0.a. Goal

Goal 1. End poverty in all its forms everywhere

0.b. Target

Target 1.2: By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

0.c. Indicator

1.2.2: Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

0.e. Metadata update

October 2020

0.f. Related indicators

1.2.2 Proportion of children living in child-specific multidimensional poverty

1.a. Organisation

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2.a. Definition and concepts

The child poverty rate is the percentage of all children who live in poor households. This means that we are looking at the characteristics of children who live in households who are poor.

2.b. Unit of measure

Percent (%)

3.a. Data sources

Cambodia Socio-Economic Survey (CSES)

3.b. Data collection method

CSES is conducted by NIS since 1993. The survey provides a comprehensive set of indicators on living conditions in Cambodia, covering main socio-economic areas such as housing conditions, health, education, labor force, economic activities, victimization, vulnerability and others. The survey questionnaire was asked for the household and for the household members. The CSES is conducted annually from 2007 to 2017. The sample size was determined for annual CSES is about 3,600 households. Every 5 years it is conducted with a big sample size is about 12,000 households. The last four big sample surveys were conducted in 2004, 2009, 2014 and 2019. From 2019 onwards the survey will be conducted biannually (every two years).

Since the CSES 2004, the diary method for collecting data on household expenditure/consumption and household income was introduced. As the recall method has been used in the previous rounds it was also decided to include in the recall modules. Thus, both methods are retained. The data collection was carried out throughout the whole calendar year, started from January to December. Face-to-face interview using the questionnaire was done and about 15 households per village were selected.

The detailed documentations of the survey, such as questionnaire, filed operation annual and technical report on survey design and implementation are stored in NADA (National Data Archive), NIS website: http://nada.nis.gov.kh/index.php/home

3.c. Data collection calendar

The next round survey: Quater1, 2021

3.d. Data release calendar

One year after the reference period of the survey

3.e. Data providers

National Institute of Statistics

3.f. Data compilers

National Working Group on Poverty Measurement, Ministry of Planning and Ministry of Economy and Finance, NIS

3.g. Institutional mandate

By virtue of the article 12 of Statistics Law, NIS in is responsible for:

- Collecting, processing, compiling, analyzing, publishing and disseminating basic data by conducting censuses and surveys, and utilizing administrative data sources;
- Compiling national accounts and price indexes, as well as economic, environment and socio-demographic indicators;
- Coordination with line ministries as data producers as mandated by the Statistics Law; and
- Functioning as the central repository of SDG indicators.

4.a. Rationale

Poverty has traditionally been defined as the lack of money. However, the poor themselves consider their experience of poverty much more broadly. A person who is poor can suffer multiple disadvantages at the same time – for example, they may have poor health or malnutrition, a lack of clean water or electricity, poor quality of work or little schooling. Focusing on one factor alone, such as income, is not enough to capture the true reality of poverty. Therefore, multidimensional poverty measures described above have been developed to create a more comprehensive picture by looking at multiple dimensions such as health, education, living standards. Official multidimensional poverty headcount (% population), official multidimensional poverty headcount (% of total households) and multidimensional deprivation for children (% of population under 18) are all about the headcount ratio trying to capture how many people, households, or children in the entire pool are regarded as multidimensionally poor. On the other hand, average number of deprivation tries to capture the depth of multidimensional poverty. For instance, if there are 18 indicators to capture different dimensions of poverty, a person or a household is considered to be deprived if they are shown to be deprived in at least 4 indicators. Therefore, the person who is deprived in 5 indicators, and the person who is deprived in 15 indicators are considered to be both multidimensionally poor. The 'intensity' of the poverty is different between these two people, which is captured by the average number of deprivation.

4.b. Comment and limitations

Comparisons of the results from the 2007 CSES with previous surveys in 1993/94, 1996, 1997 and 1999, are not recommended due to differences in the survey design. Fieldwork from the last five

surveys (2004, 2007, 2008, 2009 and 2010) covered 15 months, and results can be reported for both 12 month (calendar year) and 15 month periods.

The weights used in the reports from CSES 2004, are adjusted by using the preliminary population projections which give over estimated population counts. The weights in CSES 2007 are adjusted by using the preliminary result from 2008 Population Census. Some provinces were excluded, due to cost and other reasons, in the sample for 2007. The estimates are however, adjusted for the under coverage error caused by excluding those provinces. A recalculation of the weights in CSES 2004 has been made for the coming analyses to obtain higher comparability between CSES 2004, and the surveys conducted from 2007 and onwards.

4.c. Method of computation

This empirical model of income child poverty use variable of “income child poverty” as dependent variables. We model our income child poverty on set of explanatory such as child’s age (0-2 years old), child’s age (3-4 years old), child’s age (5-9 years old), child’s age (10-14 years old), child’s age (15-17 years old), female child (1 if female child; 0 otherwise), education of the child (1 if individual child completed at least secondary or higher education; 0 otherwise), married child (1 if child is married; 0 otherwise), hours worked of children in both primary and secondary occupation, education of household head, household size, health expenditure of household per capita per month, health subsidies per capita per year, education expenditure per person per years, severe sanitation (children with no access to a toilet facility of any kind, severe water (children using surface water such as rivers, pond, streams and dams), severe shelter (children living in a dwelling with 5 or more people per room or with no floor material), ethnicity such as Khmer (1 if Khmer; 0 otherwise), local group (1 if local group; 0 otherwise), Cham (1 if Cham; 0 otherwise), other local group (1 if Other local group; 0 otherwise), and regional characteristics such as urban (1 if urban; 0 otherwise), mountain zone (1 if mountain zone; 0 otherwise) and plain zone (1 if plain zone; 0 otherwise).

Because our dependent variable of income child poverty is dichotomy (1 if child poverty; 0 otherwise), we use Probit model to estimates in this analysis. Now, let $ChPov^*_i$ is the dichotomous variable of child poverty, take on the value {1} for child poverty, and zero {0} for otherwise. Therefore the specification model is expressed through the latent variable as follow:

$$ChPov_i^* = x_i\beta + U_{i1}$$
$$U_{i1}|x_i \sim N(0,1)$$

equation (1)

where  is the aggregated form of the explanatory variables. Therefore, the dependent variable (income child poverty) can be observed as follow:

$$ChPov_i \equiv 1(ChPov_i^* > 0)$$
$$\Pr(Y_i = 1|x_i) = G(x_i\beta) = \Phi(z)$$

equation (2)

Then the standard normal cumulative distribution function and the standard normal density are:

$$\Phi(z) = \int_{-\infty}^{(z)} \phi(v)dv \quad ; \quad \phi(z) = \frac{1}{\sqrt{2\pi}} \exp[-\frac{(z)^2}{2}]$$

equation (3)

And the likelihood function is:

$$\ln L = \sum_{i}^{s} w_i \ln \Phi\{1-(x_i\beta)\} + \sum_{s+1}^{n} w_i \ln \Phi(x_i\beta)$$
$$N = 1