status is single
hms_mar	1 if head's marital status is married
hms_wid	1 if head's marital status is widow
hms_div	1 if head's marital status is divorced
hms_unk	1 if head's marital status is unknown
per_sib	Proportion of HH members who are brother/sister of head
per_kidsinlaw	Proportion of HH members who are sons/daughters in law of head
per_gkid	Proportion of HH members who are grandsons/granddaughters of head

A.1 Obtainable or derivable from FIES2000 or LFS (cont.)

Variable Name	Variable Label
per_parent	Proportion of HH members who are parents of head
per_othrel	Proportion of HH members who are other relatives of head
per_nonrel	Proportion of members who are non-relatives: boarders, domestic help, other
per_nofw	Proportion of members who are overseas workers
out_nucleus	1 if relatives from outside of nucleus family are part of HH
per_hhall1	Proportion of female members age<1
per_hhall16	Proportion of members ages 1-6
per_hhall714	Proportion of members ages 7-14
per_hhall1524	Proportion of members ages 15-24
per_hhall25up	Proportion of members ages 25 and up
per_hhall2560	Proportion of members ages 25-60
per_male1	Proportion of male members age<1
per_male16	Proportion of male members ages 1-6
per_male714	Proportion of male members ages 7-14
per_male1524	Proportion of male members ages 15-24
per_male25up	Proportion of male members ages 25 and up
per_male2560	Proportion of male members ages 25-60
per_male61up	Proportion of male members ages 61 and up
per_fema16	Proportion of female members ages 1-6
per_fema714	Proportion of female members ages 7-14
per_fema1524	Proportion of female members ages 15-24
per_fema25up	Proportion of female members ages 25 and up
per_fema2560	Proportion of female members ages 25-60
per_fema61up	Proportion of female members ages 61 and up
per_fema1	Proportion of female members

A.1 Obtainable or derivable from FIES2000 or LFS (cont.)

A.2 Municipal	level census means
Variable Name	Variable Label
hou_repair	% of dwellings in municipality that need major repair
hou_9600	% of dwellings in municipality built in 1996-2000
murb	Proportion of urban households in municipality
hea_rel_mus	% of heads in municipality who are Muslim
hea_rel_oth	% of heads in municipality with other religion
per_disa	% of disabled in municipality
per_indig	% of indigenous in municipality
head_nohere	% of heads in municipality who did not live in this municipality 5 years ago
head_abroad	% of heads in municipality who lived in a foreign country 5 years ago
hou_li_ele	% of households that use electricity for lighting
hou_ren	% of houses that are rented
hou_renf1	% of houses that are rent-free with consent of owner
hou_renf2	% of houses that are rent-free without consent of owner
hou_acq_2	% of houses constructed by owner
hou_gar_tru	% of households with pick-up by truck
hou_own_rad	% of households who have radio
hou_own_tv	% of households who have TV
hou_own_ref	% of households who have refrigerator
hou_own_vcr	% of households who have VCR
hou_own_tel	% of households who have telephone
hou_own_was	% of households who have washing machine
hou_own_veh	% of households who have motorized vehicle
hou_lan_res	% of households that own other residential lands
hou_lan_ag1	% of households that own agricultural lands
hou_lan_ag2	% of households that own agricultural lands acquired through CARP
hou_lan_oth	% of households that own other agricultural lands
hou_coelpg	% of households that use electricity or Ipg for cooking
hou_waduns	% of households that use an unsanitary water source for drinking
hou_notoi	% of households with no toilet
hou_untoi	% of households with unsanitary (open pit) toilet
per_ind_1t5	% of persons employed in agriculture, hunting and forestry
per_ind_45	% of persons employed in construction
per_ind_52	% of persons employed in retail trade
per_ind_60	% of persons employed in land transport
per_wor_abr	% of persons who work overseas
per_wor_prh	% who worked for private household
per_wor_pre	% who worked for private establishment
per_wor_gov	% who worked for private government
per_nonphi	% of non-Philippine citizens
per_lit	% of persons 5 and older who can read in some language
per_taga	% of persons 5 and older who speak Filipino/Tagalog
per_eng	% of persons 5 and older who speak English
per_school	% of persons ages 5 to 18 who attended school from June 99-March 2000

A.2 Municipal level census means

A.2 Municipa	A.2 Municipal level census means (cont.)					
variable name	variable label					
per_taga	% of persons 5 and older who speak Filipino/Tagalog					
per_eng	% of persons 5 and older who speak English					
per_school	% of persons ages 5 to 18 who attended school from June 99-March 2000					
per_sch_cit	% of persons ages 5 to 18 who attended school in same city/municipality					
per_sch_abr	% of persons ages 5 to 18 who attended school in foreign country					

#### A.2 Municipal level census means (cont.)

#### Appendix B. **Regression results**

#### B.1 Model for In(income)

B.1 Model for In(income)				2	2 / 2
	n	р	$R^2$	$\sigma_u^{\scriptscriptstyle -}$	$\sigma_{\scriptscriptstyle h}^{\scriptscriptstyle 2}$ / $\sigma_{\scriptscriptstyle u}^{\scriptscriptstyle 2}$
where $n =$ sample size, $p =$ number of variables,	39537	65	0.7132	0.2091	0.1896

 $\sigma_u^2$  = residual variance,  $\sigma_h^2 / \sigma_u^2$  = ratio of cluster to total residual variation

Variable	Coef.	Std. Err.	t	P> t	Domain	Coef
amsize	-0.1026	0.0023	-44.67	0.0000	regn_1urb	9.6289
amsizesqc	0.0066	0.0005	13.98	0.0000	regn_1rur	9.4956
ype_mult	0.0622	0.0216	2.89	0.0040	regn_2urb	9.7419
per_kids	-0.2613	0.0165	-15.83	0.0000	regn_2rur	9.5794
roof_light	-0.0837	0.0141	-5.95	0.0000	regn_3urb	9.7280
per_61up	-0.0763	0.0184	-4.14	0.0000	regn_3rur	9.6808
roof_strong	0.0446	0.0130	3.44	0.0010	regn_4urb	9.7291
wall_light	-0.0534	0.0135	-3.96	0.0000	regn_4rur	9.5870
wall_salva~d	-0.1553	0.0265	-5.86	0.0000	regn_5urb	9.7185
wall_strong	0.1144	0.0128	8.96	0.0000	regn_5rur	9.5775
fa_xs	-0.1378	0.0113	-12.20	0.0000	regn_6urb	9.7005
fa_s	-0.0717	0.0096	-7.45	0.0000	regn_6rur	9.5850
fa_l	0.0750	0.0105	7.15	0.0000	regn_7urb	9.6657
fa_xl	0.1361	0.0133	10.25	0.0000	regn_7rur	9.4842
fa_xxl	0.2297	0.0144	15.91	0.0000	regn_8urb	9.6947
fa_xxxl	0.3725	0.0246	15.15	0.0000	regn_8rur	9.5135
all_eled	0.2301	0.0183	12.55	0.0000	regn_9urb	9.6660
all_hsed	0.4899	0.0154	31.74	0.0000	regn_9rur	9.3791
all_coed	1.3652	0.0208	65.72	0.0000	regn_10urb	9.5940
dom_help	0.6569	0.0267	24.62	0.0000	regn_10rur	9.3938
nead_male	-0.1882	0.0187	-10.06	0.0000	regn_11urb	9.7456
no_spouse	-0.2429	0.0203	-11.97	0.0000	regn_11rur	9.5164
nmxnsp	0.2252	0.0249	9.06	0.0000	regn_12urb	9.5191
coedxr	0.1961	0.0340	5.77	0.0000	regn 12rur	9.3827
faxxxlxr	-0.1639	0.0386	-4.24	0.0000	regn_13urb	9.8945
nsedxreg15	-0.4244	0.0750	-5.66	0.0000	regn_14urb	9.7301
coedxreg15	-0.5545	0.0997	-5.56	0.0000	regn_14rur	9.6161
nou_9600	0.4204	0.0897	4.68	0.0000	regn 15urb	9.7293
nea_rel_mus	0.2018	0.0527	3.83	0.0000	regn_15rur	9.6219
per_eng	0.1600	0.0670	2.39	0.0170	regn_16urb	9.5818
nou_coelpg	0.2544	0.0638	3.99	0.0000	regn_16rur	9.4150
nou_own_ref	0.4527	0.1189	3.81	0.0000	<u></u>	
nou_own_tel	0.4271	0.1407	3.03	0.0020		
per_wor_prh	0.4590	0.1543	2.97	0.0030		
per_ind_52	-0.5981	0.2338	-2.56	0.0110		

where $n =$ sample size, $p =$ number of variab	39537	68

0.7388

0.1521

0.2561

# $\sigma_u^2$ = residual variance, $\sigma_h^2/\sigma_u^2$ = ratio of cluster to total residual variation

Variable	Coef.	Std. Err.	t	P> t
famsize	-0.1056	0.0019	-54.99	0.0000
famsizesqc	0.0064	0.0004	15.47	0.0000
ype_mult	0.0674	0.0177	3.81	0.0000
ype_cia	0.1670	0.0577	2.89	0.0040
oof_strong	0.0573	0.0114	5.02	0.0000
oof_light	-0.0719	0.0122	-5.91	0.0000
vall_strong	0.1105	0.0116	9.52	0.0000
/all_light	-0.0352	0.0119	-2.95	0.0030
all_salva~d	-0.1314	0.0185	-7.12	0.0000
a_xs	-0.1298	0.0102	-12.71	0.0000
i_s	-0.0642	0.0082	-7.85	0.0000
l	0.0676	0.0090	7.47	0.0000
xl	0.1240	0.0112	11.02	0.0000
xxl	0.2223	0.0144	15.49	0.0000
xxxl	0.3574	0.0251	14.25	0.0000
eled	0.1927	0.0159	12.09	0.0000
_ hsed	0.3906	0.0164	23.88	0.0000
- coed	1.1781	0.0188	62.73	0.0000
m_help	0.6179	0.0270	22.85	0.0000
ad_male	-0.1514	0.0146	-10.36	0.0000
spouse	-0.2167	0.0162	-13.38	0.0000
knsp	0.1821	0.0207	8.8	0.0000
kids	-0.1808	0.0143	-12.64	0.0000
_1	-0.1246	0.0210	-5.94	0.0000
lxr	-0.0627	0.0218	-2.87	0.0040
xlxr	-0.1745	0.0210	-4.8	0.0000
dxr	0.0642	0.0240	2.67	0.0080
	0.0042	0.0240	4.31	0.0000
edxr Iupxr	0.1347	0.0313	4.31 2.17	0.0300
•				
edxreg15	-0.4020	0.0693	-5.8	0.0000
edxreg15	-0.5881	0.0870	-6.76	0.0000
ı_9600	0.4412	0.0790	5.58	0.0000
a_rel_mus	0.1456	0.0479	3.04	0.0020
u_own_tel	0.5452	0.1012	5.39	0.0000
u_coelpg	0.4029	0.0555	7.26	0.0000
er_ind_52	-0.6080	0.2001	-3.04	0.0020
er_wor_pre	0.2015	0.0540	3.73	0.0000
r_eng	0.2471	0.0580	4.26	0.0000

#### B.3 Variance model for In(income)

p =	12	$R^2$	=	0.03 <sup>-</sup>	1
μ-	ı <i>د</i> ,	<i>'</i> ``	_	0.00	

Variable	Coef.	Std. Err.	t	P> t
famsize	-0.0588	0.0078	-7.58	0.0000
famsizesqc	0.0089	0.0016	5.57	0.0000
all_coed	1.0850	0.0615	17.65	0.0000
all_hsed	0.2656	0.0609	4.36	0.0000
roof_strong	0.1034	0.0323	3.20	0.0010
wall_light	-0.1694	0.0383	-4.42	0.0000
dom_help	0.3380	0.0832	4.06	0.0000
fa_xl	0.1101	0.0462	2.39	0.0170
fa_xxl	0.1748	0.0490	3.57	0.0000
fa_xxxl	0.1446	0.0624	2.32	0.0210
per_61up	0.3961	0.0712	5.56	0.0000
hou_own_ref	-0.1761	0.0860	-2.05	0.0410
_cons	-5.8158	0.0584	-99.51	0.0000

#### B.4 Variance model for In(expenditure)

 $p = 12, R^2 = 0.040$ 

Variable	Coef.	Std. Err.	t	P> t
famsize	-0.0581	0.0083	-7.00	0.0000
famsizesqc	0.0085	0.0019	4.47	0.0000
all_coed	1.0419	0.0580	17.96	0.0000
wall_light	-0.2100	0.0343	-6.12	0.0000
urb	0.2342	0.0330	7.09	0.0000
head_male	-0.1053	0.0359	-2.93	0.0030
fa_xl	0.1316	0.0474	2.77	0.0060
fa_xxl	0.1798	0.0477	3.77	0.0000
fa_xxxl	0.2900	0.0557	5.21	0.0000
per_61up	0.3917	0.0681	5.75	0.0000
hea_rel_mus	-0.7208	0.0715	-10.08	0.0000
hou_coelpg	-0.3265	0.0637	-5.13	0.0000
constant	-5.2928	0.0588	-90.02	0.0000

#### Appendix C. Summaries of income-based small-area estimates

Region	FIE	S	SAE (dom	nain-based r	nodels)	SAE (gl	SAE (global model)		
(Urban)	Poverty Incidence	SE	Poverty Incidence	SE	Z	Poverty Incidence	SE	Z	
NCR	0.0771	0.0061	0.0693	0.0051	-0.9818	0.0829	0.0060	0.6780	
CAR	0.0949	0.0139	0.1310	0.0135	1.8600	0.1604	0.0167	3.0115	
Region I	0.2217	0.0239	0.2636	0.0161	1.4563	0.2453	0.0165	0.8135	
Region II	0.2681	0.0405	0.2477	0.0195	-0.4532	0.2480	0.0238	-0.4275	
Region III	0.1561	0.0123	0.1896	0.0094	2.1607	0.2019	0.0082	3.0964	
Region IV	0.1436	0.0092	0.1498	0.0068	0.5467	0.1551	0.0070	0.9971	
Region V	0.3943	0.0289	0.3487	0.0137	-1.4275	0.3635	0.0145	-0.9550	
Region VI	0.2791	0.0208	0.2180	0.0131	-2.4821	0.2071	0.0108	-3.0688	
Region VII	0.2706	0.0233	0.2260	0.0125	-1.6866	0.2484	0.0125	-0.8386	
Region VIII	0.2396	0.0209	0.2280	0.0131	-0.4715	0.2231	0.0164	-0.6239	
Region IX	0.2707	0.0332	0.2754	0.0212	0.1183	0.2845	0.0196	0.3573	
Region X	0.2665	0.0230	0.2552	0.0162	-0.4004	0.2280	0.0152	-1.3962	
Region XI	0.2376	0.0193	0.1957	0.0120	-1.8452	0.1976	0.0155	-1.6146	
Region XII	0.4029	0.0282	0.3340	0.0200	-1.9934	0.3489	0.0173	-1.6332	
ARMM	0.5409	0.0376	0.4930	0.0240	-1.0741	0.5141	0.0288	-0.5656	
Caraga	0.3678	0.0331	0.3794	0.0178	0.3088	0.3820	0.0254	0.3396	

#### C.1 Comparison of region-level poverty incidence estimates for urban and rural

Region	FIE	S	SAE (doma	ain-based m	odels)	SAE (g	lobal model	)
(Rural)	Poverty Incidence	SE	Poverty Incidence	SE	Z	Poverty Incidence	SE	Z
NCR	N/A							
CAR	0.5314	0.0263	0.4910	0.0180	-1.2647	0.5103	0.0225	-0.6084
Region I	0.4196	0.0261	0.3914	0.0166	-0.9120	0.3970	0.0165	-0.7315
Region II	0.3301	0.0301	0.3604	0.0154	0.8943	0.3857	0.0172	1.6017
Region III	0.2714	0.0218	0.2767	0.0153	0.1976	0.2847	0.0143	0.5084
Region IV	0.4182	0.0242	0.4001	0.0199	-0.5778	0.4839	0.0125	2.4158
Region V	0.5777	0.0262	0.5647	0.0177	-0.4125	0.5445	0.0175	-1.0535
Region VI	0.5631	0.0219	0.5058	0.0145	-2.1858	0.5322	0.0125	-1.2266
Region VII	0.4725	0.0305	0.4952	0.0177	0.6456	0.5231	0.0203	1.3838
Region VIII	0.5388	0.0316	0.4880	0.0172	-1.4124	0.4973	0.0196	-1.1140
Region IX	0.5388	0.0342	0.5095	0.0170	-0.7659	0.5334	0.0231	-0.1308
Region X	0.5069	0.0340	0.4994	0.0243	-0.1797	0.4864	0.0231	-0.4995
Region XI	0.4611	0.0342	0.4672	0.0150	0.1636	0.4690	0.0207	0.1979
Region XII	0.5982	0.0278	0.5964	0.0139	-0.0577	0.5957	0.0171	-0.0776
ARMM	0.6736	0.0301	0.6440	0.0190	-0.8301	0.6659	0.0190	-0.2137
Caraga	0.5778	0.0305	0.5843	0.0143	0.1941	0.5525	0.0194	-0.7006

## C.2 Summary of regional poverty gap and severity measures

		4				ι	Jrban			R	ural	
Region	Poverty Gap	SE	Poverty Severity	SE	Poverty Gap	SE	Poverty Severity	SE	Poverty Gap	SE	Poverty Severity	SE
NCR	0.0170	0.0016	0.0054	0.0006	0.0170	0.0016	0.0054	0.0006	N/A			
CAR	0.1247	0.0082	0.0550	0.0047	0.0408	0.0059	0.0152	0.0027	0.1730	0.0122	0.0779	0.0070
Region I	0.1007	0.0052	0.0415	0.0027	0.0653	0.0058	0.0249	0.0026	0.1222	0.0074	0.0516	0.0039
Region II	0.1062	0.0063	0.0438	0.0032	0.0693	0.0088	0.0275	0.0041	0.1166	0.0076	0.0485	0.0039
Region III	0.0611	0.0026	0.0230	0.0012	0.0509	0.0026	0.0188	0.0011	0.0766	0.0054	0.0294	0.0025
Region IV	0.0905	0.0031	0.0388	0.0017	0.0385	0.0022	0.0142	0.0010	0.1630	0.0066	0.0732	0.0038
Region V	0.1656	0.0073	0.0735	0.0042	0.1142	0.0068	0.0490	0.0037	0.1851	0.0097	0.0828	0.0056
Region VI	0.1439	0.0051	0.0637	0.0030	0.0555	0.0038	0.0214	0.0017	0.1822	0.0072	0.0821	0.0042
Region VII	0.1260	0.0062	0.0542	0.0035	0.0698	0.0048	0.0278	0.0024	0.1741	0.0110	0.0768	0.0062
Region VIII	0.1428	0.0084	0.0615	0.0046	0.0598	0.0060	0.0229	0.0028	0.1624	0.0102	0.0707	0.0056
Region IX	0.1572	0.0100	0.0696	0.0057	0.0813	0.0076	0.0326	0.0038	0.1821	0.0128	0.0818	0.0073
Region X	0.1180	0.0074	0.0499	0.0040	0.0607	0.0052	0.0232	0.0024	0.1567	0.0117	0.0679	0.0064
Region XI	0.1149	0.0071	0.0492	0.0039	0.0515	0.0052	0.0194	0.0023	0.1540	0.0107	0.0675	0.0060
Region XII	0.1825	0.0078	0.0846	0.0047	0.1073	0.0076	0.0454	0.0040	0.2187	0.0107	0.1034	0.0066
ARMM	0.2213	0.0106	0.1002	0.0063	0.1652	0.0141	0.0713	0.0077	0.2365	0.0123	0.1080	0.0075
Caraga	0.1726	0.0085	0.0778	0.0049	0.1206	0.0116	0.0519	0.0062	0.1919	0.0110	0.0873	0.0064

Region	Provincial-level pover Province	AI		Urb	an	Rural	
-		Poverty	SE	Poverty	SE	Poverty	SE
		Incidence		Incidence		Incidence	
NCR	1st District	0.1133	0.0092	0.1133	0.0092		
	2nd District	0.0655	0.0084	0.0655	0.0084		
	3rd District	0.0999	0.0137	0.0999	0.0137		
	4th District	0.0729	0.0087	0.0729	0.0087		
CAR	Abra	0.4270	0.0205	0.2841	0.0348	0.4568	0.0224
	Benguet	0.2509	0.0155	0.1233	0.0163	0.4801	0.0308
	Ifugao	0.5262	0.0218	0.2190	0.0503	0.5591	0.0237
	Kalinga	0.4830	0.0264	0.2808	0.0589	0.5496	0.0272
	Mountain Province	0.5460	0.0278	0.3573	0.0653	0.5647	0.0295
	Арауао	0.4485	0.0287	0.2598	0.0612	0.4758	0.0306
Region I	llocos Norte	0.2916	0.0161	0.1033	0.0140	0.3353	0.0190
	Ilocos Sur	0.3512	0.0147	0.1419	0.0162	0.4039	0.0180
	La Union	0.3431	0.0146	0.1341	0.0173	0.3843	0.0166
	Pangasinan	0.3462	0.0130	0.2758	0.0181	0.4227	0.0177
Region II	Batanes	0.2338	0.0323	0.1538	0.0506	0.2684	0.0358
	Cagayan	0.3899	0.0167	0.1746	0.0217	0.4358	0.0198
	Isabela	0.3493	0.0145	0.3202	0.0295	0.3589	0.0171
	Nueva Vizcaya	0.2991	0.0156	0.1619	0.0279	0.3446	0.0187
	Quirino	0.3277	0.0237	0.1881	0.0379	0.3665	0.0276
Region III	Bataan	0.1556	0.0092	0.1469	0.0116	0.1683	0.0156
	Bulacan	0.1622	0.0092	0.1510	0.0105	0.2008	0.0167
	Nueva Ecija	0.3728	0.0117	0.3590	0.0140	0.3861	0.0178
	Pampanga	0.2204	0.0109	0.1935	0.0132	0.2757	0.0194
	Tarlac	0.2482	0.0128	0.2128	0.0193	0.2652	0.0157
	Zambales	0.2196	0.0134	0.1629	0.0170	0.2946	0.0234
Region IV	Batangas	0.3339	0.0085	0.1932	0.0099	0.4454	0.0138
	Cavite	0.1287	0.0075	0.1007	0.0080	0.3141	0.0198
	Laguna	0.1297	0.0072	0.0980	0.0075	0.2902	0.0183
	Marinduque	0.4777	0.0199	0.2491	0.0589	0.4893	0.0207
	Occidental Mindoro	0.5356	0.0174	0.3357	0.0311	0.6554	0.0183
	Oriental Mindoro	0.5848	0.0140	0.4662	0.0264	0.6169	0.0142
	Palawan	0.5422	0.0162	0.4599	0.0245	0.5750	0.0189
	Quezon	0.4191	0.0132	0.2085	0.0218	0.4782	0.0145
	Rizal	0.1532	0.0131	0.1442	0.0136	0.3597	0.0352
	Romblon	0.5075	0.0177	0.4077	0.0320	0.5316	0.0189
	Aurora	0.3985	0.0213	0.2892	0.0345	0.4335	0.0245
Region V	Albay	0.4741	0.0141	0.3744	0.0181	0.5185	0.0186
	Camarines Norte	0.4206	0.0189	0.3226	0.0263	0.4725	0.0253
	Camarines Sur	0.4723	0.0142	0.3387	0.0174	0.5286	0.0190
	Catanduanes	0.4399	0.0176	0.3142	0.0301	0.4666	0.0204
	Masbate	0.6429	0.0158	0.4411	0.0288	0.6898	0.0175
	Sorsogon	0.4953	0.0167	0.4014	0.0229	0.5249	0.0200

C.3 Provincial-level poverty incidence measures

	rovincial-level pover	ty incider	nce mea	sures (cont	.)			
Region	Province	AI	All		Urban		Rural	
		Poverty Incidence	SE	Poverty Incidence	SE	Poverty Incidence	SE	
Region VI	Aklan	0.4648	0.0140	0.2097	0.0214	0.5458	0.0163	
	Antique	0.4724	0.0135	0.2828	0.0243	0.5182	0.0153	
	Capiz	0.4936	0.0128	0.2892	0.0220	0.5752	0.0153	
	lloilo	0.4007	0.0099	0.1705	0.0103	0.4976	0.0132	
	Negros Occidental	0.4321	0.0107	0.2036	0.0139	0.5558	0.0151	
	Guimaras	0.4222	0.0214	0.2937	0.0584	0.4425	0.0231	
Region VII	Bohol	0.4536	0.0168	0.3015	0.0169	0.5017	0.0218	
	Cebu	0.3478	0.0105	0.2392	0.0134	0.5330	0.0211	
	Negros Oriental	0.4902	0.0188	0.2715	0.0198	0.5473	0.0222	
	Siquijor	0.3102	0.0218	0.1682	0.0389	0.3232	0.0232	
Region VIII	Eastern Samar	0.4370	0.0160	0.2964	0.0239	0.4795	0.0200	
	Leyte	0.4077	0.0159	0.1799	0.0159	0.4789	0.0198	
	Northern Samar	0.5264	0.0203	0.2726	0.0316	0.5697	0.0232	
	Samar	0.5190	0.0194	0.2903	0.0304	0.5479	0.0216	
	Southern Leyte	0.3696	0.0194	0.2176	0.0267	0.3936	0.0215	
	Biliran	0.4536	0.0227	0.2769	0.0328	0.5015	0.0255	
Region IX	Basilan Zamboanga del	0.4770	0.0294	0.3969	0.0370	0.4990	0.0338	
	Norte	0.5274	0.0234	0.3356	0.0294	0.5700	0.0262	
Pogion V	Zamboanga del Sur	0.4468	0.0179	0.2555	0.0208	0.5217	0.0232	
Region X	Bukidnon	0.4379	0.0211	0.2979	0.0247	0.4918	0.0272	
	Camiguin	0.4695	0.0316	0.3928	0.0560	0.5173	0.0334	
	Misamis Occidental	0.3818	0.0162	0.2334	0.0196	0.4740	0.0220	
Dogion VI	Misamis Oriental	0.3238	0.0147	0.1837	0.0187	0.4828	0.0226	
Region XI	Davao	0.3378	0.0195	0.1474	0.0229	0.4167	0.0260	
	Davao del Sur	0.2647	0.0141	0.1471	0.0174	0.3564	0.0200	
	Davao Oriental	0.5099	0.0232	0.4092	0.0395	0.5745	0.0278	
	South Cotabato	0.3489	0.0188	0.1740	0.0286	0.5122	0.0249	
	Saranggani	0.6328	0.0237	0.4011	0.0529	0.6778	0.0249	
Dogion VII	Compostela Valley	0.4644	0.0235	0.2965	0.0430	0.5241	0.0261	
Region XII	Lanao del Norte	0.4827	0.0167	0.3069	0.0306	0.5472	0.0177	
	Cotabato Sultan Kudarat	0.5553 0.5986	0.0174 0.0169	0.3736 0.4794	0.0278 0.0371	0.6107 0.6308	0.0197 0.0205	
ARMM	Lanao del Sur	0.5923	0.0183	0.4222	0.0309	0.6290	0.0201	
	Maguindanao	0.6687	0.0197	0.6116	0.0390	0.6832	0.0220	
	Sulu	0.6753	0.0229	0.5227	0.0609	0.7222	0.0214	
_	Tawi tawi	0.5596	0.0261	0.4497	0.0437	0.6003	0.0293	
Caraga	Agusan del Norte	0.4000	0.0178	0.2965	0.0286	0.4346	0.0220	
	Agusan del Sur	0.5994	0.0186	0.4449	0.0386	0.6565	0.0215	
	Surigao del Norte	0.5260	0.0172	0.4085	0.0344	0.5689	0.0207	
	Surigao del Sur	0.5000	0.0226	0.3740	0.0530	0.5525	0.0237	

C.3 Provincial-level poverty incidence measures (cont.)

#### Appendix D. Summaries of expenditure-based small-area estimates

Region			URBAN			RURAL				
	FIE	S		SAE		FIES			SAE	
	Poverty Incidence	SE	Poverty Incidence	SE	Z	Poverty Incidence	SE	Poverty Incidence	SE	Z
NCR	0.0011	0.0006	0.0023	0.0005	1.6263	N/A				
CAR	0.0174	0.0125	0.0240	0.0055	0.4859	0.1577	0.0212	0.1834	0.0144	1.0049
Region I	0.0491	0.0112	0.0701	0.0066	1.6176	0.1029	0.0214	0.1082	0.0090	0.2309
Region II	0.0302	0.0091	0.0467	0.0093	1.2736	0.1047	0.0206	0.1675	0.0132	2.5637
Region III	0.0064	0.0018	0.0224	0.0019	6.0945	0.0393	0.0116	0.0487	0.0052	0.7439
Region IV	0.0168	0.0028	0.0192	0.0015	0.7709	0.1307	0.0185	0.1483	0.0089	0.8569
Region V	0.1144	0.0210	0.0820	0.0087	-1.4264	0.2704	0.0250	0.2700	0.0186	-0.0117
Region VI	0.0836	0.0131	0.0510	0.0054	-2.3004	0.2031	0.0202	0.2154	0.0137	0.5010
Region VII	0.1105	0.0204	0.0930	0.0082	-0.7920	0.3789	0.0301	0.3774	0.0236	-0.0408
Region VIII	0.1422	0.0161	0.1360	0.0126	-0.3007	0.3689	0.0316	0.3506	0.0219	-0.4766
Region IX	0.1053	0.0238	0.1286	0.0151	0.8293	0.4162	0.0352	0.4143	0.0225	-0.0457
Region X	0.1111	0.0142	0.0903	0.0084	-1.2653	0.3575	0.0342	0.3412	0.0229	-0.3956
Region XI	0.0759	0.0130	0.0630	0.0085	-0.8340	0.2653	0.0327	0.2667	0.0202	0.0364
Region XII	0.1507	0.0242	0.1341	0.0134	-0.6026	0.3204	0.0301	0.3437	0.0182	0.6648
ARMM	0.1395	0.0251	0.1877	0.0276	1.2921	0.1748	0.0237	0.2410	0.0232	1.9961
Caraga	0.1546	0.0283	0.1404	0.0159	-0.4373	0.2871	0.0317	0.3030	0.0217	0.4154

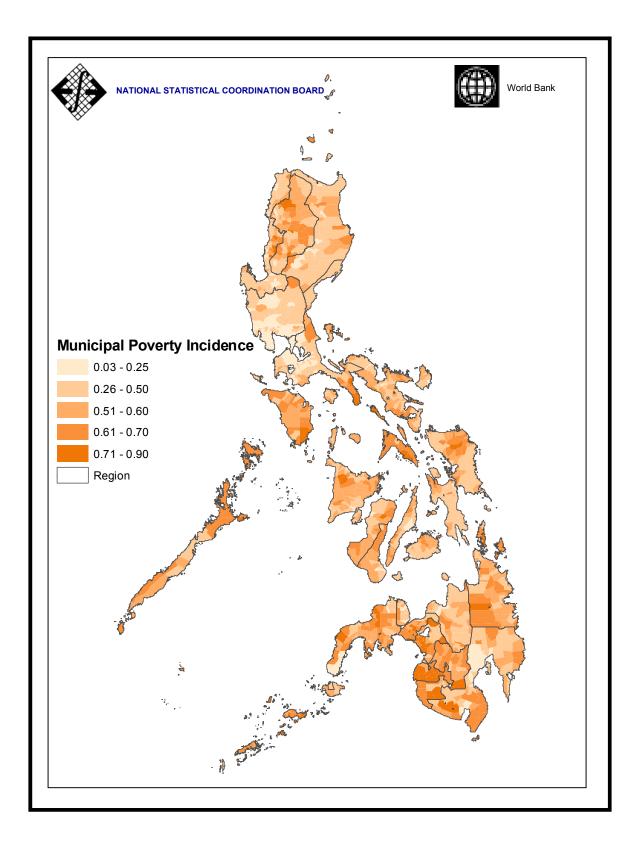
D.1 Urban and rural region-level \$1-a-day poverty incidence estimates

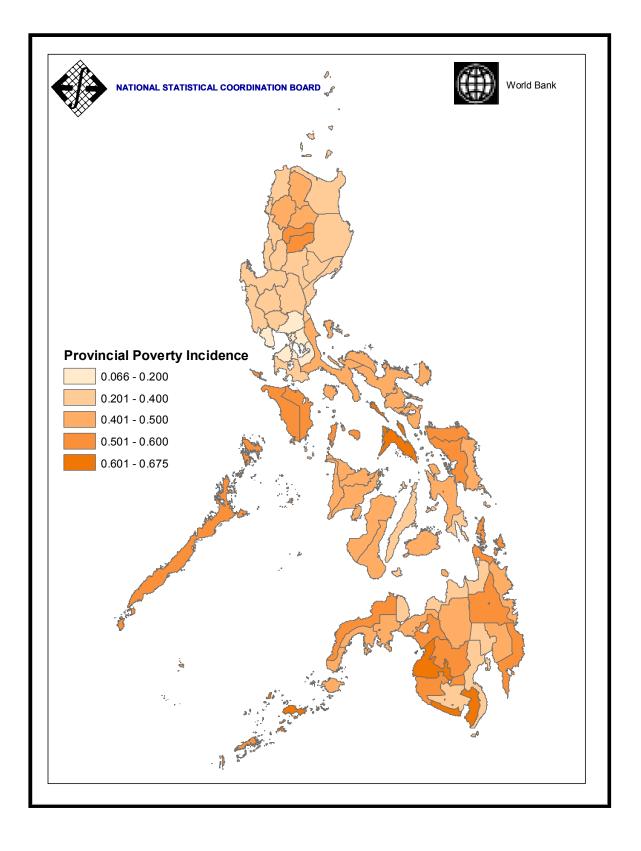
Region	Province	All		Urbaı	n	Rura	al
		Poverty Incidence	SE	Poverty Incidence	SE	Poverty Incidence	SE
NCR	1st District	0.0044	0.0012	0.0044	0.0012		
	2nd District	0.0014	0.0008	0.0014	0.0008		
	3rd District	0.0035	0.0012	0.0035	0.0012		
	4th District	0.0013	0.0007	0.0013	0.0007		
CAR	Abra	0.1357	0.0118	0.0774	0.0185	0.1479	0.0135
	Benguet	0.0410	0.0052	0.0081	0.0035	0.1001	0.0137
	Ifugao	0.2563	0.0205	0.0614	0.0302	0.2772	0.0223
	Kalinga	0.2330	0.0216	0.0820	0.0342	0.2828	0.0247
	Mountain Province	0.1228	0.0166	0.0350	0.0267	0.1315	0.0180
	Арауао	0.1995	0.0215	0.0922	0.0355	0.2150	0.0242
Region I	llocos Norte	0.0670	0.0069	0.0275	0.0072	0.0761	0.0085
	llocos Sur	0.0909	0.0071	0.0439	0.0075	0.1027	0.0086
	La Union	0.0841	0.0079	0.0311	0.0070	0.0945	0.0093
	Pangasinan	0.1030	0.0065	0.0793	0.0075	0.1287	0.0111
Region II	Batanes	0.0694	0.0170	0.0200	0.0126	0.0908	0.0237
	Cagayan	0.1747	0.0138	0.0494	0.0116	0.2014	0.0164
	Isabela	0.1222	0.0096	0.0532	0.0109	0.1450	0.0119
	Nueva Vizcaya	0.1214	0.0107	0.0221	0.0077	0.1543	0.0142
	Quirino	0.1311	0.0165	0.0410	0.0158	0.1561	0.0200
Region III	Bataan	0.0232	0.0035	0.0180	0.0043	0.0308	0.0060
	Bulacan	0.0213	0.0022	0.0166	0.0022	0.0377	0.0058
	Nueva Ecija	0.0523	0.0042	0.0430	0.0048	0.0613	0.0071
	Pampanga	0.0210	0.0030	0.0158	0.0029	0.0316	0.0059
	Tarlac	0.0452	0.0051	0.0310	0.0063	0.0520	0.0069
	Zambales	0.0454	0.0059	0.0231	0.0051	0.0750	0.0108
Region IV	Batangas	0.0417	0.0036	0.0126	0.0019	0.0647	0.0063
	Cavite	0.0077	0.0011	0.0053	0.0010	0.0234	0.0044
	Laguna	0.0121	0.0016	0.0061	0.0011	0.0426	0.0071
	Marinduque	0.1602	0.0127	0.0641	0.0265	0.1651	0.0131
	Occidental Mindoro	0.2174	0.0164	0.1072	0.0205	0.2835	0.0220
	Oriental Mindoro	0.1705	0.0112	0.1072	0.0131	0.1876	0.0131
	Palawan	0.2591	0.0169	0.1655	0.0212	0.2963	0.0207
	Quezon	0.1195	0.0078	0.0294	0.0059	0.1448	0.0099
	Rizal	0.0089	0.0024	0.0076	0.0025	0.0375	0.0120
	Romblon	0.2694	0.0168	0.1651	0.0259	0.2945	0.0202
	Aurora	0.1416	0.0154	0.0750	0.0224	0.1629	0.0191
Region V	Albay	0.1870	0.0150	0.0636	0.0099	0.2421	0.0214
	Camarines Norte	0.1374	0.0122	0.0538	0.0133	0.1817	0.0180
	Camarines Sur	0.2050	0.0129	0.0759	0.0096	0.2595	0.0180
	Catanduanes	0.1896	0.0151	0.0726	0.0168	0.2145	0.0180
	Masbate	0.3477	0.0201	0.1461	0.0195	0.3946	0.0245
	Sorsogon	0.2315	0.0151	0.1172	0.0175	0.2675	0.0196

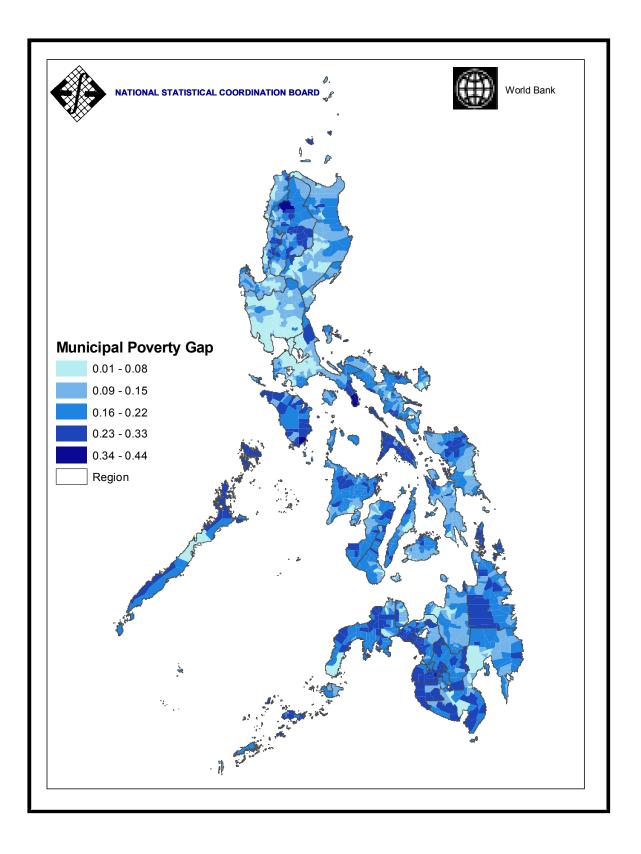
Region	Province	All		Urbaı	n	Rura	al
		Poverty Incidence	SE	Poverty Incidence	SE	Poverty	SE
Region VI	Aklan	0.1921	0.0140	0.0531	0.0114	0.2362	0.0179
	Antique	0.2176	0.0151	0.0939	0.0179	0.2475	0.0179
	Capiz	0.1887	0.0126	0.0635	0.0118	0.2386	0.0173
	lloilo	0.1294	0.0090	0.0313	0.0038	0.1707	0.0129
	Negros Occidental	0.1728	0.0108	0.0558	0.0073	0.2361	0.0164
	Guimaras	0.1685	0.0204	0.0726	0.0282	0.1837	0.0228
Region VII	Bohol	0.3085	0.0189	0.1633	0.0186	0.3546	0.0240
	Cebu	0.1770	0.0098	0.0808	0.0075	0.3410	0.0235
	Negros Oriental	0.3917	0.0217	0.1220	0.0160	0.4621	0.0271
	Siquijor	0.2208	0.0251	0.0661	0.0272	0.2349	0.0275
Region VII	I Eastern Samar	0.3178	0.0172	0.1809	0.0209	0.3592	0.0213
	Leyte	0.2613	0.0175	0.0945	0.0119	0.3134	0.0227
	Northern Samar	0.4165	0.0228	0.2390	0.0295	0.4468	0.0264
	Samar	0.3819	0.0217	0.1820	0.0254	0.4071	0.0244
	Southern Leyte	0.2462	0.0193	0.1223	0.0200	0.2659	0.0218
	Biliran	0.2852	0.0199	0.1877	0.0305	0.3116	0.0245
Region IX	Basilan	0.3616	0.0333	0.1743	0.0336	0.4129	0.0391
	Zamboanga del Norte	0.4036	0.0207	0.1530	0.0196	0.4593	0.0248
	Zamboanga del Sur	0.3145	0.0169	0.1159	0.0161	0.3924	0.0228
Region X	Bukidnon	0.3217	0.0197	0.1532	0.0198	0.3865	0.0254
	Camiguin	0.1857	0.0257	0.1045	0.0361	0.2364	0.0314
	Misamis Occidental	0.2447	0.0170	0.1009	0.0117	0.3341	0.0252
	Misamis Oriental	0.1645	0.0117	0.0551	0.0077	0.2886	0.0231
Region XI	Davao	0.1518	0.0146	0.0512	0.0127	0.1934	0.0196
	Davao del Sur	0.1499	0.0103	0.0377	0.0084	0.2374	0.0185
	Davao Oriental	0.3010	0.0188	0.1697	0.0267	0.3852	0.0286
	South Cotabato	0.1485	0.0154	0.0423	0.0127	0.2477	0.0255
	Saranggani	0.3727	0.0264	0.1630	0.0518	0.4135	0.0302
	Compostela Valley	0.2264	0.0226	0.1241	0.0315	0.2628	0.0277
Region XII	Lanao del Norte	0.2251	0.0145	0.1195	0.0183	0.2638	0.0190
	Cotabato	0.3361	0.0155	0.1923	0.0230	0.3799	0.0200
	Sultan Kudarat	0.3493	0.0194	0.2237	0.0300	0.3833	0.0225
ARMM	Lanao del Sur	0.1291	0.0145	0.1136	0.0216	0.1325	0.0169
	Maguindanao	0.2892	0.0268	0.2291	0.0424	0.3045	0.0307
	Sulu	0.3019	0.0267	0.2252	0.0475	0.3255	0.0311
	Tawi tawi	0.1643	0.0205	0.1552	0.0338	0.1677	0.0245
Caraga	Agusan del Norte	0.1796	0.0169	0.0989	0.0186	0.2066	0.0210
	Agusan del Sur	0.3282	0.0247	0.1817	0.0291	0.3822	0.0296
	Surigao del Norte	0.2542	0.0169	0.1369	0.0190	0.2971	0.0215
	Surigao del Sur	0.2733	0.0209	0.1396	0.0323	0.3289	0.0249

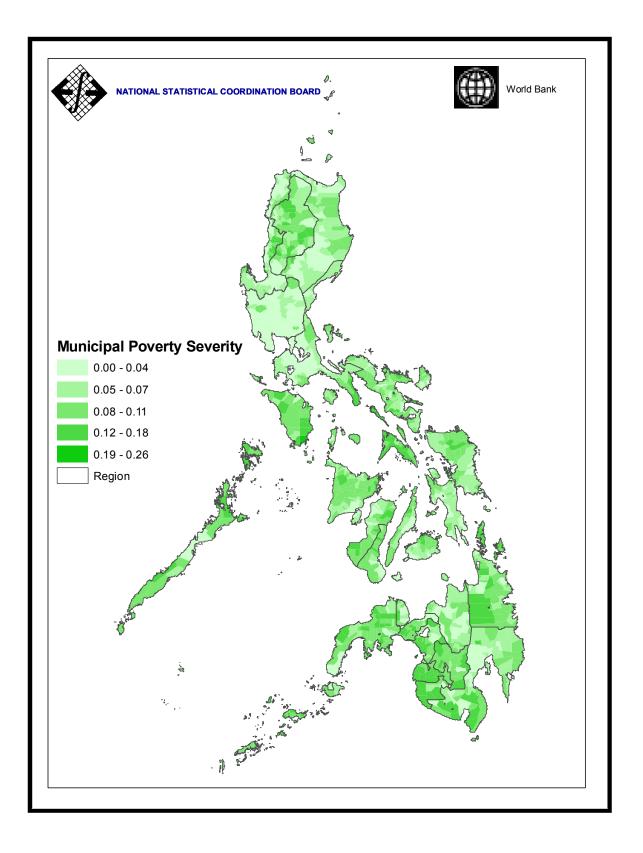
D.2	Provincial-level \$	1-a-day povert	y incidence measures	(cont.)

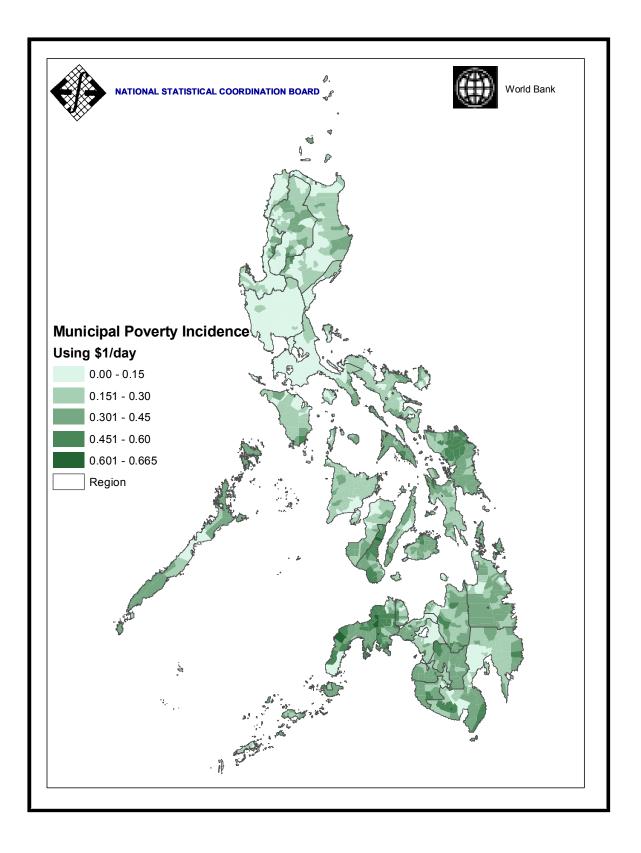
## Appendix E. Poverty maps

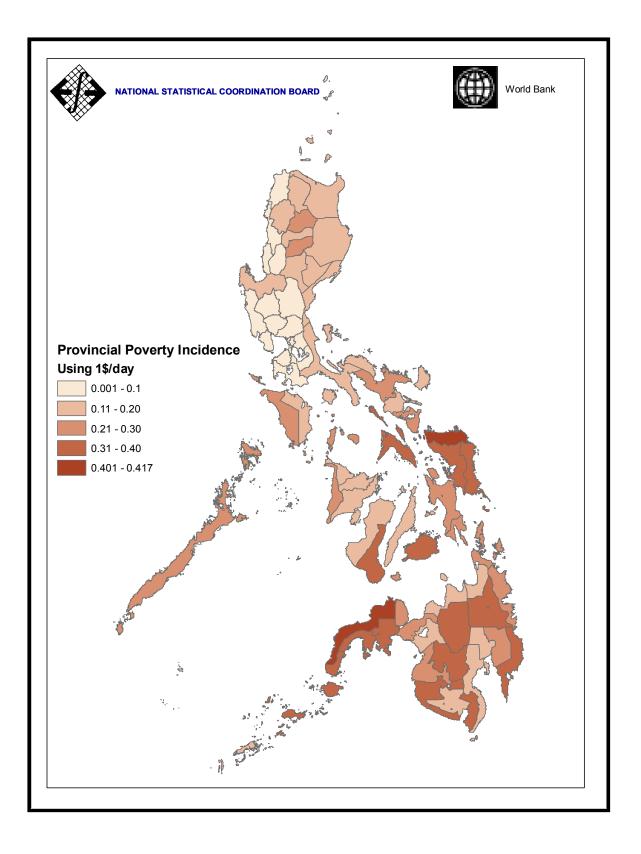












**Appendix F: Validation Form** 

Estimation of Local Poverty in the Philippines

#### VALIDATION WORKSHOP FOR THE WB ASEM/NSCB POVERTY MAPPING PROJECT

HRTC Provincial Capitol, Basco, Batanes

July 7, 2005

 Type of Informant (Please check the appropriate box):
 Provincial Key Informant
 Municipal Key

Note: Provincial key informants are requested to rate all the municipalities, while municipal key informants have the optroformant/ide answers only for their respective municipalities

Instructions:

Based on your perception at present, please rate each municipality in terms of the identified poverty indicators using a rating of 1-10, with **1=lowest** and **10=highest**. [Please refer to the even numbered columns].

Indicate whether the present condition is **1** = an improvement over, **2** = the same as, or **3** = worse than the situation in 2000. [Please refer to the odd numbered columns, starting with column 3.]

	Level of educational attainment		Age dependency ratio		Employment		Absence of malnourished or underweight children under 5 years of age		Maternal mortality ratio	Access to health facilities	
Municipality	able to reach at least		15-64 in the municipality, how many have no dependents (with age below 15 or above		For every 10 individuals aged 15 and above in the municipality, how many are employed (including self- employed)?		For every 10 children under 5 years of age in the municipality, how many are not malnourished/underweight?		pregnant women in the municipality, how	regnant women the nunicipality, how many h access to health facilities RHUs, public hospitals, f access to health facilities RHUs, public hospitals, f	
	At present	Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)	At present	Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)		Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)	At present	Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)	Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)	At present	Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(11)	(12)	(13)
Basco											
Itbayat											
Ivana											
Mahatao											
Sabtang											
Uyugan					66						

	Literacy rate		Ownership of residence		Quality of housing		Access to safe water		Access to sanitary toilet		Access to electricity	
Municipality	For every 10 individuals aged 10 and above in the municipality, how many are able to read and write?		municipality, how many own their house and lot?		municipality, how many have houses made of strong		For every 10 families in the municipality, how many have access to safe water (faucet, tubed or piped well)?				For every 10 families in the municipality, how many have access to electricity?	
	At present	Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)	At present	Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)	At present	Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)	At present	Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)	At present	Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)	At present	Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Basco												
Itbayat												
Ivana												
Mahatao												
Sabtang												
Uyugan												

	Ownersh	nip of refrigerator	Pea	ace and order	Ove	rall level of poverty
Municipality		families in the now many own a		amilies in the ow many will not e and order/security a		0 families in the municipality, are not poor?
	At present	Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)	At present	Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)	At present	Present condition compared with 2000 condition (1 = Improvement 2 = The same 3 = Worse)
(1)	(26)	(27)	(28)	(29)	(30)	(31)
Basco						
Itbayat						
Ivana						
Mahatao						
Sabtang						
Uyugan						

# Appendix H: Municipal level small-area estimates

#### WB ASEM / NSCB POVERTY MAPPING PROJECT STAFF

# **NSCB** Project Management Committee

Chair ROMULO A. VIROLA

Members

ESTRELLA V. DOMINGO LINA V. CASTRO FRANCISCO K. MALLION RAYMUNDO J. TALENTO

Project Manager LINA V. CASTRO Assistant Project Manager REDENCION M. IGNACIO

Technical Staff

JOSEPH M. ADDAWE REY ANGELO MILLENDEZ AMANDO G. PATIO, JR. GLENITA V. AMORANTO MELISSA C. PASCUA BERNADETTE B. BALAMBAN MILDRED A. BATITIS TERESITA M. ALMARINES

> Research Assistant MARISSA C. ISIDRO

Administrative Staff LAODICEA F. DELOS SANTOS ERLINDA S. MAULIT ANDREA BAYLON LOTIS I. IRA MAGNOLIA O. CORONEL JEFFREY E. ENRADO

# The World Bank

Task Manager CHORCHING GOH

Consultants DR. STEPHEN HASLETT DR. GEOFFREY JONES

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
NCR	1st district	TONDO	0.1601	0.0171	0.0362	0.0055	0.0122	0.0024
		BINONDO	0.0274	0.0122	0.0051	0.0029	0.0015	0.0010
		QUIAPO	0.1009	0.0267	0.0212	0.0073	0.0068	0.002
		SAN NICOLAS	0.2278	0.0707	0.0576	0.0254	0.0210	0.011
		SANTA CRUZ	0.0756	0.0140	0.0153	0.0036	0.0048	0.001
		SAMPALOC	0.0425	0.0050	0.0079	0.0012	0.0023	0.000
		SAN MIGUEL	0.1091	0.0449	0.0235	0.0138	0.0077	0.005
		ERMITA	0.0587	0.0223	0.0117	0.0055	0.0036	0.002
		INTRAMUROS	0.2588	0.0846	0.0629	0.0268	0.0222	0.011
		MALATE	0.0856	0.0152	0.0176	0.0040	0.0056	0.001
		PACO	0.0729	0.0126	0.0146	0.0033	0.0045	0.001
		PANDACAN	0.0801	0.0171	0.0158	0.0044	0.0049	0.001
		PORT AREA	0.5011	0.1273	0.1621	0.0626	0.0701	0.034
		SANTA ANA	0.0774	0.0119	0.0155	0.0034	0.0048	0.001
	2nd district	MANDALUYONG CITY	0.0725	0.0253	0.0143	0.0067	0.0044	0.002
		CITY OF MARIKINA	0.0552	0.0236	0.0102	0.0059	0.0030	0.002
		CITY OF PASIG	0.0533	0.0147	0.0098	0.0038	0.0028	0.001
		QUEZON CITY	0.0714	0.0113	0.0140	0.0028	0.0042	0.001
		SAN JUAN	0.0292	0.0093	0.0052	0.0022	0.0015	0.000
	3rd district	KALOOKAN CITY	0.0937	0.0185	0.0189	0.0050	0.0059	0.001
		MALABON	0.1129	0.0273	0.0234	0.0079	0.0074	0.003
		NAVOTAS	0.1873	0.0480	0.0423	0.0151	0.0142	0.006
		CITY OF VALENZUELA	0.0644	0.0166	0.0120	0.0043	0.0035	0.001
	4th district	CITY OF LAS PIÑAS	0.0731	0.0205	0.0146	0.0055	0.0045	0.002
		CITY OF MAKATI	0.0374	0.0093	0.0069	0.0022	0.0020	0.000
		CITY OF MUNTINLUPA	0.0955	0.0283	0.0197	0.0079	0.0062	0.003
		CITY OF PARAÑAQUE	0.0667	0.0180	0.0133	0.0050	0.0041	0.002
		PASAY CITY	0.0808	0.0093	0.0164	0.0027	0.0051	0.001
		PATEROS	0.0823	0.0458	0.0167	0.0132	0.0053	0.005
		TAGUIG	0.0893	0.0266	0.0179	0.0070	0.0056	0.002
CAR	Abra	BANGUED (Capital)	0.2141	0.0248	0.0551	0.0089	0.0205	0.004
		BOLINEY	0.6679	0.0672	0.2523	0.0439	0.1218	0.028
		BUCAY	0.5238	0.0438	0.1816	0.0242	0.0830	0.014
		BUCLOC	0.6371	0.0855	0.2381	0.0549	0.1146	0.034
		DAGUIOMAN	0.4440	0.1105	0.1367	0.0507	0.0571	0.027
		DANGLAS	0.4816	0.0678	0.1570	0.0344	0.0688	0.019
		DOLORES	0.3600	0.0411	0.1086	0.0178	0.0451	0.009
		LA PAZ	0.4673	0.0566	0.1505	0.0278	0.0651	0.01
		LACUB	0.6419	0.0650	0.2486	0.0448	0.1217	0.030
		LAGANGILANG	0.4181	0.0436	0.1298	0.0204	0.0550	0.01
		LAGAYAN	0.6261	0.0693	0.2339	0.0441	0.1118	0.027
		LANGIDEN	0.5246	0.0675	0.1821	0.0392	0.0835	0.024
		LICUAN-BAAY (LICUAN)	0.5511	0.0501	0.2012	0.0289	0.0956	0.018
		LUBA	0.5385	0.0643	0.1869	0.0382	0.0857	0.023
		MALIBCONG	0.6536	0.0560	0.2528	0.0368	0.1240	0.023
		MANABO	0.4127	0.0628	0.1261	0.0262	0.0528	0.013
		PEÑARRUBIA	0.4345	0.0589	0.1369	0.0281	0.0586	0.01
		PIDIGAN	0.3311	0.0470	0.0961	0.0203	0.0389	0.010
		PILAR	0.3937	0.0459	0.1155	0.0188	0.0467	0.009
		SALLAPADAN	0.4204	0.0531	0.1291	0.0244	0.0540	0.013
		SALLAI ADAN SAN ISIDRO	0.5037	0.0675	0.1649	0.0244	0.0723	0.019

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		SAN JUAN	0.4523	0.0484	0.1399	0.0243	0.0588	0.013
		SAN QUINTIN	0.4196	0.0665	0.1296	0.0322	0.0548	0.018
		TAYUM	0.4166	0.0582	0.1282	0.0274	0.0539	0.014
		TINEG	0.7944	0.0454	0.3426	0.0414	0.1795	0.030
		TUBO	0.6004	0.0624	0.2157	0.0359	0.1006	0.021
		VILLAVICIOSA	0.4579	0.0589	0.1426	0.0286	0.0600	0.016
	Benguet	ATOK	0.5435	0.0643	0.1812	0.0326	0.0802	0.018
		BAGUIO CITY	0.0673	0.0108	0.0133	0.0028	0.0041	0.00
		BAKUN	0.6072	0.0674	0.2133	0.0414	0.0973	0.02
		BOKOD	0.4644	0.0558	0.1479	0.0269	0.0635	0.01
		BUGUIAS	0.4891	0.0659	0.1558	0.0319	0.0667	0.01
		ITOGON	0.3013	0.0564	0.0789	0.0221	0.0295	0.01
		KABAYAN	0.5787	0.0519	0.2067	0.0306	0.0961	0.01
		KAPANGAN	0.5716	0.0473	0.2023	0.0274	0.0938	0.01
		KIBUNGAN	0.6855	0.0721	0.2718	0.0488	0.1359	0.03
		LA TRINIDAD (Capital)	0.1441	0.0280	0.0336	0.0091	0.0117	0.00
		MANKAYAN	0.4253	0.0591	0.1282	0.0273	0.0528	0.01
		SABLAN	0.4910	0.0721	0.1631	0.0380	0.0725	0.02
		TUBA	0.3688	0.0616	0.1046	0.0255	0.0416	0.01
		TUBLAY	0.3586	0.0710	0.0983	0.0293	0.0380	0.01
	Ifugao	BANAUE	0.5298	0.0433	0.1786	0.0224	0.0796	0.01
		HUNGDUAN	0.6525	0.0610	0.2502	0.0383	0.1220	0.02
		KIANGAN	0.4635	0.0460	0.1496	0.0220	0.0647	0.01
		LAGAWE (Capital)	0.3593	0.0402	0.1067	0.0162	0.0438	0.00
		LAMUT	0.3172	0.0409	0.0901	0.0157	0.0356	0.00
		ΜΑΥΟΥΑΟ	0.6777	0.0366	0.2661	0.0271	0.1309	0.01
		ALFONSO LISTA (POTIA)	0.4348	0.0464	0.1319	0.0207	0.0543	0.01
		AGUINALDO	0.6473	0.0461	0.2390	0.0287	0.1129	0.01
		HINGYON	0.5242	0.0571	0.1760	0.0301	0.0784	0.01
		TINOC	0.7638	0.0486	0.3266	0.0386	0.1707	0.02
		ASIPULO	0.6554	0.0640	0.2427	0.0424	0.1148	0.02
	Kalinga	BALBALAN	0.5997	0.0491	0.2164	0.0292	0.1013	0.01
		LUBUAGAN	0.6212	0.0603	0.2263	0.0398	0.1058	0.02
		PASIL	0.6191	0.0521	0.2208	0.0316	0.1020	0.01
		PINUKPUK	0.5925	0.0388	0.2058	0.0227	0.0930	0.01
		RIZAL (LIWAN)	0.4382	0.0514	0.1350	0.0244	0.0563	0.01
		TABUK (Capital)	0.3543	0.0408	0.1022	0.0161	0.0409	0.00
		TANUDAN	0.6210	0.0440	0.2262	0.0271	0.1061	0.01
		TINGLAYAN	0.6512	0.0439	0.2406	0.0282	0.1137	0.01
	Mountain Province	BARLIG	0.4779	0.0597	0.1571	0.0326	0.0693	0.01
		BAUKO	0.6030	0.0451	0.2204	0.0275	0.1043	0.01
		BESAO	0.4710	0.0577	0.1505	0.0270	0.0650	0.01
		BONTOC (Capital)	0.3787	0.0497	0.1143	0.0222	0.0476	0.01
		NATONIN	0.6947	0.0530	0.2794	0.0410	0.1408	0.02
		PARACELIS	0.7026	0.0558	0.2793	0.0411	0.1392	0.02
		SABANGAN	0.4011	0.0486	0.1182	0.0213	0.0482	0.01
		SADANGA	0.7229	0.0614	0.2932	0.0443	0.1477	0.03
		SAGADA	0.4879	0.0474	0.1597	0.0224	0.0699	0.01

			Incidence		Gap		Severity	
		TADIAN	0.5162	0.0486	0.1741	0.0258	0.0780	0.0151
	Арауао	CALANASAN (BAYAG)	0.5627	0.0528	0.1814	0.0256	0.0777	0.0143
		CONNER	0.5318	0.0439	0.1724	0.0210	0.0742	0.0116
		FLORA	0.3920	0.0496	0.1153	0.0206	0.0469	0.010
		KABUGAO (Capital)	0.5196	0.0555	0.1653	0.0268	0.0702	0.0147
		LUNA	0.3225	0.0449	0.0883	0.0164	0.0341	0.0076
		PUDTOL	0.3940	0.0444	0.1138	0.0188	0.0456	0.0098
		SANTA MARCELA	0.3591	0.0484	0.1013	0.0204	0.0399	0.0103
Region I	Ilocos Norte	ADAMS	0.6594	0.1382	0.2398	0.0904	0.1126	0.0594
		BACARRA	0.2208	0.0276	0.0552	0.0092	0.0201	0.004
		BADOC	0.3865	0.0348	0.1159	0.0157	0.0478	0.0084
		BANGUI	0.2793	0.0458	0.0769	0.0170	0.0302	0.0082
		BATAC	0.2617	0.0316	0.0704	0.0115	0.0269	0.005
		BURGOS	0.3585	0.0462	0.1009	0.0188	0.0399	0.009
		CARASI	0.4970	0.0963	0.1579	0.0474	0.0676	0.027
		CURRIMAO	0.3051	0.0368	0.0853	0.0144	0.0336	0.007
		DINGRAS	0.3769	0.0385	0.1089	0.0171	0.0439	0.009
		DUMALNEG	0.4259	0.1973	0.1237	0.0801	0.0495	0.039
		BANNA (ESPIRITU)	0.4058	0.0406	0.1206	0.0180	0.0493	0.009
		LAOAG CITY (Capital)	0.1096	0.0142	0.0245	0.0042	0.0083	0.001
		MARCOS	0.4726	0.0572	0.1505	0.0285	0.0649	0.015
		NUEVA ERA	0.5745	0.0553	0.2040	0.0325	0.0944	0.019
		PAGUDPUD	0.4811	0.0490	0.1563	0.0252	0.0682	0.014
		PAOAY	0.2770	0.0358	0.0764	0.0139	0.0298	0.006
		PASUQUIN	0.3706	0.0356	0.1105	0.0158	0.0457	0.008
		PIDDIG	0.3369	0.0436	0.0943	0.0172	0.0371	0.008
		PINILI	0.4076	0.0403	0.1265	0.0178	0.0538	0.009
		SAN NICOLAS	0.1623	0.0263	0.0381	0.0082	0.0133	0.003
		SARRAT	0.3281	0.0396	0.0902	0.0161	0.0350	0.007
		SOLSONA	0.3648	0.0409	0.1064	0.0179	0.0432	0.009
		VINTAR	0.3292	0.0349	0.0906	0.0142	0.0353	0.007
	Ilocos Sur	ALILEM	0.5336	0.0614	0.1851	0.0331	0.0849	0.019
		BANAYOYO	0.3151	0.0496	0.0866	0.0190	0.0337	0.009
		BANTAY	0.2841	0.0344	0.0765	0.0130	0.0293	0.006
		BURGOS	0.4052	0.0402	0.1232	0.0184	0.0515	0.010
		CABUGAO	0.4151	0.0316	0.1281	0.0152	0.0541	0.008
		CITY OF CANDON	0.3096	0.0267	0.0871	0.0110	0.0345	0.005
		CAOAYAN	0.2035	0.0310	0.0506	0.0099	0.0182	0.004
		CERVANTES	0.6889	0.0427	0.2841	0.0306	0.1458	0.021
		GALIMUYOD	0.3891	0.0404	0.1120	0.0179	0.0448	0.009
		GREGORIO DEL PILAR (CONCEPCION)	0.5856	0.0634	0.2074	0.0361	0.0960	0.021
		LIDLIDDA	0.3750	0.0621	0.1073	0.0265	0.0427	0.013
		MAGSINGAL	0.3578	0.0437	0.1049	0.0190	0.0426	0.009
		NAGBUKEL	0.5073	0.0513	0.1692	0.0257	0.0750	0.014
		NARVACAN	0.3427	0.0344	0.0999	0.0237	0.0406	0.007
		QUIRINO (ANGKAKI)	0.6279	0.0632	0.2302	0.0366	0.10400	0.022
		SALCEDO (BAUGEN)	0.0279	0.0032	0.2302	0.0300	0.0591	0.022
				0.0388		0.0183	0.0591	0.010
		SAN EMILIO SAN ESTEBAN	0.6006 0.3506	0.0638	0.2105 0.1004	0.0373	0.0961	0.022

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		SAN ILDEFONSO	0.3200	0.0493	0.0879	0.0203	0.0340	0.0103
		SAN JUAN (LAPOG)	0.3070	0.0324	0.0862	0.0118	0.0341	0.0056
		SAN VICENTE	0.2068	0.0546	0.0522	0.0205	0.0191	0.0099
		SANTA	0.2728	0.0342	0.0739	0.0131	0.0287	0.0064
		SANTA CATALINA	0.0788	0.0296	0.0155	0.0078	0.0047	0.0030
		SANTA CRUZ	0.4512	0.0322	0.1448	0.0157	0.0627	0.0087
		SANTA LUCIA	0.4155	0.0344	0.1282	0.0167	0.0539	0.0091
		SANTA MARIA	0.3091	0.0320	0.0868	0.0134	0.0343	0.0068
		SANTIAGO	0.3072	0.0389	0.0838	0.0156	0.0325	0.0078
		SANTO DOMINGO	0.3535	0.0296	0.1032	0.0131	0.0419	0.0069
		SIGAY	0.7209	0.0675	0.2951	0.0473	0.1510	0.0330
		SINAIT	0.3532	0.0330	0.1032	0.0144	0.0421	0.0075
		SUGPON	0.7308	0.0706	0.3177	0.0474	0.1700	0.0325
		SUYO	0.6249	0.0576	0.2418	0.0375	0.1192	0.0246
		TAGUDIN	0.4364	0.0297	0.1400	0.0153	0.0606	0.0087
		CITY OF VIGAN (Capital)	0.0855	0.0171	0.0177	0.0046	0.0057	0.0018
	La Union	AGOO	0.3542	0.0280	0.1058	0.0121	0.0436	0.0063
		ARINGAY	0.4659	0.0345	0.1530	0.0177	0.0672	0.0101
		BACNOTAN	0.2356	0.0212	0.0597	0.0076	0.0219	0.0035
		BAGULIN	0.7187	0.0481	0.2918	0.0352	0.1477	0.0247
		BALAOAN	0.3606	0.0325	0.1064	0.0139	0.0436	0.0073
		BANGAR	0.4125	0.0368	0.1268	0.0174	0.0532	0.009
		BAUANG	0.2572	0.0250	0.0683	0.0096	0.0259	0.0046
		BURGOS	0.5236	0.0649	0.1738	0.0331	0.0769	0.0188
		CABA	0.3949	0.0427	0.1219	0.0208	0.0513	0.0117
		LUNA	0.3303	0.0285	0.0954	0.0119	0.0385	0.006
		NAGUILIAN	0.3045	0.0264	0.0846	0.0106	0.0332	0.0053
		PUGO	0.2990	0.0429	0.0812	0.0167	0.0313	0.008
		ROSARIO	0.3966	0.0334	0.1220	0.0151	0.0515	0.008
		CITY OF SAN FERNANDO (Capital)	0.1460	0.0194	0.0348	0.0060	0.0123	0.0026
		SAN GABRIEL	0.5823	0.0502	0.2051	0.0288	0.0941	0.0174
		SAN JUAN	0.2583	0.0297	0.0678	0.0107	0.0255	0.0049
		SANTO TOMAS	0.5136	0.0400	0.1728	0.0214	0.0772	0.0124
		SANTOL	0.6454	0.0467	0.2490	0.0317	0.1220	0.0208
		SUDIPEN	0.4229	0.0430	0.1318	0.0199	0.0561	0.0109
		TUBAO	0.4895	0.0361	0.1622	0.0191	0.0720	0.011
	Pangasinan	AGNO	0.4704	0.0471	0.1502	0.0235	0.0648	0.013
	0	AGUILAR	0.5058	0.0417	0.1674	0.0221	0.0737	0.0127
		CITY OF ALAMINOS	0.3526	0.0274	0.1017	0.0114	0.0408	0.0058
		ALCALA	0.2739	0.0386	0.0707	0.0139	0.0263	0.006
		ANDA	0.4580	0.0428	0.1413	0.0196	0.0593	0.010
		ASINGAN	0.2023	0.0318	0.0485	0.0110	0.0171	0.0050
		BALUNGAO	0.3006	0.0395	0.0819	0.0154	0.0317	0.007
		BANI	0.4270	0.0375	0.1298	0.0171	0.0539	0.0092
		BASISTA	0.4270	0.0573	0.1230	0.0223	0.0359	0.0032
		BAUTISTA	0.3629	0.0312	0.0865	0.0223	0.0400	0.007
		BAYAMBANG	0.3167				0.0333	0.007
				0.0236	0.1508	0.0121		
		BINALONAN	0.2091	0.0375	0.0513	0.0118	0.0184	0.005
		BINMALEY	0.3222	0.0307	0.0906	0.0126	0.0357	0.0064
		BOLINAO	0.5333	0.0352	0.1783	0.0187	0.0790	0.0108
		BUGALLON	0.4868	0.0360	0.1612	0.0176	0.0712	0.0099

Region	Province	Area Estimates Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		BURGOS	0.4886	0.0507	0.1628	0.0264	0.0723	0.0153
		CALASIAO	0.2826	0.0377	0.0749	0.0143	0.0283	0.0068
		DAGUPAN CITY	0.1689	0.0290	0.0399	0.0095	0.0139	0.0042
		DASOL	0.4418	0.0436	0.1401	0.0210	0.0602	0.0117
		INFANTA	0.4267	0.0530	0.1286	0.0238	0.0528	0.0124
		LABRADOR	0.3122	0.0493	0.0854	0.0192	0.0330	0.0094
		LINGAYEN (Capital)	0.2815	0.0321	0.0766	0.0122	0.0294	0.0059
		MABINI	0.4926	0.0462	0.1635	0.0236	0.0722	0.0134
		MALASIQUI	0.4227	0.0259	0.1276	0.0114	0.0526	0.0059
		MANAOAG	0.3013	0.0322	0.0815	0.0129	0.0312	0.0064
		MANGALDAN	0.2381	0.0333	0.0586	0.0111	0.0210	0.0049
		MANGATAREM	0.4550	0.0278	0.1452	0.0143	0.0624	0.0081
		MAPANDAN	0.2728	0.0434	0.0713	0.0157	0.0267	0.0074
		NATIVIDAD	0.3496	0.0387	0.1009	0.0167	0.0406	0.0088
		POZZORUBIO	0.3232	0.0275	0.0910	0.0111	0.0359	0.0056
		ROSALES	0.3087	0.0315	0.0851	0.0122	0.0332	0.0058
		SAN CARLOS CITY	0.4477	0.0232	0.1396	0.0113	0.0590	0.0061
		SAN FABIAN	0.4091	0.0359	0.1235	0.0157	0.0510	0.0082
		SAN JACINTO	0.3249	0.0392	0.0906	0.0158	0.0354	0.0077
		SAN MANUEL	0.3333	0.0409	0.0933	0.0153	0.0367	0.0074
		SAN NICOLAS	0.3467	0.0346	0.1030	0.0148	0.0423	0.0077
		SAN QUINTIN	0.4003	0.0424	0.1196	0.0185	0.0491	0.0095
		SANTA BARBARA	0.3126	0.0321	0.0844	0.0126	0.0322	0.0062
		SANTA MARIA	0.2505	0.0334	0.0642	0.0120	0.0237	0.0056
		SANTO TOMAS	0.2034	0.0477	0.0488	0.0154	0.0172	0.0067
		SISON	0.2495	0.0290	0.0625	0.0097	0.0226	0.0044
		SUAL	0.4194	0.0449	0.1268	0.0197	0.0523	0.0102
		TAYUG	0.2757	0.0338	0.0754	0.0133	0.0293	0.0065
		UMINGAN	0.4373	0.0274	0.1353	0.0129	0.0569	0.0069
		URBIZTONDO	0.5495	0.0457	0.1935	0.0240	0.0890	0.0139
		CITY OF URDANETA	0.1963	0.0300	0.0471	0.0102	0.0166	0.0046
		VILLASIS	0.2286	0.0347	0.0574	0.0118	0.0209	0.0054
		LAOAC	0.2794	0.0320	0.0727	0.0122	0.0271	0.0060
Region II	Batanes	BASCO (Capital)	0.0966	0.0384	0.0199	0.0102	0.0063	0.0040
		ITBAYAT	0.4741	0.0781	0.1496	0.0372	0.0634	0.0203
		IVANA	0.1840	0.0686	0.0449	0.0237	0.0160	0.0109
		MAHATAO	0.1985	0.0699	0.0467	0.0226	0.0164	0.0100
		SABTANG	0.2817	0.0703	0.0732	0.0264	0.0276	0.0131
		UYUGAN	0.2893	0.0856	0.0794	0.0332	0.0310	0.0162
	Cagayan	ABULUG	0.3650	0.0384	0.1064	0.0158	0.0430	0.0081
		ALCALA	0.4527	0.0408	0.1405	0.0190	0.0590	0.0102
		ALLACAPAN	0.3875	0.0410	0.1144	0.0174	0.0469	0.0090
		AMULUNG	0.6213	0.0297	0.2264	0.0185	0.1059	0.0117
		APARRI	0.3393	0.0379	0.0964	0.0157	0.0382	0.0079
		BAGGAO	0.5421	0.0283	0.1845	0.0165	0.0827	0.0101
		BALLESTEROS	0.4134	0.0200	0.1262	0.0103	0.0526	0.0113
		BUGUEY	0.3977	0.0335	0.1202	0.0214	0.0484	0.0078
		CALAYAN	0.6383	0.0355	0.2371	0.0297	0.0404	0.0070
		CAMALANIUGAN	0.0383	0.0459	0.2371	0.0297	0.0222	0.0190
		CLAVERIA	0.2397	0.0381	0.0606	0.0131	0.0222	0.0058
				0.0317		0.0118		
		ENRILE	0.3617		0.1049		0.0420	0.0080
		GATTARAN	0.4076	0.0308	0.1234	0.0139	0.0511	0.0072

#### SE SE SE Region Province Municipality Poverty Poverty Poverty Severity Incidence Gap GONZAGA 0.0153 0.3288 0.0374 0.0914 0.0357 0.0075 IGUIG 0.4399 0.0318 0.1366 0.0158 0.0575 0.0088 LAL-LO 0.3468 0.0349 0.0985 0.0145 0.0392 0.0073 LASAM 0.3546 0.0343 0.1005 0.0133 0.0397 0.0064 PAMPLONA 0.4165 0.0535 0.1246 0.0234 0.0510 0.0118 PEÑABLANCA 0.0791 0.0137 0.5180 0.0410 0.1759 0.0230 0.0232 0.0130 PIAT 0.4606 0.0450 0.1484 0.0640 **RIZAI** 0.5084 0 0395 0.1651 0.0210 0 0716 0.0121 0.0738 0.0139 0.0064 SANCHEZ-MIRA 0.2791 0.0403 0.0279 SANTA ANA 0.3970 0 0482 0.1166 0.0213 0.0473 0.0112 SANTA PRAXEDES 0.2839 0.0625 0.0751 0.0218 0.0282 0.0100 SANTA TERESITA 0.3605 0.0507 0.1033 0.0213 0.0412 0.0109 SANTO NIÑO (FAIRE) 0.5407 0.0360 0.1810 0.0191 0.0803 0.0111 SOLANA 0.4976 0.0372 0.1621 0.0194 0.0704 0.0109 TUAO 0.4935 0.0326 0.1595 0.0167 0.0690 0.0094 **TUGUEGARAO CITY** 0.1040 0.0153 0.0227 0.0041 0.0075 0.0016 (Capital) Isabela 0.2622 0.0312 0.0682 0.0110 0.0255 0.0050 ALICIA ANGADANAN 0.3904 0.0287 0.1180 0 0133 0 0488 0 0071 AURORA 0.2144 0.0262 0.0533 0.0091 0.0193 0.0042 **BENITO SOLIVEN** 0.5366 0.0446 0.1792 0.0235 0.0794 0.0135 BURGOS 0.3219 0.0514 0.0890 0.0202 0.0344 0.0097 CABAGAN 0.4314 0.0345 0.1359 0.0165 0.0579 0.0090 CABATUAN 0.2359 0.0404 0.0580 0.0136 0.0207 0.0061 CITY OF CAUAYAN 0.2932 0.0282 0.0798 0.0104 0.0308 0.0049 CORDON 0.3262 0.0335 0.0921 0.0138 0.0364 0.0072 DINAPIGUE 0.4931 0.0972 0.1483 0.0474 0.0605 0.0263 DIVILACAN 0.6361 0.0574 0.2243 0.0384 0.1020 0.0243 **ECHAGUE** 0.3144 0.0235 0.0866 0.0093 0.0335 0.0046 GAMU 0.2808 0.0505 0.0756 0.0193 0.0290 0.0093 ILAGAN (Capital) 0.4069 0.0256 0.1224 0.0109 0.0505 0.0055 JONES 0.3243 0.0339 0.0902 0.0135 0.0354 0.0067 LUNA 0.0357 0.0640 0.0134 0.0236 0.0063 0.2509 MACONACON 0.4819 0.0621 0.1558 0.0298 0.0678 0.0167 **DELFIN ALBANO** 0.3393 0.0394 0.0945 0.0147 0.0369 0.0069 (MAGSAYSAY) MALLIG 0.4558 0.0395 0.1456 0.0194 0.0628 0.0109 NAGUILIAN 0.4295 0.0343 0.1320 0.0158 0.0551 0.0085 PALANAN 0.0485 0.2141 0.0287 0.0973 0.0169 0.6104 QUEZON 0.4317 0.0497 0.1294 0.0221 0.0529 0.0116 QUIRINO 0.3946 0.0441 0.1164 0.0194 0.0473 0.0100 RAMON 0.3343 0.0450 0.0924 0.0184 0.0360 0.0092 **REINA MERCEDES** 0.3388 0.0421 0.0933 0.0168 0.0362 0.0082 ROXAS 0.2812 0.0358 0.0753 0.0135 0.0287 0.0064 SAN AGUSTIN 0.2963 0.0365 0.0825 0.0141 0.0325 0.0070 SAN GUILLERMO 0.5089 0.0396 0.1599 0.0204 0.0675 0.0114 SAN ISIDRO 0.2281 0.0385 0.0576 0.0132 0.0211 0.0060 SAN MANUEL 0.0924 0.0166 0.0355 0.0081 0 3395 0 0414 SAN MARIANO 0.5930 0.0319 0.2091 0.0197 0.0957 0.0123 SAN MATEO 0.2649 0.0335 0.0704 0.0129 0.0268 0.0063 SAN PABLO 0.4983 0.0452 0.1618 0.0224 0.0704 0.0127 SANTA MARIA 0.5914 0.0359 0.2100 0.0218 0.0964 0.0134 CITY OF SANTIAGO 0.0259 0.0434 0.0077 0.0032 0.1802 0.0153

Region	Province	Area Estimates Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		SANTO TOMAS	0.4600	0.0418	0.1439	0.0205	0.0607	0.0113
		TUMAUINI	0.4667	0.0323	0.1493	0.0158	0.0642	0.0087
	Nueva Vizcay	a AMBAGUIO	0.7026	0.0597	0.2684	0.0410	0.1289	0.0261
		ARITAO	0.3028	0.0369	0.0810	0.0145	0.0308	0.0072
		BAGABAG	0.1912	0.0362	0.0462	0.0121	0.0164	0.0054
		BAMBANG	0.2247	0.0297	0.0571	0.0106	0.0211	0.0050
		BAYOMBONG (Capital)	0.1197	0.0225	0.0262	0.0064	0.0086	0.0026
		DIADI	0.4328	0.0432	0.1283	0.0196	0.0520	0.0102
		DUPAX DEL NORTE	0.2876	0.0454	0.0766	0.0178	0.0291	0.0088
		DUPAX DEL SUR	0.3495	0.0444	0.0985	0.0181	0.0388	0.0092
		KASIBU	0.5335	0.0403	0.1700	0.0217	0.0724	0.0122
		KAYAPA	0.6189	0.0379	0.2170	0.0237	0.0985	0.0145
		QUEZON	0.4390	0.0634	0.1309	0.0286	0.0534	0.0150
		SANTA FE	0.4329	0.0501	0.1288	0.0228	0.0525	0.0124
		SOLANO	0.1368	0.0257	0.0303	0.0074	0.0101	0.0030
		VILLAVERDE	0.2575	0.0520	0.0663	0.0185	0.0245	0.0085
		ALFONSO CASTANEDA	0.5163	0.0968	0.1638	0.0446	0.0692	0.0236
		AGLIPAY	0.3576	0.0402	0.1002	0.0158	0.0393	0.0078
		CABARROGUIS (Capital)	0.2588	0.0458	0.0644	0.0158	0.0231	0.0072
		DIFFUN	0.3560	0.0334	0.1008	0.0140	0.0397	0.0071
		MADDELA	0.2773	0.0363	0.0711	0.0129	0.0262	0.0058
		SAGUDAY	0.3121	0.0599	0.0852	0.0238	0.0328	0.0119
		NAGTIPUNAN	0.4346	0.0587	0.1247	0.0247	0.0497	0.0124
Region III	Bataan	ABUCAY	0.1194	0.0380	0.0257	0.0109	0.0084	0.0045
		BAGAC	0.2240	0.0398	0.0535	0.0133	0.0188	0.0059
		CITY OF BALANGA (Capital)	0.1012	0.0189	0.0210	0.0058	0.0066	0.0025
		DINALUPIHAN	0.1801	0.0228	0.0409	0.0071	0.0138	0.0029
		HERMOSA	0.1689	0.0308	0.0379	0.0095	0.0127	0.0040
		LIMAY	0.1459	0.0458	0.0331	0.0140	0.0113	0.0060
		MARIVELES	0.1375	0.0285	0.0310	0.0085	0.0105	0.0036
		MORONG	0.2194	0.0604	0.0528	0.0199	0.0186	0.0087
		ORANI	0.2003	0.0303	0.0479	0.0100	0.0168	0.0044
		ORION	0.1347	0.0251	0.0289	0.0075	0.0093	0.0031
		PILAR	0.1719	0.0331	0.0394	0.0107	0.0134	0.0047
		SAMAL	0.1457	0.0262	0.0325	0.0081	0.0108	0.0034
	Bulacan	ANGAT	0.1759	0.0297	0.0412	0.0094	0.0144	0.0043
		BALAGTAS (BIGAA)	0.1983	0.0446	0.0463	0.0143	0.0161	0.0063
		BALIUAG	0.1702	0.0259	0.0388	0.0079	0.0132	0.0033
		BOCAUE	0.1327	0.0341	0.0286	0.0102	0.0093	0.0043
		BULACAN	0.1463	0.0383	0.0313	0.0106	0.0101	0.0041
		BUSTOS	0.0919	0.0270	0.0179	0.0069	0.0054	0.0026
		CALUMPIT	0.1635	0.0247	0.0360	0.0080	0.0119	0.0034
		GUIGUINTO	0.1085	0.0276	0.0227	0.0082	0.0073	0.0034
		HAGONOY	0.2108	0.0301	0.0486	0.0092	0.0166	0.0038
		CITY OF MALOLOS	0.1040	0.0163	0.0216	0.0045	0.0069	0.0018
		(Capital) MARILAO	0.0862	0.0205	0.0169	0.0054	0.0051	0.0021
		MEYCAUAYAN					0.0095	0.0021
			0.1315	0.0253	0.0287	0.0074	0.0095	0.0031

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		NORZAGARAY	0.2573	0.0529	0.0647	0.0173	0.0235	0.0075
		OBANDO	0.1291	0.0344	0.0270	0.0098	0.0086	0.0040
		PANDI	0.2091	0.0283	0.0489	0.0091	0.0169	0.0040
		PAOMBONG	0.1539	0.0342	0.0338	0.0096	0.0112	0.0039
		PLARIDEL	0.1393	0.0283	0.0298	0.0089	0.0097	0.0038
		PULILAN	0.1991	0.0360	0.0466	0.0121	0.0162	0.005
		SAN ILDEFONSO	0.2561	0.0272	0.0636	0.0096	0.0229	0.0044
		CITY OF SAN JOSE DEL MONTE	0.1474	0.0235	0.0322	0.0064	0.0106	0.002
		SAN MIGUEL	0.2738	0.0250	0.0709	0.0091	0.0264	0.004
		SAN RAFAEL	0.1268	0.0264	0.0265	0.0073	0.0084	0.002
		SANTA MARIA	0.1296	0.0280	0.0274	0.0081	0.0088	0.003
		DOÑA REMEDIOS TRINIDAD	0.6029	0.0634	0.2050	0.0382	0.0912	0.022
	Nueva Ecija	ALIAGA	0.4466	0.0409	0.1386	0.0193	0.0587	0.010
		BONGABON	0.3856	0.0403	0.1115	0.0162	0.0448	0.008
		CABANATUAN CITY	0.2416	0.0185	0.0627	0.0069	0.0234	0.003
		CABIAO	0.4336	0.0381	0.1296	0.0178	0.0532	0.009
		CARRANGLAN	0.6088	0.0442	0.2225	0.0285	0.1050	0.018
		CUYAPO	0.3882	0.0306	0.1120	0.0127	0.0448	0.006
		GABALDON (BITULOK & SABANI)	0.5012	0.0483	0.1663	0.0254	0.0738	0.014
		CITY OF GAPAN	0.3582	0.0419	0.1021	0.0162	0.0407	0.007
		GENERAL MAMERTO NATIVIDAD	0.4266	0.0461	0.1323	0.0212	0.0561	0.011
		GENERAL TINIO (PAPAYA)	0.3519	0.0549	0.0977	0.0225	0.0380	0.011
		GUIMBA	0.4364	0.0272	0.1332	0.0127	0.0555	0.006
		JAEN	0.4494	0.0377	0.1375	0.0179	0.0574	0.009
		LAUR	0.4532	0.0462	0.1470	0.0220	0.0643	0.012
		LICAB	0.4976	0.0505	0.1661	0.0281	0.0738	0.016
		LLANERA	0.3844	0.0398	0.1130	0.0167	0.0461	0.008
		LUPAO	0.3668	0.0416	0.1045	0.0181	0.0414	0.009
		SCIENCE CITY OF MUÑOZ	0.3171	0.0339	0.0873	0.0127	0.0339	0.006
		NAMPICUAN	0.3559	0.0419	0.0996	0.0179	0.0390	0.009
		PALAYAN CITY (Capital)	0.3726	0.0457	0.1089	0.0188	0.0442	0.009
		PANTABANGAN	0.3384	0.0506	0.0942	0.0204	0.0370	0.010
		PEÑARANDA	0.3231	0.0613	0.0894	0.0264	0.0350	0.013
		QUEZON	0.4763	0.0487	0.1525	0.0239	0.0658	0.013
		RIZAL	0.3522	0.0340	0.1003	0.0138	0.0399	0.006
		SAN ANTONIO	0.4749	0.0502	0.1487	0.0238	0.0631	0.013
		SAN ISIDRO	0.3356	0.0547	0.0934	0.0212	0.0367	0.010
		SAN JOSE CITY	0.2735	0.0294	0.0717	0.0109	0.0270	0.005
		SAN LEONARDO	0.3544	0.0469	0.0987	0.0187	0.0387	0.009
		SANTA ROSA	0.3083	0.0346	0.0848	0.0143	0.0331	0.007
		SANTO DOMINGO	0.4006	0.0472	0.1214	0.0210	0.0505	0.010
		TALAVERA	0.4074	0.0283	0.1224	0.0126	0.0506	0.006
		TALUGTUG	0.4855	0.0384	0.1524	0.0190	0.0645	0.010
		ZARAGOZA	0.4109	0.0407	0.1231	0.0181	0.0506	0.009
	Pampanga	ANGELES CITY	0.1527	0.0230	0.0345	0.0068	0.0117	0.002
	, 5-	APALIT	0.2406	0.0477	0.0590	0.0161	0.0211	0.007
		ARAYAT	0.3003	0.0360	0.0786	0.0138	0.0295	0.006

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		BACOLOR	0.1636	0.0441	0.0377	0.0131	0.0129	0.0054
		CANDABA	0.3574	0.0331	0.0978	0.0131	0.0377	0.0064
		FLORIDABLANCA	0.2131	0.0308	0.0532	0.0104	0.0194	0.0046
		GUAGUA	0.1935	0.0267	0.0451	0.0085	0.0155	0.0036
		LUBAO	0.2662	0.0277	0.0669	0.0097	0.0244	0.0045
		MABALACAT	0.1691	0.0425	0.0389	0.0136	0.0134	0.0060
		MACABEBE	0.2296	0.0335	0.0559	0.0116	0.0199	0.0054
		MAGALANG	0.1807	0.0317	0.0428	0.0102	0.0150	0.0045
		MASANTOL	0.3017	0.0398	0.0767	0.0146	0.0280	0.0067
		MEXICO	0.2582	0.0321	0.0645	0.0103	0.0234	0.0045
		MINALIN	0.2685	0.0464	0.0655	0.0154	0.0232	0.0067
		PORAC	0.2485	0.0392	0.0606	0.0138	0.0215	0.0064
		CITY OF SAN FERNANDO (Capital)	0.1504	0.0280	0.0340	0.0090	0.0115	0.0039
		SAN LUIS	0.3590	0.0495	0.0959	0.0195	0.0361	0.0095
		SAN SIMON	0.2390	0.0410	0.0570	0.0136	0.0199	0.0060
		SANTA ANA	0.2859	0.0426	0.0750	0.0164	0.0282	0.0079
		SANTA RITA	0.2250	0.0555	0.0535	0.0192	0.0186	0.0085
		SANTO TOMAS	0.1458	0.0517	0.0323	0.0160	0.0108	0.0068
		SASMUAN (Sexmoan)	0.3256	0.0581	0.0882	0.0230	0.0338	0.0111
	Tarlac	ANAO	0.1632	0.0334	0.0361	0.0102	0.0120	0.0044
		BAMBAN	0.3150	0.0789	0.0830	0.0275	0.0312	0.0124
		CAMILING	0.1969	0.0220	0.0466	0.0075	0.0162	0.0033
		CAPAS	0.3178	0.0561	0.0871	0.0231	0.0338	0.0118
		CONCEPCION	0.2793	0.0260	0.0716	0.0093	0.0264	0.0043
		GERONA	0.2309	0.0247	0.0560	0.0078	0.0198	0.0034
		LA PAZ	0.3217	0.0398	0.0861	0.0154	0.0326	0.0075
		MAYANTOC	0.2458	0.0335	0.0625	0.0118	0.0229	0.0054
		MONCADA	0.2854	0.0337	0.0741	0.0122	0.0276	0.0057
		PANIQUI	0.2012	0.0248	0.0489	0.0083	0.0174	0.0037
		PURA	0.1961	0.0398	0.0473	0.0127	0.0168	0.0056
		RAMOS	0.2547	0.0594	0.0647	0.0206	0.0238	0.0095
		SAN CLEMENTE	0.2209	0.0488	0.0547	0.0171	0.0195	0.0078
		SAN MANUEL	0.2320	0.0417	0.0565	0.0138	0.0200	0.0062
		SANTA IGNACIA	0.2101	0.0288	0.0513	0.0100	0.0183	0.0046
		CITY OF TARLAC (Capital)	0.1871	0.0206	0.0439	0.0068	0.0152	0.0029
		VICTORIA	0.2504	0.0281	0.0626	0.0101	0.0227	0.0047
		SAN JOSE	0.5664	0.0538	0.1952	0.0305	0.0882	0.0182
	Zambales	BOTOLAN	0.3379	0.0503	0.0966	0.0204	0.0385	0.0102
		CABANGAN	0.2956	0.0366	0.0806	0.0147	0.0312	0.0074
		CANDELARIA	0.2854	0.0489	0.0756	0.0190	0.0286	0.0093
		CASTILLEJOS	0.2497	0.0435	0.0670	0.0163	0.0259	0.0082
		IBA (Capital)	0.2238	0.0384	0.0561	0.0141	0.0205	0.0068
		MASINLOC	0.2755	0.0506	0.0712	0.0178	0.0264	0.0082
		OLONGAPO CITY	0.1152	0.0273	0.0251	0.0083	0.0083	0.0035
		PALAUIG	0.3981	0.0413	0.1188	0.0187	0.0488	0.0100
		SAN ANTONIO	0.1767	0.0380	0.0407	0.0119	0.0138	0.0050
		SAN FELIPE	0.1659	0.0415	0.0416	0.0143	0.0153	0.0067
		SAN MARCELINO	0.2050	0.0290	0.0522	0.0109	0.0192	0.0053
		SAN NARCISO	0.1427	0.0283	0.0319	0.0084	0.0107	0.0035
		SANTA CRUZ	0.3265	0.0375	0.0881	0.0145	0.0336	0.0070

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		SUBIC	0.2527	0.0408	0.0650	0.0151	0.0240	0.0071
Region IV	Batangas	AGONCILLO	0.3721	0.0412	0.1074	0.0170	0.0432	0.0086
		ALITAGTAG	0.3479	0.0379	0.1008	0.0159	0.0407	0.0083
		BALAYAN	0.3878	0.0277	0.1153	0.0126	0.0473	0.0067
		BALETE	0.5061	0.0540	0.1635	0.0271	0.0706	0.0152
		BATANGAS CITY (Capital)	0.2258	0.0193	0.0589	0.0067	0.0221	0.0031
		BAUAN	0.1444	0.0226	0.0321	0.0064	0.0107	0.0025
		CALACA	0.4768	0.0278	0.1537	0.0142	0.0667	0.0080
		CALATAGAN	0.5128	0.0394	0.1673	0.0209	0.0730	0.0120
		CUENCA	0.3475	0.0408	0.0984	0.0163	0.0389	0.0080
		IBAAN	0.4412	0.0382	0.1424	0.0188	0.0620	0.0106
		LAUREL	0.5423	0.0480	0.1819	0.0262	0.0811	0.0153
		LEMERY	0.3828	0.0268	0.1140	0.0120	0.0468	0.0063
		LIAN	0.4932	0.0428	0.1611	0.0223	0.0703	0.0127
		LIPA CITY	0.1872	0.0166	0.0440	0.0052	0.0153	0.0023
		LOBO	0.5804	0.0384	0.2100	0.0217	0.0985	0.0130
		MABINI	0.1780	0.0293	0.0434	0.0097	0.0155	0.0042
		MALVAR	0.2258	0.0427	0.0558	0.0141	0.0201	0.006
		MATAAS NA KAHOY	0.2743	0.0408	0.0720	0.0154	0.0271	0.0074
		NASUGBU	0.4392	0.0338	0.1357	0.0167	0.0571	0.009
		PADRE GARCIA	0.4427	0.0363	0.1357	0.0174	0.0566	0.009
		ROSARIO	0.5668	0.0274	0.2003	0.0161	0.0921	0.009
		SAN JOSE	0.3267	0.0306	0.0921	0.0128	0.0365	0.006
		SAN JUAN	0.5642	0.0282	0.1980	0.0162	0.0908	0.010
		SAN LUIS	0.3972	0.0341	0.1196	0.0149	0.0496	0.007
		SAN NICOLAS	0.2554	0.0440	0.0660	0.0141	0.0246	0.006
		SAN PASCUAL	0.2023	0.0244	0.0511	0.0085	0.0188	0.004
		SANTA TERESITA	0.3671	0.0421	0.1102	0.0194	0.0457	0.010
		SANTO TOMAS	0.2635	0.0320	0.0675	0.0123	0.0249	0.005
		TAAL	0.2262	0.0262	0.0566	0.0094	0.0206	0.004
		TALISAY	0.2084	0.0405	0.0487	0.0137	0.0168	0.006
		CITY OF TANAUAN	0.1801	0.0207	0.0417	0.0066	0.0143	0.002
		TAYSAN	0.4924	0.0426	0.1592	0.0211	0.0689	0.011
		TINGLOY	0.6828	0.0396	0.2778	0.0287	0.1412	0.019
		TUY	0.5109	0.0333	0.1671	0.0177	0.0731	0.010
	Cavite	ALFONSO	0.2787	0.0334	0.0737	0.0124	0.0279	0.005
		AMADEO	0.1549	0.0286	0.0365	0.0092	0.0127	0.004
		BACOOR	0.0651	0.0111	0.0127	0.0028	0.0038	0.001
		CARMONA	0.1451	0.0417	0.0326	0.0123	0.0110	0.005
		CAVITE CITY	0.1013	0.0135	0.0208	0.0037	0.0066	0.001
		DASMARIÑAS	0.1094	0.0173	0.0226	0.0047	0.0071	0.001
		GENERAL EMILIO AGUINALDO	0.3691	0.0480	0.1090	0.0207	0.0444	0.010
		GENERAL TRIAS	0.1068	0.0266	0.0218	0.0066	0.0068	0.0024
		IMUS	0.0317	0.0064	0.0056	0.0015	0.0016	0.000
		INDANG	0.0517	0.0231	0.0393	0.0013	0.0139	0.003
		KAWIT	0.1044	0.0231	0.0393	0.0078	0.0064	0.003
		MAGALLANES	0.1005	0.0197	0.0204	0.0058	0.0084	0.002
		MARAGONDON MENDEZ (MENDEZ- NUÑEZ)	0.4458 0.1001	0.0361 0.0196	0.1415 0.0218	0.0175 0.0059	0.0607 0.0072	0.0097 0.0025

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		NAIC	0.1927	0.0271	0.0466	0.0090	0.0166	0.004
		NOVELETA	0.0493	0.0186	0.0090	0.0045	0.0026	0.001
		ROSARIO	0.1874	0.0358	0.0440	0.0117	0.0153	0.005
		SILANG	0.2164	0.0224	0.0543	0.0072	0.0199	0.003
		TAGAYTAY CITY	0.1281	0.0232	0.0275	0.0066	0.0090	0.002
		TANZA	0.0954	0.0182	0.0193	0.0046	0.0060	0.001
		TERNATE	0.3339	0.0525	0.0933	0.0208	0.0367	0.010
		TRECE MARTIRES CITY (Capital)	0.0972	0.0239	0.0199	0.0065	0.0063	0.002
		GEN. MARIANO ALVAREZ	0.1797	0.0300	0.0417	0.0097	0.0144	0.004
	Laguna	ALAMINOS	0.1868	0.0348	0.0431	0.0110	0.0147	0.004
		BAY	0.1455	0.0315	0.0313	0.0090	0.0102	0.003
		BIÑAN	0.1024	0.0274	0.0210	0.0076	0.0066	0.002
		CABUYAO	0.0694	0.0196	0.0130	0.0046	0.0038	0.00
		CITY OF CALAMBA	0.0828	0.0174	0.0163	0.0045	0.0050	0.00
		CALAUAN	0.2679	0.0397	0.0680	0.0148	0.0250	0.007
		CAVINTI	0.2755	0.0470	0.0724	0.0165	0.0274	0.007
		FAMY	0.3642	0.0560	0.1046	0.0253	0.0420	0.013
		KALAYAAN	0.3635	0.1021	0.1028	0.0415	0.0407	0.020
		LILIW	0.2007	0.0307	0.0488	0.0109	0.0174	0.00
		LOS BAÑOS	0.0951	0.0235	0.0191	0.0062	0.0059	0.002
		LUISIANA	0.1304	0.0341	0.0283	0.0105	0.0093	0.00
		LUMBAN	0.1418	0.0291	0.0309	0.0083	0.0101	0.00
		MABITAC	0.3568	0.0542	0.1014	0.0239	0.0402	0.01
		MAGDALENA	0.3263	0.0443	0.0903	0.0166	0.0352	0.00
		MAJAYJAY	0.2727	0.0338	0.0719	0.0127	0.0269	0.00
		NAGCARLAN	0.1993	0.0233	0.0481	0.0078	0.0171	0.00
		PAETE	0.1571	0.0496	0.0344	0.0148	0.0113	0.00
		PAGSANJAN	0.1432	0.0295	0.0319	0.0085	0.0107	0.00
		PAKIL	0.3185	0.0485	0.0866	0.0181	0.0333	0.00
		PANGIL	0.3016	0.0604	0.0801	0.0231	0.0304	0.01
		PILA	0.1976	0.0365	0.0458	0.0117	0.0157	0.00
		RIZAL	0.1845	0.0508	0.0447	0.0169	0.0159	0.00
		SAN PABLO CITY	0.1169	0.0147	0.0248	0.0043	0.0080	0.00
		SAN PEDRO	0.0571	0.0207	0.0109	0.0053	0.0033	0.00
		SANTA CRUZ (Capital)	0.1431	0.0243	0.0314	0.0070	0.0104	0.00
			0.4554	0.0451	0.1387	0.0201	0.0575	0.01
		CITY OF SANTA ROSA	0.0562	0.0154	0.0106	0.0041	0.0032	0.00
		SINILOAN	0.3086	0.0423	0.0833	0.0159	0.0318	0.00
		VICTORIA	0.1474	0.0432	0.0319	0.0125	0.0104	0.00
	Marinduque	BOAC (Capital)	0.4028	0.0282	0.1236	0.0126	0.0518	0.00
		BUENAVISTA	0.6104	0.0447	0.2219	0.0284	0.1038	0.01
		GASAN	0.5065	0.0349	0.1707	0.0192	0.0763	0.01
		MOGPOG	0.4166	0.0359	0.1279	0.0175	0.0535	0.00
		SANTA CRUZ	0.4610	0.0309	0.1481	0.0156	0.0641	0.00
		TORRIJOS	0.5870	0.0335	0.2090	0.0199	0.0967	0.01
	Occidental Mindoro	ABRA DE ILOG	0.6784	0.0405	0.2692	0.0342	0.1334	0.02
		CALINTAAN	0.6236	0.0586	0.2320	0.0346	0.1104	0.02
		LOOC	0.4995	0.0503	0.1742	0.0268	0.0804	0.01
		LUBANG	0.4010	0.0559	0.1228	0.0258	0.0516	0.01
		MAGSAYSAY	0.6553	0.0518	0.2588	0.0316	0.1288	0.02
		MAMBURAO (Capital)	0.4073	0.0522	0.1327	0.0251	0.0579	0.01

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		PALUAN	0.6338	0.0533	0.2358	0.0377	0.1122	0.025
		RIZAL	0.6246	0.0502	0.2268	0.0297	0.1060	0.018
		SABLAYAN	0.5951	0.0374	0.2155	0.0229	0.1007	0.014
		SAN JOSE	0.4297	0.0348	0.1426	0.0162	0.0634	0.009
		SANTA CRUZ	0.6365	0.0469	0.2442	0.0318	0.1186	0.020
	Oriental Mindoro	BACO	0.6152	0.0360	0.2320	0.0210	0.1120	0.012
		BANSUD	0.6470	0.0448	0.2493	0.0279	0.1222	0.018
		BONGABONG	0.6984	0.0281	0.2846	0.0218	0.1442	0.01
		BULALACAO (SAN PEDRO)	0.8710	0.0266	0.4403	0.0328	0.2565	0.027
		CITY OF CALAPAN (Capital)	0.3563	0.0240	0.1054	0.0100	0.0431	0.00
		GLORIA	0.6035	0.0322	0.2211	0.0184	0.1045	0.01
		MANSALAY	0.7375	0.0397	0.3060	0.0309	0.1562	0.02
		NAUJAN	0.6227	0.0240	0.2319	0.0148	0.1108	0.00
		PINAMALAYAN	0.5348	0.0306	0.1860	0.0170	0.0849	0.01
		POLA	0.6807	0.0364	0.2712	0.0256	0.1355	0.01
		PUERTO GALERA	0.4653	0.0511	0.1498	0.0250	0.0646	0.01
		ROXAS	0.6187	0.0369	0.2378	0.0230	0.1160	0.01
		SAN TEODORO	0.5651	0.0578	0.2009	0.0325	0.0929	0.01
		SOCORRO	0.6167	0.0351	0.2310	0.0210	0.1108	0.01
		VICTORIA	0.5193	0.0349	0.1776	0.0173	0.0800	0.00
	Palawan	ABORLAN	0.5493	0.0470	0.1867	0.0272	0.0833	0.01
		AGUTAYA	0.6617	0.0629	0.2411	0.0411	0.1117	0.02
		ARACELI	0.6290	0.0502	0.2247	0.0287	0.1030	0.01
		BALABAC	0.6248	0.0746	0.2099	0.0403	0.0922	0.02
		BATARAZA	0.6025	0.0514	0.2050	0.0289	0.0906	0.01
		BROOKE'S POINT	0.5888	0.0439	0.2076	0.0266	0.0943	0.01
		BUSUANGA	0.6998	0.0483	0.2660	0.0349	0.1268	0.02
		CAGAYANCILLO	0.6488	0.0605	0.2338	0.0398	0.1083	0.02
		CORON	0.6436	0.0354	0.2324	0.0223	0.1071	0.01
		CUYO	0.3442	0.0417	0.0967	0.0171	0.0378	0.00
		DUMARAN	0.7116	0.0406	0.2744	0.0318	0.1322	0.02
		EL NIDO (BACUIT)	0.6400	0.0443	0.2293	0.0318	0.1053	0.02
		LINAPACAN	0.7586	0.0483	0.3042	0.0402	0.1501	0.02
		MAGSAYSAY	0.4877	0.0623	0.1593	0.0318	0.0694	0.01
		NARRA	0.5014	0.0476	0.1623	0.0234	0.0698	0.01
		PUERTO PRINCESA CITY (Capital)	0.2770	0.0223	0.0725	0.0081	0.0269	0.00
		QUEZON	0.6785	0.0505	0.2501	0.0340	0.1169	0.02
		ROXAS	0.6062	0.0359	0.2125	0.0223	0.0964	0.01
		SAN VICENTE	0.6345	0.0668	0.2302	0.0420	0.1069	0.02
		ΤΑΥΤΑΥ	0.6908	0.0351	0.2631	0.0239	0.1261	0.01
		KALAYAAN	0.2422	0.1415	0.0631	0.0503	0.0232	0.02
		CULION	0.6204	0.0551	0.2410	0.0391	0.1182	0.02
		RIZAL (MARCOS)	0.6573	0.0662	0.2328	0.0411	0.1060	0.02
		SOFRONIO ESPAÑOLA	0.5870	0.0604	0.1968	0.0344	0.0866	0.02
	Quezon	AGDANGAN	0.3978	0.0581	0.1154	0.0240	0.0463	0.01
		ALABAT	0.3361	0.0499	0.0947	0.0202	0.0374	0.01

Region Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
	ATIMONAN	0.3178	0.0318	0.0895	0.0124	0.0355	0.0060
	BUENAVISTA	0.7207	0.0295	0.2892	0.0225	0.1439	0.0153
	BURDEOS	0.6117	0.0572	0.2170	0.0336	0.1002	0.0204
	CALAUAG	0.5084	0.0286	0.1653	0.0137	0.0717	0.0074
	CANDELARIA	0.2837	0.0371	0.0725	0.0132	0.0265	0.0062
	CATANAUAN	0.5918	0.0254	0.2134	0.0164	0.0996	0.0105
	DOLORES	0.2993	0.0511	0.0785	0.0186	0.0294	0.0086
	GENERAL LUNA	0.6108	0.0404	0.2234	0.0254	0.1052	0.0160
	GENERAL NAKAR	0.6394	0.0471	0.2289	0.0290	0.1056	0.0176
	GUINAYANGAN	0.5850	0.0343	0.2054	0.0187	0.0940	0.0111
	GUMACA	0.3862	0.0288	0.1137	0.0136	0.0463	0.0073
	INFANTA	0.3238	0.0361	0.0891	0.0156	0.0346	0.0080
	JOMALIG	0.7571	0.0577	0.3151	0.0506	0.1612	0.0366
	LOPEZ	0.4816	0.0235	0.1546	0.0111	0.0667	0.0061
	LUCBAN	0.1700	0.0252	0.0400	0.0081	0.0139	0.0036
	LUCENA CITY (Capital)	0.1726	0.0310	0.0408	0.0101	0.0143	0.0043
	MACALELON	0.6150	0.0334	0.2227	0.0191	0.1041	0.0118
	MAUBAN	0.4414	0.0352	0.1375	0.0154	0.0582	0.0081
	MULANAY	0.6281	0.0366	0.2318	0.0238	0.1096	0.0152
	PADRE BURGOS	0.4333	0.0457	0.1293	0.0213	0.0532	0.0115
	PAGBILAO	0.2909	0.0321	0.0780	0.0127	0.0296	0.0062
	PANUKULAN	0.5612	0.0638	0.1833	0.0332	0.0794	0.0187
	PATNANUNGAN	0.6765	0.0747	0.2454	0.0517	0.1137	0.0329
	PEREZ	0.5112	0.0496	0.1659	0.0256	0.0720	0.0145
	PITOGO	0.4425	0.0348	0.1357	0.0161	0.0564	0.0085
	PLARIDEL	0.3458	0.0531	0.0980	0.0214	0.0391	0.0109
	POLILLO	0.4501	0.0478	0.1395	0.0216	0.0585	0.0116
	QUEZON	0.6065	0.0336	0.2236	0.0204	0.1062	0.0129
	REAL	0.4275	0.0528	0.1245	0.0225	0.0499	0.0115
	SAMPALOC	0.2446	0.0513	0.0626	0.0168	0.0231	0.0074
	SAN ANDRES	0.7773	0.0495	0.3379	0.0414	0.1778	0.0303
	SAN ANTONIO	0.4350	0.0413	0.1293	0.0184	0.0526	0.0095
	SAN FRANCISCO (AURORA)	0.7910	0.0392	0.3456	0.0344	0.1823	0.0254
	SAN NARCISO	0.6867	0.0342	0.2624	0.0214	0.1263	0.0136
	SARIAYA	0.3864	0.0345	0.1103	0.0146	0.0438	0.0073
	TAGKAWAYAN	0.5022	0.0362	0.1600	0.0177	0.0684	0.0097
	TAYABAS	0.2573	0.0274	0.0662	0.0103	0.0246	0.0050
	TIAONG	0.3658	0.0399	0.1025	0.0161	0.0402	0.0081
	UNISAN	0.4759	0.0312	0.1521	0.0152	0.0653	0.0085
Rizal	ANGONO	0.0701	0.0323	0.0136	0.0090	0.0042	0.0038
	CITY OF ANTIPOLO	0.1634	0.0327	0.0367	0.0098	0.0123	0.0040
	BARAS	0.2940	0.0552	0.0805	0.0240	0.0312	0.0126
	BINANGONAN	0.1788	0.0274	0.0410	0.0085	0.0140	0.0036
	CAINTA	0.0772	0.0350	0.0151	0.0087	0.0046	0.0033
	CARDONA	0.2476	0.0400	0.0620	0.0139	0.0224	0.0063
	JALA-JALA	0.3772	0.0569	0.1063	0.0231	0.0418	0.0115
	RODRIGUEZ (MONTALBAN)	0.1869	0.0561	0.0457	0.0171	0.0165	0.0071
	MORONG	0.1222	0.0334	0.0266	0.0099	0.0088	0.0041
	PILILLA	0.2414	0.0524	0.0597	0.0182	0.0215	0.0083
	SAN MATEO	0.0963	0.0263	0.0198	0.0070	0.0063	0.0027

Region	Province	Area Estimates Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		TANAY	0.2932	0.0486	0.0796	0.0175	0.0306	0.0081
		TAYTAY	0.1221	0.0451	0.0255	0.0125	0.0081	0.0051
		TERESA	0.1167	0.0346	0.0246	0.0104	0.0079	0.0044
	Romblon	ALCANTARA	0.4943	0.0538	0.1589	0.0266	0.0683	0.0150
		BANTON	0.4538	0.0450	0.1443	0.0226	0.0622	0.0127
		CAJIDIOCAN	0.5603	0.0415	0.1971	0.0258	0.0901	0.0164
		CALATRAVA	0.5720	0.0588	0.1994	0.0343	0.0904	0.0202
		CONCEPCION	0.4840	0.0601	0.1574	0.0296	0.0685	0.0164
		CORCUERA	0.6056	0.0519	0.2145	0.0326	0.0982	0.0202
		LOOC	0.5245	0.0491	0.1735	0.0260	0.0762	0.0151
		MAGDIWANG	0.5246	0.0583	0.1722	0.0316	0.0753	0.0182
		ODIONGAN	0.3250	0.0300	0.0922	0.0133	0.0364	0.007
		ROMBLON (Capital)	0.4999	0.0332	0.1621	0.0174	0.0699	0.0098
		SAN AGUSTIN	0.5524	0.0484	0.1893	0.0294	0.0849	0.0179
		SAN ANDRES	0.5099	0.0415	0.1715	0.0232	0.0759	0.0137
		SAN FERNANDO	0.5836	0.0519	0.2074	0.0307	0.0952	0.0187
		SAN JOSE	0.6555	0.0736	0.2500	0.0480	0.1204	0.0306
		SANTA FE	0.5597	0.0567	0.1882	0.0334	0.0829	0.0198
		FERROL	0.5640	0.0714	0.1925	0.0388	0.0861	0.0224
		SANTA MARIA	0.5103	0.0650	0.1684	0.0333	0.0738	0.0189
		(IMELDA)	0.0100	0.0000	0.1001	0.0000	0.0700	0.010
	Aurora	BALER (Capital)	0.2729	0.0452	0.0743	0.0169	0.0286	0.0082
		CASIGURAN	0.4609	0.0412	0.1448	0.0195	0.0616	0.0108
		DILASAG	0.4992	0.0664	0.1570	0.0312	0.0666	0.0170
		DINALUNGAN	0.4884	0.0599	0.1556	0.0295	0.0666	0.016
		DINGALAN	0.5084	0.0702	0.1653	0.0343	0.0717	0.018
		DIPACULAO	0.4076	0.0442	0.1223	0.0199	0.0504	0.010
		MARIA AURORA	0.3064	0.0298	0.0815	0.0113	0.0309	0.0054
		SAN LUIS	0.4301	0.0529	0.1300	0.0236	0.0538	0.012
Region V	Albay	BACACAY	0.5084	0.0350	0.1645	0.0178	0.0709	0.0099
U	2	CAMALIG	0.5097	0.0312	0.1686	0.0161	0.0741	0.009
		DARAGA (LOCSIN)	0.3288	0.0235	0.0936	0.0100	0.0372	0.005
		GUINOBATAN	0.4319	0.0315	0.1347	0.0147	0.0567	0.0079
		JOVELLAR	0.6825	0.0389	0.2599	0.0279	0.1248	0.0184
		LEGAZPI CITY	0.3387	0.0237	0.0993	0.0106	0.0402	0.0055
		(Capital)	0.0007	0.0207	0.0000	0.0100	0.0402	0.0000
		LIBON	0.5746	0.0293	0.1986	0.0177	0.0896	0.0108
		CITY OF LIGAO	0.5096	0.0274	0.1676	0.0140	0.0733	0.0079
		MALILIPOT	0.5328	0.0477	0.1783	0.0250	0.0792	0.0143
		MALINAO	0.4849	0.0437	0.1551	0.0214	0.0665	0.011
		MANITO	0.6251	0.0543	0.2208	0.0325	0.1009	0.0197
		OAS	0.5235	0.0287	0.1759	0.0167	0.0778	0.0099
		PIO DURAN	0.6673	0.0292	0.2506	0.0207	0.1194	0.0136
		POLANGUI	0.4714	0.0292	0.2500	0.0207	0.0642	0.0083
		RAPU-RAPU	0.6932	0.0366	0.2604	0.0253	0.1243	0.016
		SANTO DOMINGO	0.0932	0.0300	0.2004	0.0203	0.1243	0.010
		(LIBOG)	0.4421	0.0413	0.1301	0.0203	0.0509	0.0112
		CITY OF TABACO	0.4587	0.0277	0.1466	0.0139	0.0631	0.0079
		TIWI	0.4744	0.0395	0.1532	0.0193	0.0663	0.0107
	Camarines	BASUD	0.4330	0.0430	0.1278	0.0190	0.0518	0.0099
	Norte	2,000	0.4000	0.0400	5.1210	5.0100	0.0010	5.000
		CAPALONGA	0.5637	0.0471	0.1893	0.0259	0.0838	0.0150
		DAET (Capital)	0.2395	0.0329	0.0627	0.0122	0.0235	0.0059
		SAN LORENZO RUIZ	0.4525	0.0740	0.1331	0.0318	0.0541	0.016
			0.7020	0.0140	5.1001	5.0010	0.00+1	5.5100
		(IMELDA)						

egion Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
	LABO	0.4571	0.0306	0.1391	0.0145	0.0575	0.007
	MERCEDES	0.4939	0.0437	0.1561	0.0217	0.0663	0.012
	PARACALE	0.4923	0.0449	0.1558	0.0221	0.0663	0.012
	SAN VICENTE	0.4060	0.0612	0.1180	0.0256	0.0472	0.013
	SANTA ELENA	0.4755	0.0490	0.1429	0.0238	0.0584	0.012
	TALISAY	0.3209	0.0473	0.0896	0.0191	0.0352	0.009
	VINZONS	0.4024	0.0501	0.1157	0.0216	0.0460	0.011
Camarines Su	Ir BAAO	0.4474	0.0399	0.1415	0.0198	0.0605	0.011
	BALATAN	0.6326	0.0478	0.2272	0.0299	0.1048	0.018
	BATO	0.5075	0.0373	0.1646	0.0194	0.0711	0.010
	BOMBON	0.5112	0.0534	0.1708	0.0299	0.0753	0.017
	BUHI	0.5162	0.0303	0.1720	0.0167	0.0759	0.009
	BULA	0.5659	0.0396	0.1936	0.0230	0.0867	0.013
	CABUSAO	0.6123	0.0519	0.2223	0.0355	0.1040	0.023
	CALABANGA	0.4695	0.0298	0.1486	0.0152	0.0633	0.008
	CAMALIGAN	0.3371	0.0544	0.0966	0.0226	0.0387	0.011
	CANAMAN	0.3172	0.0304	0.0884	0.0124	0.0343	0.006
	CARAMOAN	0.5947	0.0295	0.2104	0.0181	0.0965	0.011
	DEL GALLEGO	0.5779	0.0402	0.1956	0.0222	0.0868	0.012
	GAINZA	0.4524	0.0686	0.1393	0.0298	0.0581	0.015
	GARCHITORENA	0.6846	0.0361	0.2531	0.0248	0.1187	0.016
	GOA	0.4910	0.0309	0.1625	0.0160	0.0713	0.009
	IRIGA CITY	0.2987	0.0279	0.0827	0.0115	0.0323	0.005
	LAGONOY	0.5281	0.0366	0.1741	0.0195	0.0761	0.011
	LIBMANAN	0.5776	0.0243	0.1993	0.0139	0.0897	0.008
	LUPI	0.5776	0.0360	0.2007	0.0187	0.0913	0.010
	MAGARAO	0.3943	0.0517	0.1182	0.0242	0.0485	0.012
	MILAOR	0.4212	0.0462	0.1259	0.0203	0.0515	0.010
	MINALABAC	0.5583	0.0380	0.1862	0.0216	0.0817	0.012
	NABUA	0.3903	0.0328	0.1183	0.0165	0.0490	0.009
	NAGA CITY	0.1891	0.0269	0.0480	0.0097	0.0177	0.004
	OCAMPO	0.5585	0.0362	0.1917	0.0203	0.0862	0.012
	PAMPLONA	0.4891	0.0458	0.1541	0.0241	0.0653	0.013
	PASACAO	0.6256	0.0504	0.2265	0.0305	0.1054	0.018
	PILI (Capital)	0.3801	0.0369	0.1131	0.0164	0.0462	0.008
	PRESENTACION (PARUBCAN)	0.6057	0.0643	0.2106	0.0369	0.0954	0.022
	RAGAY	0.5651	0.0351	0.1926	0.0196	0.0860	0.011
	SAGÑAY	0.5912	0.0450	0.2052	0.0253	0.0929	0.015
	SAN FERNANDO	0.4702	0.0440	0.1478	0.0218	0.0626	0.012
	SAN JOSE	0.4209	0.0389	0.1279	0.0182	0.0532	0.009
	SIPOCOT	0.5230	0.0293	0.1738	0.0152	0.0764	0.008
	SIRUMA	0.5876	0.0526	0.1984	0.0289	0.0879	0.016
	TIGAON	0.5107	0.0367	0.1708	0.0187	0.0757	0.010
	TINAMBAC	0.5817	0.0314	0.1972	0.0188	0.0876	0.01
Catanduanes	BAGAMANOC	0.5555	0.0475	0.1941	0.0268	0.0885	0.016
	BARAS	0.4811	0.0412	0.1499	0.0198	0.0631	0.010
	BATO	0.3934	0.0459	0.1205	0.0201	0.0505	0.010

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		CARAMORAN	0.5729	0.0370	0.2025	0.0236	0.0932	0.014
		GIGMOTO	0.4276	0.0682	0.1286	0.0301	0.0529	0.015
		PANDAN	0.5961	0.0346	0.2142	0.0200	0.0992	0.012
		PANGANIBAN (PAYO)	0.4228	0.0372	0.1311	0.0175	0.0548	0.009
		SAN ANDRES (CALOLBON)	0.4664	0.0398	0.1487	0.0197	0.0638	0.010
		SAN MIGUEL	0.4641	0.0406	0.1470	0.0195	0.0630	0.010
		VIGA	0.5389	0.0339	0.1865	0.0184	0.0846	0.010
		VIRAC (Capital)	0.2756	0.0208	0.0765	0.0077	0.0300	0.003
	Masbate	AROROY	0.6760	0.0294	0.2583	0.0195	0.1246	0.012
		BALENO	0.6453	0.0332	0.2454	0.0214	0.1182	0.014
		BALUD	0.6892	0.0363	0.2678	0.0240	0.1303	0.015
		BATUAN	0.5763	0.0536	0.2026	0.0310	0.0926	0.018
		CATAINGAN	0.6285	0.0338	0.2322	0.0212	0.1096	0.013
		CAWAYAN	0.7401	0.0304	0.2985	0.0236	0.1487	0.015
		CLAVERIA	0.6979	0.0336	0.2716	0.0249	0.1322	0.016
		DIMASALANG	0.6415	0.0408	0.2446	0.0275	0.1178	0.017
		ESPERANZA	0.6905	0.0349	0.2671	0.0237	0.1299	0.01
		MANDAON	0.6332	0.0348	0.2321	0.0218	0.1084	0.01
		CITY OF MASBATE (Capital)	0.4118	0.0345	0.1333	0.0159	0.0579	0.008
		MILAGROS	0.6573	0.0341	0.2491	0.0239	0.1191	0.01
		MOBO	0.6472	0.0380	0.2398	0.0244	0.1131	0.01
		MONREAL	0.6885	0.0561	0.2713	0.0368	0.1333	0.02
		PALANAS	0.6317	0.0366	0.2348	0.0225	0.1113	0.01
		PIO V. CORPUZ (LIMBUHAN)	0.6099	0.0439	0.2182	0.0266	0.1008	0.01
		PLACER	0.7211	0.0301	0.2901	0.0237	0.1445	0.01
		SAN FERNANDO	0.5724	0.0418	0.1988	0.0229	0.0900	0.01
		SAN JACINTO	0.5731	0.0388	0.2048	0.0242	0.0950	0.01
		SAN PASCUAL	0.7552	0.0360	0.3044	0.0294	0.1514	0.02
		USON	0.6794	0.0300	0.2620	0.0201	0.1272	0.01
	Sorsogon	BARCELONA	0.4485	0.0396	0.1357	0.0188	0.0559	0.01
		BULAN	0.5079	0.0308	0.1649	0.0155	0.0712	0.00
		BULUSAN	0.4912	0.0414	0.1565	0.0208	0.0669	0.01
		CASIGURAN	0.5272	0.0490	0.1701	0.0241	0.0733	0.01
		CASTILLA	0.6138	0.0371	0.2140	0.0211	0.0967	0.01
		DONSOL	0.6514	0.0309	0.2404	0.0212	0.1129	0.01
		GUBAT	0.4092	0.0316	0.1210	0.0129	0.0490	0.00
		IROSIN	0.4863	0.0385	0.1548	0.0187	0.0661	0.01
		JUBAN	0.5610	0.0383	0.1908	0.0224	0.0851	0.01
		MAGALLANES	0.5796	0.0360	0.1970	0.0215	0.0874	0.01
		MATNOG	0.5673	0.0320	0.1880	0.0176	0.0821	0.01
		PILAR	0.6186	0.0316	0.2149	0.0187	0.0968	0.01
		PRIETO DIAZ	0.5811	0.0446	0.1987	0.0246	0.0889	0.01
		SANTA MAGDALENA	0.4086	0.0549	0.1185	0.0242	0.0472	0.012
		CITY OF SORSOGON (Capital)	0.2841	0.0295	0.0755	0.0109	0.0284	0.00
egion VI	Aklan	ALTAVAS	0.4907	0.0496	0.1569	0.0263	0.0668	0.01
		BALETE	0.6359	0.0575	0.2295	0.0374	0.1066	0.02
		BANGA	0.4632	0.0281	0.1541	0.0152	0.0679	0.00
		BATAN	0.5304	0.0452	0.1795	0.0259	0.0800	0.01

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		BURUANGA	0.5959	0.0489	0.2172	0.0304	0.1019	0.019
		IBAJAY	0.4755	0.0354	0.1570	0.0179	0.0689	0.010
		KALIBO (Capital)	0.1705	0.0299	0.0408	0.0098	0.0143	0.004
		LEZO	0.4235	0.0400	0.1354	0.0207	0.0581	0.011
		LIBACAO	0.7462	0.0313	0.3145	0.0260	0.1615	0.019
		MADALAG	0.7558	0.0327	0.3248	0.0266	0.1693	0.019
		MAKATO	0.4814	0.0351	0.1638	0.0201	0.0737	0.012
		MALAY	0.3227	0.0579	0.0891	0.0213	0.0344	0.010
		MALINAO	0.5980	0.0312	0.2232	0.0193	0.1063	0.012
		NABAS	0.5177	0.0401	0.1754	0.0212	0.0785	0.012
		NEW WASHINGTON	0.4249	0.0400	0.1350	0.0199	0.0578	0.011
		NUMANCIA	0.3110	0.0362	0.0927	0.0165	0.0382	0.008
		TANGALAN	0.5364	0.0434	0.1839	0.0248	0.0825	0.014
	Antique	ANINI-Y	0.4170	0.0383	0.1232	0.0174	0.0498	0.009
		BARBAZA	0.5435	0.0364	0.1854	0.0195	0.0829	0.011
		BELISON	0.3073	0.0565	0.0841	0.0204	0.0326	0.009
		BUGASONG	0.5385	0.0362	0.1861	0.0199	0.0841	0.011
		CALUYA	0.5697	0.0513	0.1951	0.0271	0.0871	0.015
		CULASI	0.5318	0.0271	0.1807	0.0153	0.0806	0.00
		TOBIAS FORNIER (DAO)	0.4547	0.0305	0.1436	0.0152	0.0610	0.008
		HAMTIC	0.4352	0.0276	0.1325	0.0127	0.0546	0.00
		LAUA-AN	0.5848	0.0306	0.2036	0.0169	0.0919	0.01
		LIBERTAD	0.5308	0.0417	0.1801	0.0225	0.0803	0.01
		PANDAN	0.4468	0.0355	0.1393	0.0177	0.0586	0.00
		PATNONGON	0.5355	0.0378	0.1784	0.0191	0.0785	0.01
		SAN JOSE (Capital)	0.1904	0.0236	0.0462	0.0082	0.0163	0.00
		SAN REMIGIO	0.6473	0.0305	0.2391	0.0202	0.1124	0.01
		SEBASTE	0.4912	0.0602	0.1572	0.0307	0.0672	0.01
		SIBALOM	0.4476	0.0255	0.1394	0.0122	0.0585	0.006
		TIBIAO	0.5320	0.0442	0.1828	0.0238	0.0821	0.01
		VALDERRAMA	0.5564	0.0383	0.1891	0.0220	0.0842	0.01
	Capiz	CUARTERO	0.5332	0.0381	0.1802	0.0198	0.0801	0.01
		DAO	0.5570	0.0359	0.1895	0.0210	0.0846	0.01
		DUMALAG	0.5183	0.0366	0.1697	0.0192	0.0736	0.01
		DUMARAO	0.5902	0.0343	0.2121	0.0213	0.0987	0.01
		IVISAN	0.5111	0.0425	0.1701	0.0227	0.0749	0.01
		JAMINDAN	0.6350	0.0349	0.2338	0.0226	0.1096	0.01
		MA-AYON	0.6239	0.0323	0.2270	0.0200	0.1059	0.01
		MAMBUSAO	0.5027	0.0307	0.1696	0.0169	0.0755	0.01
		PANAY	0.5350	0.0303	0.1789	0.0169	0.0787	0.01
		PANITAN	0.4962	0.0338	0.1577	0.0167	0.0671	0.00
		PILAR	0.5939	0.0396	0.2125	0.0233	0.0982	0.01
		PONTEVEDRA	0.5418	0.0354	0.1845	0.0200	0.0823	0.01
		PRESIDENT ROXAS	0.5181	0.0497	0.1727	0.0258	0.0762	0.01
		ROXAS CITY (Capital)	0.2588	0.0253	0.0680	0.0093	0.0254	0.004
		SAPI-AN	0.5015	0.0554	0.1624	0.0288	0.0701	0.01
		SIGMA	0.4734	0.0444	0.1470	0.0213	0.0617	0.01
		TAPAZ	0.5909	0.0259	0.2082	0.0153	0.0951	0.00
	lloilo	AJUY	0.5608	0.0344	0.1941	0.0189	0.0879	0.01
		ALIMODIAN	0.4816	0.0339	0.1557	0.0159	0.0670	0.00
		ANILAO	0.5580	0.0417	0.1917	0.0227	0.0863	0.01

Region Pro	ovince	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		BADIANGAN	0.4299	0.0378	0.1316	0.0168	0.0549	0.008
		BALASAN	0.6009	0.0372	0.2187	0.0223	0.1024	0.013
		BANATE	0.5756	0.0365	0.2054	0.0237	0.0950	0.015
		BAROTAC NUEVO	0.4288	0.0341	0.1345	0.0166	0.0569	0.009
		BAROTAC VIEJO	0.5592	0.0318	0.1969	0.0176	0.0900	0.010
		BATAD	0.5792	0.0385	0.2013	0.0245	0.0910	0.015
		BINGAWAN	0.5591	0.0569	0.1917	0.0293	0.0862	0.017
		CABATUAN	0.3453	0.0260	0.0963	0.0106	0.0375	0.005
		CALINOG	0.5369	0.0203	0.1931	0.0133	0.0901	0.008
		CARLES	0.7182	0.0282	0.2874	0.0216	0.1429	0.014
		CONCEPCION	0.6713	0.0356	0.2606	0.0246	0.1272	0.015
		DINGLE	0.3882	0.0336	0.1149	0.0147	0.0467	0.007
		DUEÑAS	0.5218	0.0291	0.1722	0.0150	0.0752	0.008
		DUMANGAS	0.4132	0.0319	0.1276	0.0152	0.0536	0.008
		ESTANCIA	0.4871	0.0466	0.1561	0.0224	0.0669	0.012
		GUIMBAL	0.3090	0.0336	0.0854	0.0136	0.0332	0.006
		IGBARAS	0.5198	0.0328	0.1692	0.0172	0.0733	0.009
		ILOILO CITY (Capital)	0.1067	0.0104	0.0233	0.0030	0.0077	0.001
		JANIUAY	0.5325	0.0246	0.1865	0.0145	0.0854	0.008
		LAMBUNAO	0.5382	0.0245	0.1864	0.0148	0.0845	0.009
		LEGANES	0.3380	0.0357	0.0993	0.0155	0.0403	0.008
		LEMERY	0.6453	0.0291	0.2429	0.0190	0.1165	0.012
		LEON	0.5050	0.0237	0.1662	0.0119	0.0727	0.006
		MAASIN	0.5178	0.0302	0.1793	0.0171	0.0813	0.010
		MIAGAO	0.4003	0.0241	0.1183	0.0106	0.0479	0.005
		MINA	0.4066	0.0340	0.1223	0.0154	0.0503	0.008
		NEW LUCENA	0.3480	0.0412	0.0999	0.0167	0.0399	0.008
		OTON	0.2921	0.0301	0.0788	0.0113	0.0300	0.005
		CITY OF PASSI	0.5067	0.0253	0.1708	0.0135	0.0761	0.008
		PAVIA	0.1406	0.0272	0.0311	0.0080	0.0103	0.003
		POTOTAN	0.3515	0.0297	0.1023	0.0132	0.0413	0.006
		SAN DIONISIO	0.6503	0.0303	0.2473	0.0203	0.1190	0.013
		SAN ENRIQUE	0.5652	0.0276	0.1953	0.0167	0.0881	0.010
		SAN JOAQUIN	0.5776	0.0251	0.2037	0.0141	0.0932	0.008
		SAN MIGUEL	0.2352	0.0368	0.0585	0.0121	0.0211	0.005
		SAN RAFAEL	0.5680	0.0585	0.1968	0.0312	0.0888	0.017
		SANTA BARBARA	0.2868	0.0262	0.0774	0.0106	0.0296	0.005
		SARA	0.5190	0.0341	0.1733	0.0183	0.0764	0.010
		TIGBAUAN	0.3368	0.0260	0.0941	0.0108	0.0368	0.005
		TUBUNGAN	0.5728	0.0280	0.1983	0.0178	0.0900	0.011
		ZARRAGA	0.2785	0.0360	0.0743	0.0143	0.0281	0.006
Negro		BACOLOD CITY	0.0912	0.0168	0.0188	0.0045	0.0059	0.001
Occid	lental	(Capital)						
		BAGO CITY	0.4613	0.0388	0.1452	0.0196	0.0616	0.011
		BINALBAGAN	0.4680	0.0455	0.1596	0.0271	0.0714	0.016
		CADIZ CITY	0.4910	0.0388	0.1585	0.0206	0.0685	0.011
		CALATRAVA	0.6744	0.0281	0.2583	0.0194	0.1250	0.012
		CANDONI	0.6444	0.0532	0.2441	0.0355	0.1172	0.023
		CAUAYAN	0.6621	0.0343	0.2505	0.0232	0.1200	0.015
		ENRIQUE B. MAGALONA (SARAVIA)	0.4375	0.0372	0.1330	0.0175	0.0550	0.009

Region	Province	Area Estimates Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		CITY OF ESCALANTE	0.5070	0.0439	0.1661	0.0206	0.0725	0.0112
		CITY OF HIMAMAYLAN	0.5225	0.0437	0.1769	0.0250	0.0789	0.0151
		HINIGARAN	0.4540	0.0357	0.1407	0.0170	0.0590	0.0093
		HINOBA-AN (ASIA)	0.5705	0.0489	0.1984	0.0270	0.0898	0.0159
		ILOG	0.5472	0.0415	0.1934	0.0259	0.0890	0.0164
		ISABELA	0.5948	0.0345	0.2168	0.0213	0.1017	0.0134
		CITY OF KABANKALAN	0.6012	0.0361	0.2200	0.0246	0.1033	0.0160
		LA CARLOTA CITY	0.3281	0.0416	0.0955	0.0177	0.0386	0.0091
		LA CASTELLANA	0.5779	0.0551	0.1992	0.0291	0.0897	0.0167
		MANAPLA	0.4129	0.0564	0.1210	0.0242	0.0489	0.0126
		MOISES PADILLA (MAGALLON)	0.6588	0.0447	0.2484	0.0352	0.1188	0.0247
		MURCIA	0.5401	0.0392	0.1792	0.0225	0.0788	0.0135
		PONTEVEDRA	0.4369	0.0436	0.1346	0.0211	0.0564	0.0116
		PULUPANDAN	0.3087	0.0407	0.0826	0.0145	0.0313	0.0067
		SAGAY CITY	0.5189	0.0412	0.1741	0.0214	0.0774	0.0121
		SAN CARLOS CITY	0.5797	0.0416	0.2133	0.0265	0.1008	0.0166
		SAN ENRIQUE	0.3233	0.0586	0.0886	0.0228	0.0342	0.0113
		SILAY CITY	0.3505	0.0430	0.1023	0.0189	0.0415	0.0100
		CITY OF SIPALAY	0.5920	0.0405	0.2168	0.0242	0.1017	0.0150
		CITY OF TALISAY	0.2981	0.0310	0.0832	0.0131	0.0326	0.0067
		TOBOSO	0.6161	0.0440	0.2254	0.0269	0.1060	0.0172
		VALLADOLID	0.3459	0.0433	0.0980	0.0176	0.0388	0.0088
		CITY OF VICTORIAS	0.2895	0.0376	0.0789	0.0147	0.0304	0.0072
		SALVADOR BENEDICTO	0.7215	0.0748	0.2807	0.0533	0.1369	0.0347
	Guimaras	BUENAVISTA	0.3686	0.0311	0.1049	0.0130	0.0414	0.0066
		JORDAN	0.3698	0.0423	0.1055	0.0185	0.0418	0.0096
		NUEVA VALENCIA	0.4004	0.0400	0.1173	0.0171	0.0472	0.0088
		SAN LORENZO	0.5345	0.0538	0.1736	0.0293	0.0749	0.0172
		SIBUNAG	0.5289	0.0504	0.1722	0.0271	0.0746	0.0155
Region VII	Bohol	ALBURQUERQUE	0.3158	0.0471	0.0877	0.0197	0.0343	0.0103
		ALICIA	0.5317	0.0571	0.1761	0.0301	0.0774	0.0169
		ANDA	0.4625	0.0510	0.1444	0.0255	0.0611	0.0144
		ANTEQUERA	0.4072	0.0426	0.1199	0.0194	0.0488	0.0103
		BACLAYON	0.2495	0.0338	0.0651	0.0124	0.0244	0.0059
		BALILIHAN	0.4533	0.0417	0.1369	0.0202	0.0564	0.0109
		BATUAN	0.4875	0.0625	0.1516	0.0309	0.0635	0.0166
		BILAR	0.3987	0.0486	0.1191	0.0234	0.0490	0.0127
		BUENAVISTA	0.7006	0.0290	0.2789	0.0230	0.1381	0.0161
		CALAPE	0.4011	0.0358	0.1192	0.0158	0.0487	0.0081
		CANDIJAY	0.4457	0.0435	0.1354	0.0192	0.0561	0.0099
		CARMEN	0.5463	0.0413	0.1812	0.0221	0.0797	0.0127
		CATIGBIAN	0.4723	0.0406	0.1455	0.0205	0.0610	0.0114
		CLARIN	0.4636	0.0392	0.1497	0.0192	0.0650	0.0107
		CORELLA	0.3054	0.0590	0.0820	0.0222	0.0311	0.0105
		CORTES	0.3091	0.0459	0.0850	0.0182	0.0329	0.0089
		DAGOHOY	0.6094	0.0462	0.2154	0.0269	0.0987	0.0159
		DANAO	0.6538	0.0461	0.2434	0.0292	0.1155	0.0186
		DAUIS	0.3362	0.0517	0.0917	0.0206	0.0355	0.0103

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		DIMIAO	0.4626	0.0405	0.1452	0.0187	0.0616	0.010
		DUERO	0.3949	0.0391	0.1170	0.0185	0.0478	0.010
		GARCIA HERNANDEZ	0.3833	0.0396	0.1131	0.0170	0.0461	0.008
		GUINDULMAN	0.4581	0.0437	0.1426	0.0206	0.0602	0.011
		INABANGA	0.5405	0.0285	0.1820	0.0153	0.0809	0.009
		JAGNA	0.3231	0.0338	0.0884	0.0134	0.0340	0.006
		JETAFE	0.6793	0.0379	0.2569	0.0275	0.1227	0.018
		LILA	0.4278	0.0574	0.1311	0.0266	0.0549	0.014
		LOAY	0.3056	0.0344	0.0839	0.0139	0.0326	0.00
		LOBOC	0.3349	0.0352	0.0934	0.0147	0.0367	0.00
		LOON	0.4664	0.0327	0.1480	0.0153	0.0635	0.00
		MABINI	0.5639	0.0393	0.1932	0.0227	0.0869	0.01
		MARIBOJOC	0.2764	0.0428	0.0750	0.0173	0.0290	0.00
		PANGLAO	0.3611	0.0517	0.1019	0.0213	0.0404	0.01
		PILAR	0.5736	0.0482	0.1931	0.0263	0.0856	0.01
		PRES. CARLOS P. GARCIA (PITOGO)	0.6628	0.0370	0.2481	0.0243	0.1184	0.01
		SAGBAYAN (BORJA)	0.4483	0.0434	0.1352	0.0191	0.0557	0.01
		SAN ISIDRO	0.5471	0.0571	0.1796	0.0286	0.0783	0.01
		SAN MIGUEL	0.5834	0.0470	0.2020	0.0269	0.0912	0.01
		SEVILLA	0.4758	0.0580	0.1438	0.0270	0.0591	0.01
		SIERRA BULLONES	0.4485	0.0374	0.1363	0.0180	0.0566	0.00
		SIKATUNA	0.3541	0.0625	0.0996	0.0248	0.0393	0.01
		TAGBILARAN CITY (Capital)	0.0777	0.0170	0.0162	0.0046	0.0051	0.00
		TALIBON	0.5718	0.0398	0.2018	0.0220	0.0926	0.01
		TRINIDAD	0.5958	0.0368	0.2131	0.0234	0.0988	0.01
		TUBIGON	0.3794	0.0371	0.1102	0.0163	0.0444	0.00
		UBAY	0.5512	0.0353	0.1866	0.0196	0.0829	0.01
		VALENCIA	0.4509	0.0373	0.1393	0.0182	0.0584	0.00
		<b>BIEN UNIDO</b>	0.5636	0.0451	0.1901	0.0243	0.0843	0.01
	Cebu	ALCANTARA	0.6227	0.0538	0.2245	0.0334	0.1041	0.02
		ALCOY	0.5980	0.0658	0.2174	0.0401	0.1017	0.02
		ALEGRIA	0.6409	0.0524	0.2364	0.0337	0.1115	0.02
		ALOGUINSAN	0.5947	0.0518	0.2049	0.0310	0.0923	0.01
		ARGAO	0.4765	0.0318	0.1556	0.0159	0.0680	0.00
		ASTURIAS	0.5806	0.0413	0.2030	0.0220	0.0927	0.01
		BADIAN	0.5692	0.0367	0.1987	0.0204	0.0905	0.01
		BALAMBAN	0.4945	0.0364	0.1582	0.0180	0.0679	0.01
		BANTAYAN	0.5524	0.0369	0.1859	0.0212	0.0824	0.01
		BARILI	0.6102	0.0337	0.2165	0.0206	0.0997	0.01
		BOGO	0.4342	0.0367	0.1331	0.0174	0.0556	0.00
		BOLJOON	0.6311	0.0521	0.2348	0.0336	0.1118	0.02
		BORBON	0.5745	0.0480	0.1975	0.0273	0.0891	0.01
		CARCAR	0.4990	0.0479	0.1590	0.0236	0.0680	0.01
		CARMEN	0.3913	0.0426	0.1144	0.0191	0.0463	0.01
		CATMON	0.4543	0.0488	0.1427	0.0224	0.0605	0.01
		CEBU CITY (Capital)	0.1347	0.0166	0.0306	0.0051	0.0104	0.00
		COMPOSTELA	0.3669	0.0480	0.1035	0.0191	0.0406	0.00
		CONSOLACION	0.2192	0.0340	0.0537	0.0116	0.0192	0.00
		CORDOBA	0.3831	0.0571	0.1089	0.0248	0.0430	0.01

#### Poverty SE SE SE Region Province Municipality Poverty Poverty Incidence Severity Gap DAANBANTAYAN 0.0193 0.5449 0.0352 0.1843 0.0820 0.0114 DALAGUETE 0.5621 0.0403 0.1910 0.0226 0.0854 0.0133 DANAO CITY 0.3713 0.0374 0.1077 0.0154 0.0434 0.0076 DUMANJUG 0.5752 0.0342 0.2007 0.0204 0.0916 0.0125 GINATILAN 0.5898 0.0469 0.2160 0.0275 0.1017 0.0170 LAPU-LAPU CITY 0.0262 0.0085 0.0037 0.1874 0.0440 0.0152 (OPON) 0.2837 0.0457 0.0743 0.0159 0.0277 0.0072 LILOAN MADRIDEJOS 0.5277 0.0441 0.1752 0.0249 0.0771 0.0149 MALABUYOC 0 6 1 9 1 0.0468 0.2244 0.0305 0.1042 0.0196 MANDAUE CITY 0.1451 0.0214 0.0326 0.0066 0.0110 0.0028 **MEDELLIN** 0.5125 0.0438 0.1663 0.0233 0.0722 0.0134 MINGLANILLA 0.2273 0.0338 0.0571 0.0122 0.0208 0.0057 MOALBOAL 0.4848 0.0495 0.1563 0.0250 0.0677 0.0142 NAGA 0.0067 0.3785 0.0275 0.1102 0.0125 0.0444 OSLOB 0.5490 0.0405 0.1860 0.0223 0.0830 0.0131 PII AR 0.4378 0 0542 0.1311 0.0253 0 0539 0 0134 PINAMUNGAHAN 0.0387 0.1855 0.0202 0.0825 0.0117 0.5523 PORO 0.5365 0.0373 0 1795 0.0218 0.0793 0.0132 RONDA 0.5340 0.0510 0.1811 0.0279 0.0809 0.0162 SAMBOAN 0.5483 0.0478 0.1922 0.0260 0.0881 0.0157 SAN FERNANDO 0.4530 0.0407 0.1390 0.0188 0.0578 0.0100 SAN FRANCISCO 0.6202 0.0471 0.2235 0.0303 0.1039 0.0189 SAN REMIGIO 0.5250 0.0361 0.1732 0.0195 0.0760 0.0111 SANTA FE 0.6046 0.0555 0.2103 0.0326 0.0948 0.0196 SANTANDER 0.5402 0.0520 0.1831 0.0284 0.0814 0.0164 SIBONGA 0.5036 0.0307 0.1643 0.0162 0.0715 0.0094 SOGOD 0.5040 0.0439 0.1639 0.0234 0.0713 0.0137 TABOGON 0.5759 0.0412 0.1992 0.0249 0.0903 0.0150 TABUELAN 0.5757 0.0568 0.1987 0.0317 0.0898 0.0184 CITY OF TALISAY 0.1821 0.0272 0.0433 0.0094 0.0152 0.0044 TOLEDO CITY 0.3846 0.0341 0.1142 0.0145 0.0467 0.0074 TUBURAN 0.6466 0.0252 0.2429 0.0172 0.1161 0.0111 TUDELA 0.4720 0.0592 0.1496 0.0269 0.0639 0.0143 Negros AMLAN (AYUQUITAN) 0.3600 0.0652 0.1012 0.0272 0.0395 0.0136 Oriental AYUNGON 0.6264 0.0396 0.2223 0.0260 0.1017 0.0162 BACONG 0.2833 0.0366 0.0725 0.0122 0.0265 0.0055 BAIS CITY 0.5104 0.0365 0.1647 0.0190 0.0708 0.0107 BASAY 0.6062 0.0651 0.2095 0.0352 0.0940 0.0201 **CITY OF BAYAWAN** 0.5504 0.0409 0.1825 0.0228 0.0797 0.0132 (TULONG) **BINDOY (PAYABON)** 0.0506 0.2469 0.0328 0.1158 0.0205 0.6673 CANLAON CITY 0.4683 0.0615 0.1444 0.0289 0.0602 0.0155 DAUIN 0.3718 0.0405 0.1054 0.0167 0.0416 0.0085 DUMAGUETE CITY 0.1182 0.0207 0.0266 0.0064 0.0089 0.0027 (Capital) **GUIHULNGAN** 0.6211 0.0356 0.2202 0.0227 0.1006 0.0141 JIMALALUD 0.0987 0.0156 0.6197 0.0416 0.2177 0.0259 LA LIBERTAD 0.6685 0.0331 0.2483 0.0226 0.1172 0.0148 MABINAY 0.5683 0.0391 0.1894 0.0204 0.0832 0.0116 MANJUYOD 0.5480 0.1799 0.0196 0.0114 0.0370 0.0781 PAMPLONA 0 5541 0.0521 0.1801 0 0259 0.0774 0.0143

Region	al level Small A Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		SAN JOSE	0.3930	0.0488	0.1120	0.0205	0.0441	0.0103
		SANTA CATALINA	0.5787	0.0434	0.1963	0.0252	0.0869	0.0149
		SIATON	0.5831	0.0406	0.1980	0.0247	0.0879	0.0149
		SIBULAN	0.2216	0.0393	0.0552	0.0136	0.0199	0.0062
		CITY OF TANJAY	0.3794	0.0354	0.1098	0.0173	0.0436	0.0094
		TAYASAN	0.6211	0.0380	0.2162	0.0238	0.0971	0.0146
		VALENCIA (LUZURRIAGA)	0.3366	0.0370	0.0925	0.0151	0.0355	0.0074
		VALLEHERMOSO	0.6603	0.0473	0.2420	0.0310	0.1127	0.0197
		ZAMBOANGUITA	0.4697	0.0610	0.1442	0.0314	0.0597	0.0176
	Siquijor	ENRIQUE	0.2841	0.0462	0.0750	0.0175	0.0282	0.0086
		VILLANUEVA						
		LARENA	0.1620	0.0259	0.0377	0.0081	0.0130	0.0036
		LAZI	0.3635	0.0461	0.1038	0.0191	0.0414	0.0094
		MARIA	0.3512	0.0445	0.1008	0.0186	0.0404	0.0094
		SAN JUAN	0.4289	0.0479	0.1254	0.0226	0.0506	0.0121
		SIQUIJOR (Capital)	0.2646	0.0299	0.0691	0.0108	0.0259	0.0052
Region VIII	Eastern Samar	ARTECHE	0.5470	0.0492	0.1817	0.0275	0.0795	0.0161
		BALANGIGA	0.4690	0.0500	0.1504	0.0258	0.0643	0.0150
		BALANGKAYAN	0.4406	0.0536	0.1365	0.0252	0.0572	0.0135
		BORONGAN (Capital)	0.2758	0.0270	0.0758	0.0106	0.0294	0.0052
		CAN-AVID	0.4448	0.0457	0.1343	0.0215	0.0553	0.0114
		DOLORES	0.4787	0.0329	0.1478	0.0164	0.0616	0.0090
		GENERAL MACARTHUR	0.5654	0.0426	0.1960	0.0240	0.0882	0.0139
		GIPORLOS	0.5333	0.0461	0.1837	0.0258	0.0828	0.0152
		GUIUAN	0.4196	0.0290	0.1304	0.0140	0.0551	0.0077
		HERNANI	0.5450	0.0541	0.1820	0.0314	0.0800	0.0187
		JIPAPAD	0.6559	0.0530	0.2466	0.0350	0.1175	0.0225
		LAWAAN	0.3632	0.0500	0.1065	0.0218	0.0430	0.0113
		LLORENTE	0.4739	0.0392	0.1504	0.0203	0.0639	0.0115
		MASLOG	0.6404	0.0727	0.2204	0.0391	0.0988	0.0231
		MAYDOLONG	0.4745	0.0416	0.1529	0.0207	0.0657	0.0115
		MERCEDES	0.3638	0.0436	0.1068	0.0199	0.0433	0.0106
		ORAS	0.4566	0.0359	0.1405	0.0164	0.0585	0.0085
		QUINAPONDAN	0.5147	0.0431	0.1665	0.0238	0.0715	0.0136
		SALCEDO	0.5025	0.0381	0.1667	0.0200	0.0732	0.0113
		SAN JULIAN	0.3023	0.0518	0.1417	0.0135	0.0604	0.0136
		SAN POLICARPO	0.4769	0.0498	0.1488	0.0243	0.0625	0.0130
		SULAT	0.4709	0.0498	0.0900	0.0203	0.0025	0.00148
		TAFT				0.0108		0.0089
	Louto		0.3986	0.0395	0.1178		0.0479	0.0094
	Leyte	ABUYOG	0.4260	0.0307	0.1272	0.0136	0.0520	
			0.4580	0.0337	0.1440	0.0165	0.0609	0.0091
		ALBUERA	0.4410	0.0484	0.1346	0.0212	0.0559	0.0111
		BABATNGON	0.5204	0.0394	0.1721	0.0216	0.0754	0.0125
		BARUGO	0.4788	0.0325	0.1530	0.0161	0.0653	0.0089
		BATO	0.5680	0.0356	0.2010	0.0219	0.0920	0.0134
		BAYBAY	0.3583	0.0251	0.1017	0.0107	0.0402	0.0054
		BURAUEN	0.4171	0.0265	0.1274	0.0115	0.0530	0.0060
		CALUBIAN	0.5539	0.0330	0.1896	0.0191	0.0850	0.0114
		CAPOOCAN	0.5565	0.0417	0.1881	0.0221	0.0835	0.0126
		CARIGARA	0.4375	0.0277	0.1369	0.0132	0.0580	0.0072

#### H 1 M .... . . . ..... all A Feti

Region Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
	DAGAMI	0.4663	0.0291	0.1475	0.0143	0.0626	0.0079
	DULAG	0.4557	0.0385	0.1468	0.0195	0.0634	0.0111
	HILONGOS	0.5169	0.0317	0.1726	0.0175	0.0760	0.0100
	HINDANG	0.4200	0.0410	0.1286	0.0188	0.0535	0.0100
	INOPACAN	0.3886	0.0467	0.1156	0.0202	0.0474	0.0104
	ISABEL	0.2781	0.0374	0.0739	0.0139	0.0279	0.0067
	JARO	0.4531	0.0284	0.1415	0.0132	0.0596	0.0072
	JAVIER (BUGHO)	0.4979	0.0441	0.1594	0.0214	0.0683	0.0115
	JULITA	0.4801	0.0453	0.1510	0.0216	0.0639	0.0116
	KANANGA	0.5149	0.0473	0.1670	0.0238	0.0721	0.0131
	LA PAZ	0.4428	0.0344	0.1366	0.0161	0.0570	0.0087
	LEYTE	0.6485	0.0415	0.2403	0.0262	0.1133	0.0163
	MACARTHUR	0.4495	0.0387	0.1397	0.0188	0.0588	0.0105
	MAHAPLAG	0.4899	0.0456	0.1528	0.0230	0.0642	0.0129
	MATAG-OB	0.5370	0.0479	0.1828	0.0250	0.0820	0.0145
	MATALOM	0.5293	0.0381	0.1774	0.0205	0.0786	0.0119
	MAYORGA	0.5021	0.0468	0.1635	0.0241	0.0707	0.0137
	MERIDA	0.3880	0.0412	0.1147	0.0188	0.0469	0.0102
	ORMOC CITY	0.3435	0.0227	0.0985	0.0095	0.0392	0.0048
	PALO	0.2741	0.0288	0.0740	0.0109	0.0282	0.0052
	PALOMPON	0.3814	0.0283	0.1124	0.0123	0.0457	0.0063
	PASTRANA	0.6214	0.0361	0.2258	0.0218	0.1051	0.0135
	SAN ISIDRO	0.6319	0.0450	0.2276	0.0299	0.1054	0.0191
	SAN MIGUEL	0.5024	0.0397	0.1662	0.0214	0.0728	0.0126
	SANTA FE	0.4968	0.0401	0.1573	0.0210	0.0668	0.0118
	TABANGO	0.5913	0.0548	0.2071	0.0311	0.0941	0.0184
	TABONTABON	0.5328	0.0486	0.1786	0.0249	0.0787	0.0142
	TACLOBAN CITY (Capital)	0.0985	0.0147	0.0212	0.0044	0.0069	0.0018
	TANAUAN	0.3866	0.0324	0.1167	0.0134	0.0482	0.0068
	TOLOSA	0.2874	0.0444	0.0773	0.0166	0.0294	0.0079
	TUNGA	0.2633	0.0438	0.0718	0.0175	0.0276	0.0087
	VILLABA	0.5160	0.0411	0.1711	0.0221	0.0751	0.0126
Northern Samar	ALLEN	0.3775	0.0422	0.1108	0.0189	0.0448	0.0100
	BIRI	0.5453	0.0657	0.1788	0.0340	0.0779	0.0189
	BOBON	0.4597	0.0511	0.1442	0.0250	0.0611	0.0144
	CAPUL	0.4685	0.0561	0.1465	0.0257	0.0618	0.0137
	CATARMAN (Capital)	0.3792	0.0274	0.1128	0.0124	0.0459	0.0066
	CATUBIG	0.6218	0.0314	0.2288	0.0206	0.1073	0.0130
	GAMAY	0.5322	0.0491	0.1755	0.0275	0.0765	0.0158
	LAOANG	0.5503	0.0302	0.1869	0.0169	0.0831	0.0098
	LAPINIG	0.6260	0.0477	0.2243	0.0313	0.1031	0.0200
	LAS NAVAS	0.6536	0.0349	0.2402	0.0231	0.1123	0.0145
	LAVEZARES	0.5531	0.0433	0.1854	0.0240	0.0815	0.0138
	MAPANAS	0.6398	0.0447	0.2322	0.0295	0.1080	0.0192
	MONDRAGON	0.5752	0.0475	0.1925	0.0269	0.0844	0.0158
	PALAPAG	0.6013	0.0370	0.2137	0.0224	0.0978	0.0137
	PAMBUJAN	0.6092	0.0479	0.2083	0.0269	0.0926	0.0155
	ROSARIO	0.5035	0.0545	0.1615	0.0275	0.0689	0.0152
	SAN ANTONIO	0.4412	0.0548	0.1438	0.0300	0.0627	0.0176
	SAN ISIDRO	0.4022	0.0545	0.1153	0.0237	0.0456	0.0120
	SAN JOSE	0.4708	0.0451	0.1491	0.0215	0.0633	0.0117

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		SAN ROQUE	0.5825	0.0548	0.1992	0.0318	0.0888	0.019
		SAN VICENTE	0.4777	0.0747	0.1499	0.0359	0.0633	0.019
		SILVINO LOBOS	0.6793	0.0468	0.2527	0.0312	0.1192	0.020
		VICTORIA	0.4192	0.0450	0.1259	0.0221	0.0519	0.012
		LOPE DE VEGA	0.6123	0.0565	0.2150	0.0298	0.0975	0.017
	Western Samar	ALMAGRO	0.5258	0.0427	0.1733	0.0221	0.0756	0.012
	Gamai	BASEY	0.5005	0.0335	0.1643	0.0176	0.0717	0.010
		CALBAYOG CITY	0.4370	0.0253	0.1334	0.0117	0.0552	0.006
		CALBIGA	0.5788	0.0325	0.2029	0.0189	0.0921	0.011
		CATBALOGAN (Capital)	0.3575	0.0290	0.1065	0.0126	0.0435	0.006
		DARAM	0.7105	0.0291	0.2809	0.0214	0.1385	0.014
		GANDARA	0.6451	0.0301	0.2372	0.0195	0.1112	0.012
		HINABANGAN	0.4546	0.0453	0.1417	0.0211	0.0598	0.011
		JIABONG	0.5719	0.0395	0.2003	0.0227	0.0914	0.013
		MARABUT	0.5015	0.0422	0.1612	0.0220	0.0694	0.012
		MATUGUINAO	0.7216	0.0445	0.2793	0.0304	0.1353	0.020
		MOTIONG	0.6026	0.0488	0.2079	0.0288	0.0932	0.017
		PINABACDAO	0.5860	0.0404	0.2072	0.0251	0.0947	0.015
		SAN JOSE DE BUAN	0.6567	0.0601	0.2328	0.0363	0.1060	0.022
		SAN SEBASTIAN	0.5632	0.0487	0.1933	0.0282	0.0867	0.01
		SANTA MARGARITA	0.5153	0.0350	0.1685	0.0186	0.0732	0.01
		SANTA RITA	0.6257	0.0346	0.2214	0.0200	0.1009	0.01
		SANTO NIÑO	0.5718	0.0536	0.1951	0.0299	0.0875	0.01
		TALALORA	0.5791	0.0518	0.2017	0.0305	0.0911	0.01
		TARANGNAN	0.6428	0.0365	0.2335	0.0229	0.1085	0.01
		VILLAREAL	0.5729	0.0317	0.2010	0.0192	0.0915	0.01
		PARANAS (WRIGHT)	0.4755	0.0381	0.1499	0.0191	0.0635	0.01
		ZUMARRAGA	0.6860	0.0395	0.2628	0.0286	0.1271	0.018
		TAGAPUL-AN	0.6087	0.0471	0.2209	0.0292	0.1033	0.018
		SAN JORGE	0.5999	0.0297	0.2126	0.0178	0.0972	0.010
		PAGSANGHAN	0.5232	0.0539	0.1733	0.0296	0.0758	0.016
	Southern Leyte	ANAHAWAN	0.3154	0.0505	0.0864	0.0203	0.0335	0.010
		BONTOC	0.4710	0.0351	0.1501	0.0169	0.0641	0.009
		HINUNANGAN	0.3515	0.0361	0.0994	0.0144	0.0393	0.007
		HINUNDAYAN	0.3002	0.0440	0.0820	0.0176	0.0317	0.008
		LIBAGON	0.3972	0.0519	0.1165	0.0234	0.0471	0.012
		LILOAN	0.3805	0.0441	0.1099	0.0182	0.0440	0.00
		CITY OF MAASIN (Capital)	0.3052	0.0253	0.0843	0.0099	0.0327	0.004
		MACROHON	0.3318	0.0393	0.0925	0.0156	0.0362	0.00
		MALITBOG	0.4226	0.0375	0.1326	0.0183	0.0562	0.01
		PADRE BURGOS	0.2462	0.0490	0.0611	0.0165	0.0219	0.00
		PINTUYAN	0.3824	0.0424	0.1110	0.0189	0.0448	0.00
		SAINT BERNARD	0.4140	0.0384	0.1236	0.0174	0.0505	0.00
		SAN FRANCISCO	0.3611	0.0410	0.1032	0.0179	0.0410	0.00
		SAN JUAN (CABALIAN)	0.3513	0.0414	0.1005	0.0178	0.0399	0.009
		SAN RICARDO	0.4898	0.0505	0.1549	0.0268	0.0659	0.01
		SILAGO	0.3525	0.0567	0.0980	0.0222	0.0383	0.01
		SOGOD	0.4107	0.0342	0.1249	0.0148	0.0519	0.00
		TOMAS OPPUS	0.4156	0.0377	0.1242	0.0166	0.0507	0.00
					••••	0.0.00	0.000.	
		LIMASAWA	0.3482	0.0732	0.0957	0.0289	0.0368	0.014

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		BILIRAN	0.4303	0.0513	0.1363	0.0243	0.0585	0.0136
		CABUCGAYAN	0.5552	0.0525	0.1940	0.0297	0.0883	0.0178
		CAIBIRAN	0.5490	0.0460	0.1874	0.0257	0.0840	0.0153
		CULABA	0.4666	0.0449	0.1507	0.0227	0.0656	0.0128
		KAWAYAN	0.4204	0.0472	0.1248	0.0213	0.0510	0.0112
		MARIPIPI	0.4831	0.0469	0.1654	0.0249	0.0751	0.014
		NAVAL (Capital)	0.4083	0.0359	0.1267	0.0168	0.0533	0.009
Region IX	Basilan	ISABELA (Capital)	0.3182	0.0314	0.0901	0.0133	0.0356	0.0068
		LAMITAN	0.4475	0.0325	0.1375	0.0156	0.0574	0.008
		LANTAWAN	0.6019	0.0537	0.2018	0.0287	0.0885	0.0162
		MALUSO	0.5871	0.0490	0.1937	0.0262	0.0839	0.014
		SUMISIP	0.5735	0.0429	0.1841	0.0234	0.0785	0.013
		TIPO-TIPO	0.4866	0.0596	0.1406	0.0261	0.0556	0.012
		TUBURAN	0.5176	0.0579	0.1505	0.0258	0.0597	0.013
	Zamboanga del Norte	DAPITAN CITY	0.3806	0.0308	0.1127	0.0139	0.0460	0.0073
		DIPOLOG CITY (Capital)	0.2315	0.0323	0.0609	0.0120	0.0229	0.0057
		KATIPUNAN	0.5887	0.0408	0.2056	0.0232	0.0929	0.013
		LA LIBERTAD	0.3948	0.0614	0.1153	0.0260	0.0466	0.013
		LABASON	0.4928	0.0503	0.1606	0.0272	0.0698	0.015
		LILOY	0.4931	0.0398	0.1614	0.0193	0.0705	0.010
		MANUKAN	0.6255	0.0475	0.2285	0.0303	0.1067	0.018
			0.4943	0.0505	0.1604	0.0253	0.0697	0.014
		PIÑAN (NEW PIÑAN)	0.4840	0.0484	0.1570	0.0238	0.0680	0.013
		POLANCO PRES. MANUEL A. ROXAS	0.4120 0.6364	0.0360 0.0379	0.1242 0.2333	0.0158 0.0247	0.0510 0.1091	0.008 0.015
		RIZAL	0.3995	0.0460	0.1185	0.0201	0.0484	0.010
		SALUG	0.5620	0.0400	0.1931	0.0201	0.0464	0.013
		SERGIO OSMEÑA SR.	0.6595	0.0398	0.2440	0.0256	0.1151	0.016
		SIAYAN	0.7826	0.0427	0.3143	0.0347	0.1551	0.023
		SIBUCO	0.6288	0.0471	0.2172	0.0280	0.0975	0.016
		SIBUTAD	0.4910	0.0495	0.1558	0.0232	0.0664	0.012
		SINDANGAN	0.5832	0.0351	0.2055	0.0207	0.0938	0.012
		SIOCON	0.5171	0.0533	0.1652	0.0276	0.0703	0.015
		SIRAWAI	0.5822	0.0577	0.1960	0.0288	0.0863	0.015
		TAMPILISAN	0.5784	0.0435	0.2054	0.0244	0.0947	0.014
		JOSE DALMAN (PONOT)	0.7105	0.0458	0.2777	0.0340	0.1357	0.022
		GUTALAC	0.6919	0.0430	0.2590	0.0285	0.1226	0.018
		BALIGUIAN	0.7515	0.0435	0.2979	0.0373	0.1467	0.026
		GODOD	0.6756	0.0439	0.2545	0.0307	0.1216	0.020
		BACUNGAN (Leon T. Postigo)	0.6443	0.0529	0.2342	0.0324	0.1090	0.019
		KALAWIT	0.6336	0.0487	0.2250	0.0285	0.1032	0.017
	Zamboanga del Sur	ALICIA	0.6099	0.0458	0.2166	0.0272	0.0993	0.0164
		AURORA	0.5199	0.0338	0.1771	0.0184	0.0796	0.011
		BAYOG	0.5419	0.0462	0.1814	0.0222	0.0801	0.012
<u></u>		BUUG	0.5068	0.0487	0.1714	0.0238	0.0769	0.0134
		DIMATALING	0.5817	0.0475	0.1992	0.0275	0.0892	0.016
		DINAS	0.6202	0.0376	0.2218	0.0234	0.1020	0.014
		DUMALINAO	0.5865	0.0408	0.2084	0.0245	0.0961	0.0150
		DUMINGAG	0.6086	0.0286	0.2255	0.0175	0.1067	0.0108

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		IPIL	0.4284	0.0363	0.1340	0.0177	0.0566	0.0098
		KABASALAN	0.5215	0.0384	0.1745	0.0195	0.0769	0.0110
		KUMALARANG	0.6105	0.0550	0.2161	0.0295	0.0989	0.0171
		LABANGAN	0.4700	0.0403	0.1485	0.0190	0.0632	0.0104
		LAPUYAN	0.6620	0.0407	0.2529	0.0265	0.1219	0.0170
		MABUHAY	0.7164	0.0447	0.2749	0.0310	0.1315	0.0199
		MAHAYAG	0.6018	0.0396	0.2209	0.0237	0.1045	0.0146
		MALANGAS	0.5553	0.0484	0.1912	0.0250	0.0862	0.0143
		MARGOSATUBIG	0.5498	0.0675	0.1907	0.0330	0.0866	0.0183
		MIDSALIP	0.6792	0.0342	0.2639	0.0252	0.1288	0.0167
		MOLAVE	0.4364	0.0359	0.1408	0.0179	0.0611	0.0102
		NAGA	0.5059	0.0435	0.1641	0.0206	0.0710	0.0112
		OLUTANGA	0.5981	0.0532	0.2119	0.0312	0.0970	0.0188
		PAGADIAN CITY (Capital)	0.2715	0.0263	0.0747	0.0099	0.0290	0.0048
		RAMON MAGSAYSAY (LIARGO)	0.5796	0.0342	0.2013	0.0206	0.0914	0.0125
		SAN MIGUEL	0.5935	0.0513	0.2119	0.0293	0.0982	0.0177
		SAN PABLO	0.6176	0.0337	0.2186	0.0211	0.1001	0.0131
		SIAY	0.5834	0.0409	0.2020	0.0240	0.0914	0.0144
		TABINA	0.6032	0.0534	0.2163	0.0316	0.1004	0.0194
		TAMBULIG	0.5271	0.0466	0.1743	0.0249	0.0763	0.0139
		TITAY	0.5748	0.0390	0.1976	0.0212	0.0887	0.0125
		TUKURAN	0.5130	0.0504	0.1698	0.0246	0.0747	0.0137
		TUNGAWAN	0.6535	0.0437	0.2336	0.0266	0.1071	0.0162
		ZAMBOANGA CITY	0.2381	0.0212	0.0615	0.0075	0.0228	0.0034
		LAKEWOOD	0.6302	0.0677	0.2254	0.0417	0.1040	0.0257
		TALUSAN	0.7068	0.0603	0.2699	0.0403	0.1295	0.0257
		PAYAO	0.6073	0.0498	0.2083	0.0287	0.0931	0.0167
		IMELDA	0.4987	0.0542	0.1632	0.0270	0.0712	0.0152
		JOSEFINA	0.5348	0.0461	0.1885	0.0252	0.0868	0.0156
		PITOGO	0.5787	0.0563	0.1968	0.0287	0.0878	0.0164
		DIPLAHAN	0.5393	0.0519	0.1782	0.0290	0.0781	0.0171
		SOMINOT (DON MARIANO MARCOS)	0.6644	0.0390	0.2544	0.0242	0.1233	0.0159
		VINCENZO A. SAGUN	0.6786	0.0428	0.2625	0.0283	0.1279	0.0183
		ROSELLER LIM	0.6378	0.0395	0.2303	0.0270	0.1070	0.0174
		GUIPOS	0.5148	0.0551	0.1706	0.0270	0.0753	0.0151
		TIGBAO	0.6702	0.0488	0.2492	0.0312	0.1182	0.0195
Region X	Bukidnon	BAUNGON	0.5442	0.0614	0.1756	0.0312	0.0755	0.0172
		DAMULOG	0.5424	0.0526	0.1791	0.0277	0.0786	0.0162
		DANGCAGAN	0.4537	0.0561	0.1382	0.0271	0.0575	0.0150
		DON CARLOS	0.3877	0.0433	0.1126	0.0174	0.0454	0.0088
		IMPASUG-ONG	0.5431	0.0585	0.1756	0.0310	0.0757	0.0175
		KADINGILAN	0.5539	0.0572	0.1847	0.0290	0.0816	0.0164
		KALILANGAN	0.3715	0.0441	0.1052	0.0183	0.0415	0.0095
		KIBAWE	0.4921	0.0430	0.1560	0.0209	0.0665	0.0114

Region	Province	Area Estimates Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		KITAOTAO	0.6069	0.0450	0.2119	0.0256	0.0963	0.0150
		LANTAPAN	0.5311	0.0595	0.1711	0.0299	0.0734	0.0163
		LIBONA	0.3861	0.0500	0.1085	0.0211	0.0427	0.0107
		CITY OF	0.3259	0.0328	0.0896	0.0133	0.0345	0.0066
		MALAYBALAY						
		(Capital)	0 5747	0.0737	0 1051	0.0400	0.0960	0.0051
		MALITBOG MANOLO FORTICH	0.5747 0.2728	0.0737	0.1951 0.0698	0.0428 0.0160	0.0869 0.0257	0.0251 0.0073
		MARAMAG	0.2728	0.0443	0.1013	0.0160	0.0237	0.0079
		PANGANTUCAN	0.5507	0.0401	0.1822	0.0100	0.0397	0.0078
		QUEZON	0.3517	0.0490	0.1399	0.0204	0.0580	0.0090
		SAN FERNANDO	0.5833	0.0400	0.1943	0.0170	0.0854	0.0030
		SUMILAO	0.3333	0.0310	0.1343	0.0277	0.0548	0.0137
		TALAKAG	0.4335	0.0400	0.2175	0.0263	0.1000	0.0170
		VALENCIA	0.3601	0.0400	0.2173	0.0203	0.0402	0.0074
		CABANGLASAN	0.5130	0.0486	0.1638	0.0133	0.0702	0.0074
	Camiguin	CATARMAN	0.5130	0.0505	0.1818	0.0244	0.0831	0.0166
	Carnigan	GUINSILIBAN	0.5586	0.0642	0.1982	0.0200	0.0915	0.0228
		MAHINOG	0.4837	0.0432	0.1650	0.0222	0.0747	0.0128
		MAMBAJAO (Capital)	0.3887	0.0550	0.1193	0.0245	0.0503	0.0128
			0.0007	0.0000	0.1100	0.0210	0.0000	0.0120
		SAGAY	0.5653	0.0562	0.2050	0.0333	0.0968	0.0209
	Misamis Occidental	ALORAN	0.3110	0.0314	0.0853	0.0122	0.0331	0.0058
		BALIANGAO	0.5210	0.0423	0.1760	0.0233	0.0786	0.0137
		BONIFACIO	0.6002	0.0403	0.2174	0.0250	0.1017	0.0156
		CALAMBA	0.3888	0.0411	0.1189	0.0178	0.0497	0.0095
		CLARIN	0.3311	0.0347	0.0929	0.0133	0.0366	0.0065
		CONCEPCION	0.6481	0.0515	0.2280	0.0320	0.1043	0.0196
		JIMENEZ	0.3590	0.0385	0.1063	0.0169	0.0435	0.0088
		LOPEZ JAENA	0.5729	0.0453	0.1976	0.0237	0.0893	0.0136
		OROQUIETA CITY (Capital)	0.2420	0.0248	0.0637	0.0092	0.0240	0.0044
		OZAMIS CITY	0.2290	0.0223	0.0585	0.0084	0.0217	0.0040
		PANAON	0.3631	0.0435	0.1082	0.0189	0.0443	0.0098
		PLARIDEL	0.3943	0.0410	0.1184	0.0182	0.0488	0.0096
		SAPANG DALAGA	0.5247	0.0394	0.1789	0.0217	0.0806	0.0128
		SINACABAN	0.4478	0.0445	0.1395	0.0209	0.0591	0.0114
		TANGUB CITY	0.5060	0.0310	0.1716	0.0166	0.0771	0.0097
		TUDELA	0.4547	0.0410	0.1457	0.0192	0.0629	0.0104
		DON VICTORIANO CHIONGBIAN (DON MARIANO MARCOS)	0.6920	0.0574	0.2573	0.0355	0.1213	0.0220
	Misamis Oriental	ALUBIJID	0.5097	0.0512	0.1755	0.0278	0.0797	0.0161
		BALINGASAG	0.4835	0.0342	0.1578	0.0185	0.0689	0.0105
		BALINGOAN	0.4814	0.0616	0.1578	0.0304	0.0691	0.0172
		BINUANGAN	0.4966	0.0733	0.1557	0.0362	0.0656	0.0200
		CAGAYAN DE ORO CITY (Capital)	0.1418	0.0216	0.0328	0.0063	0.0113	0.0026
		CLAVERIA	0.4944	0.0467	0.1549	0.0215	0.0654	0.0114
		EL SALVADOR	0.4112	0.0552	0.1291	0.0241	0.0552	0.0126
		GINGOOG CITY	0.4854	0.0281	0.1602	0.0145	0.0705	0.0082
		GITAGUM	0.4733	0.0562	0.1546	0.0285	0.0680	0.0164

#### H 1 M niciı . . 2 10 all A Feti . .

Region	oal level Small A Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		INITAO	0.5362	0.0506	0.1822	0.0261	0.0818	0.0150
		JASAAN	0.3771	0.0428	0.1112	0.0195	0.0452	0.0105
		KINOGUITAN	0.4893	0.0538	0.1637	0.0282	0.0730	0.0165
		LAGONGLONG	0.4938	0.0570	0.1641	0.0287	0.0725	0.0161
		LAGUINDINGAN	0.4459	0.0579	0.1402	0.0277	0.0601	0.0154
		LIBERTAD	0.5126	0.0845	0.1718	0.0422	0.0765	0.0238
		LUGAIT	0.4277	0.0838	0.1375	0.0362	0.0599	0.0189
		MAGSAYSAY (LINUGOS)	0.6183	0.0404	0.2312	0.0248	0.1108	0.0154
		MANTICAO	0.4822	0.0570	0.1608	0.0275	0.0715	0.0153
		MEDINA	0.3791	0.0415	0.1114	0.0173	0.0453	0.0089
		NAAWAN	0.5337	0.0533	0.1885	0.0306	0.0870	0.0184
		OPOL	0.2732	0.0351	0.0794	0.0137	0.0321	0.0070
		SALAY	0.4080	0.0459	0.1227	0.0189	0.0506	0.0097
		SUGBONGCOGON	0.4407	0.0634	0.1400	0.0296	0.0605	0.0162
		TAGOLOAN	0.3364	0.0495	0.0939	0.0203	0.0369	0.0105
		TALISAYAN	0.4456	0.0497	0.1390	0.0232	0.0589	0.0124
		VILLANUEVA	0.4021	0.0597	0.1218	0.0257	0.0506	0.0133
Region XI	Davao	ASUNCION (SAUG)	0.5072	0.0445	0.1657	0.0215	0.0724	0.0119
-		CARMEN	0.4159	0.0471	0.1246	0.0208	0.0514	0.0111
		KAPALONG	0.5023	0.0481	0.1663	0.0245	0.0731	0.0139
		NEW CORELLA	0.5059	0.0556	0.1612	0.0286	0.0691	0.0162
		PANABO	0.2336	0.0291	0.0598	0.0105	0.0221	0.0048
		ISLAND GARDEN CITY OF SAMAL	0.4838	0.0317	0.1557	0.0158	0.0673	0.0089
		SANTO TOMAS	0.3267	0.0625	0.0891	0.0237	0.0344	0.0112
		CITY OF TAGUM (Capital)	0.1356	0.0253	0.0314	0.0074	0.0108	0.0030
		TALAINGOD	0.6935	0.0978	0.2564	0.0632	0.1197	0.0396
		BRAULIO E. DUJALI	0.3198	0.0722	0.0843	0.0269	0.0315	0.0126
	Davao del Sur	BANSALAN	0.3212	0.0434	0.0871	0.0169	0.0333	0.0081
		DAVAO CITY	0.1383	0.0143	0.0313	0.0041	0.0106	0.0016
		CITY OF DIGOS (Capital)	0.2382	0.0350	0.0607	0.0121	0.0222	0.0054
		HAGONOY	0.3713	0.0497	0.1066	0.0200	0.0425	0.0099
		JOSE ABAD SANTOS (TRINIDAD)	0.6403	0.0412	0.2207	0.0256	0.0983	0.0151
		KIBLAWAN	0.5711	0.0416	0.1932	0.0232	0.0856	0.0136
		MAGSAYSAY	0.4792	0.0454	0.1504	0.0214	0.0636	0.0115
		MALALAG	0.4681	0.0493	0.1465	0.0234	0.0617	0.0126
		MALITA	0.6101	0.0402	0.2087	0.0242	0.0929	0.0147
		MATANAO	0.4202	0.0389	0.1222	0.0162	0.0489	0.0081
		PADADA	0.2411	0.0381	0.0612	0.0136	0.0223	0.0061
		SANTA CRUZ	0.4166	0.0520	0.1226	0.0224	0.0495	0.0112
		SANTA MARIA	0.5627	0.0470	0.1887	0.0236	0.0831	0.0131
		SULOP	0.4247	0.0447	0.1276	0.0189	0.0525	0.0097
		SARANGANI	0.6063	0.0656	0.1975	0.0348	0.0848	0.0195
		DON MARCELINO	0.6893	0.0490	0.2461	0.0322	0.1123	0.0199
	Davao Oriental	BAGANGA	0.5575	0.0462	0.1883	0.0248	0.0835	0.0144
		BANAYBANAY	0.5269	0.0508	0.1709	0.0256	0.0735	0.0141
		BOSTON	0.5185	0.0682	0.1619	0.0341	0.0674	0.0185

Region	Province	Area Estimates Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		CARAGA	0.6660	0.0521	0.2436	0.0339	0.1132	0.0210
		CATEEL	0.4229	0.0557	0.1228	0.0243	0.0492	0.0127
		GOVERNOR GENEROSO	0.5823	0.0437	0.2018	0.0245	0.0910	0.0145
		LUPON	0.4593	0.0502	0.1415	0.0215	0.0589	0.011
		MANAY	0.6135	0.0572	0.2147	0.0348	0.0971	0.0213
		MATI (Capital)	0.3897	0.0505	0.1151	0.0214	0.0466	0.0109
		SAN ISIDRO	0.5432	0.0508	0.1834	0.0275	0.0814	0.0163
		TARRAGONA	0.6026	0.0643	0.2023	0.0355	0.0887	0.0206
	South Cotabato	BANGA	0.4709	0.0427	0.1541	0.0226	0.0673	0.0129
	Colabalo	GENERAL SANTOS CITY (DADIANGAS)	0.2028	0.0305	0.0504	0.0104	0.0182	0.0048
		CITY OF KORONADAL (Capital)	0.2775	0.0309	0.0771	0.0122	0.0300	0.0060
		NORALA	0.3997	0.0408	0.1249	0.0188	0.0531	0.0104
		POLOMOLOK	0.2869	0.0421	0.0826	0.0154	0.0333	0.007
		SURALLAH	0.4264	0.0406	0.1333	0.0185	0.0565	0.010
		TAMPAKAN	0.4912	0.0559	0.1624	0.0267	0.0714	0.015
		TANTANGAN	0.4806	0.0480	0.1571	0.0246	0.0684	0.013
		T'BOLI	0.7367	0.0412	0.2880	0.0324	0.1398	0.021
		TUPI	0.5130	0.0486	0.1760	0.0252	0.0792	0.014
		SANTO NIÑO	0.3560	0.0571	0.1021	0.0233	0.0406	0.011
		LAKE SEBU	0.6689	0.0596	0.2484	0.0406	0.1172	0.025
	Sarangani	ALABEL (Capital)	0.6044	0.0571	0.2134	0.0330	0.0974	0.019
		GLAN	0.6485	0.0313	0.2431	0.0215	0.1158	0.014
		KIAMBA	0.5171	0.0487	0.1733	0.0250	0.0764	0.014
		MAASIM	0.6994	0.0355	0.2736	0.0251	0.1338	0.017
		MAITUM	0.5394	0.0440	0.1892	0.0245	0.0864	0.015
		MALAPATAN	0.6905	0.0538	0.2610	0.0372	0.1248	0.024
		MALUNGON	0.6680	0.0416	0.2499	0.0266	0.1187	0.016
	Compostela Valley	COMPOSTELA	0.4238	0.0549	0.1292	0.0227	0.0538	0.011
		LAAK (SAN VICENTE)	0.6229	0.0349	0.2213	0.0210	0.1017	0.012
		MABINI (DOÑA ALICIA)	0.4584	0.0612	0.1420	0.0278	0.0595	0.0148
		MACO	0.4270	0.0411	0.1306	0.0180	0.0546	0.009
		MARAGUSAN (SAN MARIANO)	0.5468	0.0568	0.1833	0.0295	0.0813	0.016
		MAWAB	0.4156	0.0527	0.1274	0.0240	0.0535	0.013
		MONKAYO	0.4110	0.0445	0.1233	0.0187	0.0509	0.009
		MONTEVISTA	0.4875	0.0496	0.1559	0.0223	0.0670	0.011
		NABUNTURAN	0.3558	0.0379	0.1046	0.0156	0.0426	0.008
		NEW BATAAN	0.4627	0.0632	0.1437	0.0300	0.0606	0.016
		PANTUKAN	0.5290	0.0593	0.1757	0.0309	0.0776	0.017
Region XII	Lanao del Norte	BACOLOD	0.5471	0.0500	0.1923	0.0261	0.0889	0.015
		BALOI	0.5229	0.0488	0.1691	0.0252	0.0731	0.014
		BAROY	0.5814	0.0416	0.2157	0.0255	0.1030	0.015
		ILIGAN CITY	0.2803	0.0269	0.0807	0.0104	0.0326	0.005
		KAPATAGAN	0.6555	0.0376	0.2642	0.0250	0.1336	0.0166

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		SULTAN NAGA	0.6335	0.0360	0.2298	0.0216	0.1073	0.013
		DIMAPORO						
		(KAROMATAN)						
		KAUSWAGAN	0.5472	0.0578	0.1961	0.0329	0.0918	0.020
		KOLAMBUGAN	0.5523	0.0417	0.1990	0.0221	0.0935	0.013
		LALA	0.6421	0.0426	0.2492	0.0261	0.1227	0.016
		LINAMON	0.4399	0.0742	0.1397	0.0324	0.0600	0.017
		MAGSAYSAY	0.7416	0.0352	0.3026	0.0285	0.1526	0.020
		MAIGO	0.5495	0.0558	0.1985	0.0295	0.0936	0.017
		MATUNGAO	0.6021	0.0685	0.2013	0.0384	0.0884	0.022
		MUNAI	0.6514	0.0531	0.2300	0.0332	0.1049	0.020
		NUNUNGAN	0.6580	0.0505	0.2361	0.0314	0.1088	0.019
		PANTAO RAGAT	0.5175	0.0583	0.1575	0.0281	0.0648	0.015
		POONA PIAGAPO	0.6672	0.0514	0.2336	0.0300	0.1059	0.017
		SALVADOR	0.7207	0.0445	0.2907	0.0324	0.1454	0.022
		SAPAD	0.6571	0.0573	0.2472	0.0362	0.1182	0.022
		TAGOLOAN	0.7436	0.0725	0.2867	0.0512	0.1380	0.033
		TANGCAL	0.7251	0.0640	0.2743	0.0403	0.1307	0.024
		TUBOD (Capital)	0.5663	0.0469	0.2047	0.0253	0.0960	0.015
		PANTAR	0.5504	0.0540	0.1794	0.0279	0.0780	0.015
	Cotabato	ALAMADA	0.6593	0.0429	0.2501	0.0289	0.1206	0.018
		CARMEN	0.6106	0.0475	0.2157	0.0267	0.0986	0.015
		KABACAN	0.4655	0.0435	0.1576	0.0207	0.0705	0.011
		CITY OF KIDAPAWAN (Capital)	0.3425	0.0358	0.1033	0.0138	0.0429	0.006
		LIBUNGAN	0.5803	0.0386	0.2110	0.0226	0.0994	0.014
		MAGPET	0.6745	0.0333	0.2582	0.0219	0.1252	0.014
		MAKILALA	0.5737	0.0407	0.2050	0.0209	0.0952	0.012
		MATALAM	0.5724	0.0330	0.2022	0.0195	0.0929	0.011
		MIDSAYAP	0.5109	0.0239	0.1766	0.0139	0.0800	0.008
		M'LANG	0.5332	0.0353	0.1839	0.0192	0.0833	0.011
		PIGKAWAYAN	0.5345	0.0353	0.1852	0.0192	0.0843	0.011
		PIKIT	0.6527	0.0368	0.2405	0.0228	0.1129	0.014
		PRESIDENT ROXAS	0.6218	0.0410	0.2292	0.0252	0.1085	0.015
		TULUNAN	0.5940	0.0404	0.2146	0.0238	0.1005	0.014
		ANTIPAS	0.5939	0.0532	0.2188	0.0289	0.1038	0.017
		BANISILAN	0.5960	0.0455	0.2094	0.0269	0.0960	0.016
		ALEOSAN	0.6851	0.0386	0.2651	0.0255	0.1291	0.016
		ARAKAN	0.6312	0.0434	0.2351	0.0260	0.1122	0.016
	Sultan Kudarat	BAGUMBAYAN	0.7126	0.0399	0.2821	0.0284	0.1394	0.018
		COLUMBIO	0.7220	0.0493	0.2891	0.0331	0.1435	0.021
		ESPERANZA	0.6223	0.0337	0.2324	0.0230	0.1111	0.015
		ISULAN (Capital)	0.4581	0.0408	0.1483	0.0213	0.0641	0.012
		KALAMANSIG	0.6987	0.0401	0.2831	0.0278	0.1425	0.019
		LEBAK	0.6926	0.0332	0.2850	0.0254	0.1457	0.017
		LUTAYAN	0.7196	0.0557	0.2758	0.0382	0.1319	0.025
		LAMBAYONG	0.5466	0.0426	0.1864	0.0246	0.0834	0.014
		(MARIANO MARCOS)						
		PALIMBANG	0.6951	0.0391	0.2642	0.0260	0.1268	0.016
		PRESIDENT	0.5451	0.0447	0.1871	0.0255	0.0844	0.015

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		CITY OF TACURONG	0.3305	0.0322	0.0954	0.0136	0.0383	0.0072
		SEN. NINOY AQUINO	0.7490	0.0327	0.3128	0.0267	0.1609	0.0189
		COTABATO CITY	0.3610	0.0306	0.1095	0.0143	0.0454	0.0077
		MARAWI CITY	0.2330	0.0287	0.0579	0.0094	0.0210	0.004
ARMM	Lanao del Sur	BACOLOD-KALAWI (BACOLOD GRANDE)	0.4776	0.0558	0.1406	0.0243	0.0563	0.0124
		BALABAGAN	0.7294	0.0434	0.2772	0.0299	0.1322	0.018
		BALINDONG (WATU)	0.5261	0.0399	0.1653	0.0186	0.0698	0.009
		BAYANG	0.6774	0.0308	0.2460	0.0100	0.1142	0.010
		BINIDAYAN	0.7842	0.0353	0.3290	0.0284	0.1142	0.020
		BUBONG	0.4370	0.0473	0.1211	0.0201	0.0467	0.010
		BUTIG	0.5788	0.0668	0.1958	0.0310	0.0871	0.017
		GANASSI	0.6489	0.0435	0.2357	0.0252	0.1099	0.015
		KAPAI	0.7275	0.0453	0.2670	0.0311	0.1244	0.020
		LUMBA-BAYABAO (MAGUING)	0.3809	0.0449	0.1026	0.0167	0.0389	0.0079
		LUMBATAN	0.7071	0.0491	0.2633	0.0321	0.1247	0.020
		MADALUM	0.6813	0.0332	0.2427	0.0210	0.1107	0.012
		MADAMBA	0.5015	0.0692	0.1457	0.0292	0.0583	0.014
		MALABANG	0.6943	0.0342	0.2654	0.0242	0.1275	0.016
		MARANTAO	0.5284	0.0481	0.1648	0.0227	0.0692	0.012
		MASIU	0.4383	0.0416	0.1257	0.0177	0.0500	0.009
		MULONDO	0.5767	0.0521	0.1818	0.0257	0.0764	0.013
		PAGAYAWAN (TATARIKAN)	0.7632	0.0491	0.2941	0.0362	0.1416	0.023
		PIAGAPO	0.7952	0.0300	0.3220	0.0267	0.1600	0.018
		POONA BAYABAO	0.4327	0.0464	0.1273	0.0199	0.0519	0.010
		(GATA) PUALAS	0.6530	0.0411	0.2336	0.0279	0.1072	0.018
		DITSAAN-RAMAIN	0.3033	0.0456	0.0721	0.0151	0.0250	0.006
		SAGUIARAN	0.4977	0.0415	0.1479	0.0209	0.0597	0.011
		TAMPARAN	0.5461	0.0403	0.1742	0.0209	0.0744	0.011
		TARAKA	0.4295	0.0485	0.1219	0.0208	0.0482	0.010
		TUBARAN	0.7862	0.0372	0.3059	0.0279	0.1475	0.019
		TUGAYA	0.3494	0.0530	0.0913	0.0203	0.0342	0.009
		WAO	0.7144	0.0380	0.2844	0.0285	0.1418	0.019
		MAROGONG	0.8099	0.0388	0.3292	0.0273	0.1636	0.018
		CALANOGAS	0.7848	0.0515	0.2996	0.0350	0.1426	0.022
		BUADIPOSO- BUNTONG	0.3247	0.0435	0.0782	0.0148	0.0275	0.006
		MAGUING	0.5021	0.0374	0.1467	0.0177	0.0587	0.009
		SULTAN GUMANDER	0.7330	0.0457	0.2788	0.0303	0.1332	0.019
		LUMBAYANAGUE	0.4563	0.0479	0.1372	0.0206	0.0569	0.010
		BUMBARAN	0.7716	0.0460	0.2992	0.0373	0.1446	0.025
		TAGOLOAN II	0.7350	0.0437	0.2767	0.0291	0.1314	0.018
		KAPATAGAN	0.7803	0.0437	0.3062	0.0231	0.1488	0.026
		SULTAN DUMALONDONG	0.7850	0.0477	0.3210	0.0587	0.1488	0.020
	Maguindanao	AMPATUAN	0.7108	0.0438	0.2607	0.0281	0.1206	0.017
		BULDON	0.6172	0.0587	0.2009	0.0286	0.0864	0.0158
		BULUAN	0.6185	0.0636	0.1990	0.0348	0.0842	0.019

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		DATU PAGLAS	0.6105	0.0461	0.1932	0.0239	0.0809	0.013
		DATU PIANG	0.7231	0.0366	0.2577	0.0237	0.1169	0.014
		DATU ODIN SINSUAT (DINAIG)	0.5792	0.0453	0.1861	0.0237	0.0791	0.013
		SHARIFF AGUAK (MAGANOY) (Capital)	0.7370	0.0525	0.2713	0.0324	0.1257	0.019
		MATANOG	0.7994	0.1169	0.3040	0.0879	0.1434	0.058
		PAGALUNGAN	0.6766	0.0577	0.2296	0.0340	0.1006	0.020
		PARANG	0.4988	0.0521	0.1531	0.0236	0.0637	0.012
		SULTAN KUDARAT (NULING)	0.5972	0.0343	0.1921	0.0168	0.0819	0.009
		SULTAN SA BARONGIS (LAMBAYONG)	0.7444	0.0429	0.2775	0.0302	0.1297	0.019
		KABUNTALAN (TUMBAO)	0.6249	0.0420	0.2177	0.0246	0.0982	0.014
		UPI	0.7174	0.0420	0.2712	0.0293	0.1292	0.018
		TALAYAN	0.7591	0.0380	0.2811	0.0260	0.1307	0.010
		SOUTH UPI	0.8073	0.0548	0.3313	0.0493	0.1659	0.03
		BARIRA	0.6332	0.0587	0.2116	0.0334	0.0926	0.01
		GEN. S. K. PENDATUN	0.7744	0.0428	0.2913	0.0311	0.1365	0.02
		MAMASAPANO	0.8564	0.0386	0.3621	0.0398	0.1842	0.02
		TALITAY	0.8010	0.0452	0.3107	0.0351	0.1490	0.02
		PAGAGAWAN	0.6848	0.0654	0.2413	0.0401	0.1094	0.02
	Sulu	INDANAN	0.5906	0.0419	0.1957	0.0223	0.0853	0.01
		JOLO (Capital)	0.4302	0.0944	0.1245	0.0382	0.0497	0.01
		KALINGALAN CALUANG	0.7080	0.0713	0.2524	0.0456	0.1147	0.02
		LUUK	0.7301	0.0517	0.2580	0.0336	0.1158	0.02
		MAIMBUNG	0.7463	0.0517	0.2776	0.0375	0.1298	0.02
		HADJI PANGLIMA TAHIL (MARUNGGAS)	0.8968	0.0484	0.4244	0.0537	0.2322	0.04
		OLD PANAMAO	0.6702	0.0712	0.2198	0.0422	0.0944	0.02
		PANGUTARAN	0.7147	0.0554	0.2668	0.0376	0.1255	0.02
		PARANG	0.7037	0.0302	0.2569	0.0208	0.1193	0.01
		PATA	0.7868	0.0541	0.2958	0.0398	0.1385	0.02
		PATIKUL	0.6697	0.0464	0.2472	0.0266	0.1158	0.01
		SIASI	0.7601	0.0301	0.2967	0.0237	0.1438	0.01
		TALIPAO	0.6873	0.0341	0.2353	0.0224	0.1040	0.01
		TAPUL	0.7453	0.0486	0.2774	0.0362	0.1295	0.02
		TONGKIL	0.7853	0.0450	0.3038	0.0347	0.1457	0.02
		PANGLIMA ESTINO (NEW PANAMAO)	0.7374	0.0563	0.2666	0.0355	0.1217	0.02
		LUGUS	0.7482	0.0515	0.2874	0.0354	0.1372	0.02
_		PANDAMI	0.7781	0.0454	0.2988	0.0355	0.1423	0.02
	Tawi-tawi	PANGLIMA SUGALA (BALIMBING) (Capital)	0.6366	0.0544	0.2071	0.0320	0.0885	0.01
		BONGAO	0.4847	0.0464	0.1538	0.0228	0.0654	0.01
		MAPUN (CAGAYAN DE TAWI-TAWI)	0.6100	0.0549	0.2056	0.0329	0.0906	0.01
		SIMUNUL	0.4359	0.0592	0.1309	0.0274	0.0540	0.01
		SITANGKAI	0.4891	0.0559	0.1444	0.0254	0.0586	0.01
		SOUTH UBIAN	0.6936	0.0406	0.2470	0.0239	0.1129	0.01
			0.0000		• • • •		0.1120	

Region	Province	Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		TURTLE ISLANDS	0.5257	0.1524	0.1551	0.0680	0.0620	0.0363
		LANGUYAN	0.6255	0.0508	0.2094	0.0255	0.0916	0.0141
		SAPA-SAPA	0.6170	0.0561	0.2010	0.0321	0.0868	0.0196
CARAGA	Agusan del Norte	BUENAVISTA	0.4863	0.0377	0.1572	0.0199	0.0679	0.0112
		BUTUAN CITY (Capital)	0.3063	0.0239	0.0863	0.0097	0.0341	0.0049
		CABADBARAN	0.3792	0.0320	0.1123	0.0148	0.0458	0.0079
		CARMEN	0.5698	0.0570	0.2040	0.0341	0.0950	0.021
		JABONGA	0.6554	0.0430	0.2470	0.0280	0.1186	0.018
		KITCHARAO	0.5860	0.0734	0.2119	0.0422	0.0990	0.025
		LAS NIEVES	0.6772	0.0437	0.2565	0.0291	0.1234	0.018
		MAGALLANES	0.3236	0.0594	0.0918	0.0237	0.0365	0.011
		NASIPIT	0.3018	0.0413	0.0855	0.0161	0.0341	0.007
		SANTIAGO	0.6510	0.0570	0.2447	0.0364	0.1172	0.023
		TUBAY	0.5686	0.0602	0.1943	0.0321	0.0875	0.019
		REMEDIOS T. ROMUALDEZ	0.5520	0.0650	0.1906	0.0351	0.0864	0.0209
	Agusal del Sur	BAYUGAN	0.5389	0.0417	0.1836	0.0212	0.0824	0.0122
		BUNAWAN	0.5785	0.0629	0.1963	0.0330	0.0873	0.018
		ESPERANZA	0.6968	0.0328	0.2648	0.0220	0.1270	0.014
		LA PAZ	0.7022	0.0476	0.2719	0.0331	0.1321	0.021
		LORETO	0.6563	0.0478	0.2452	0.0311	0.1165	0.019
		PROSPERIDAD (Capital)	0.5971	0.0393	0.2098	0.0214	0.0956	0.012
		ROSARIO	0.5897	0.0546	0.2013	0.0324	0.0898	0.019
		SAN FRANCISCO	0.4941	0.0352	0.1634	0.0188	0.0718	0.010
		SAN LUIS	0.7126	0.0398	0.2770	0.0278	0.1347	0.018
		SANTA JOSEFA	0.6252	0.0472	0.2284	0.0311	0.1073	0.019
		TALACOGON	0.5968	0.0563	0.2096	0.0313	0.0957	0.018
		TRENTO	0.5404	0.0649	0.1804	0.0312	0.0795	0.017
		VERUELA	0.6372	0.0429	0.2274	0.0257	0.1047	0.015
		SIBAGAT	0.6685	0.0458	0.2510	0.0290	0.1198	0.018
	Surigao del Norte	ALEGRIA	0.5241	0.0556	0.1773	0.0292	0.0793	0.016
		BACUAG	0.4806	0.0752	0.1564	0.0359	0.0683	0.019
		BASILISA (RIZAL)	0.7268	0.0394	0.2883	0.0305	0.1431	0.020
		BURGOS	0.5487	0.0728	0.1869	0.0407	0.0836	0.024
		CAGDIANAO	0.7202	0.0480	0.2853	0.0347	0.1412	0.022
		CLAVER	0.5134	0.0510	0.1683	0.0265	0.0734	0.014
		DAPA	0.6059	0.0350	0.2235	0.0224	0.1057	0.014
		DEL CARMEN	0.6509	0.0355	0.2567	0.0262	0.1274	0.018
		DINAGAT	0.5973	0.0527	0.2162	0.0335	0.1010	0.021
		GENERAL LUNA	0.6344	0.0467	0.2396	0.0286	0.1153	0.017
		GIGAQUIT	0.5989	0.0500	0.2130	0.0306	0.0981	0.018
		LIBJO (ALBOR)	0.6765	0.0467	0.2598	0.0296	0.1263	0.018
		LORETO	0.4940	0.0572	0.1699	0.0330	0.0775	0.020
		MAINIT	0.5105	0.0487	0.1712	0.0255	0.0762	0.014
		MALIMONO	0.5947	0.0455	0.2109	0.0279	0.0973	0.017
		PILAR	0.6514	0.0405	0.2536	0.0294	0.1249	0.020
		PLACER	0.4381	0.0432	0.1385	0.0210	0.0593	0.011

Region	Province	Area Estimates Municipality	Poverty Incidence	SE	Poverty Gap	SE	Poverty Severity	SE
		SAN BENITO	0.7342	0.0512	0.3048	0.0452	0.1564	0.0332
		SAN FRANCISCO (ANAO-AON)	0.5063	0.0535	0.1676	0.0279	0.0740	0.0160
		SAN ISIDRO	0.6525	0.0596	0.2459	0.0374	0.1182	0.0243
		SANTA MONICA (SAPAO)	0.5466	0.0468	0.1898	0.0268	0.0864	0.0162
		SISON	0.4826	0.0671	0.1535	0.0308	0.0657	0.0166
		SOCORRO	0.6613	0.0624	0.2498	0.0412	0.1204	0.0262
		SURIGAO CITY (Capital)	0.3361	0.0349	0.0990	0.0141	0.0403	0.0070
		TAGANA-AN	0.5575	0.0504	0.1978	0.0296	0.0915	0.0184
		TUBAJON	0.6418	0.0543	0.2420	0.0355	0.1167	0.0228
		TUBOD	0.4159	0.0557	0.1277	0.0263	0.0536	0.0144
		SAN JOSE	0.6493	0.0577	0.2425	0.0377	0.1158	0.0238
	Surigao del Sur	BAROBO	0.5702	0.0574	0.1919	0.0319	0.0850	0.0186
		BAYABAS	0.5563	0.0642	0.1871	0.0360	0.0823	0.021
		CITY OF BISLIG	0.3804	0.0721	0.1126	0.0296	0.0460	0.014
		CAGWAIT	0.4766	0.0713	0.1538	0.0356	0.0665	0.019
		CANTILAN	0.4213	0.0467	0.1307	0.0207	0.0553	0.010
		CARMEN	0.5273	0.0619	0.1846	0.0349	0.0852	0.021
		CARRASCAL	0.5092	0.0530	0.1697	0.0257	0.0750	0.014
		CORTES	0.5970	0.0607	0.2077	0.0377	0.0940	0.022
		HINATUAN	0.6002	0.0360	0.2117	0.0207	0.0969	0.012
		LANUZA	0.5452	0.0542	0.1875	0.0323	0.0850	0.019
		LIANGA	0.4424	0.0479	0.1355	0.0220	0.0563	0.0119
		LINGIG	0.6173	0.0546	0.2158	0.0310	0.0980	0.018
		MADRID	0.5441	0.0548	0.1825	0.0293	0.0808	0.017
		MARIHATAG	0.6187	0.0577	0.2223	0.0350	0.1029	0.021
		SAN AGUSTIN	0.5843	0.0540	0.2100	0.0327	0.0976	0.0204
		SAN MIGUEL	0.6424	0.0397	0.2320	0.0261	0.1076	0.016
		TAGBINA	0.6037	0.0443	0.2104	0.0250	0.0954	0.014
		TAGO	0.4943	0.0461	0.1566	0.0227	0.0665	0.012
		TANDAG (Capital)	0.3312	0.0358	0.0937	0.0147	0.0369	0.007

## For Inquiries:



NATIONAL STATISTICAL COORDINATION BOARD NATIONAL STATISTICAL INFORMATION CENTER Ground Floor Midland Buendia Building 403 Sen. Gil J. Puyat Avenue, Makati City Philippines 1200

Tel. Nos. +63(2) 8952767 +63(2) 8909405 Telefax No. +63(2) 8908456

E-mail address: info@nscb.gov.ph URL: www.nscb.gov.ph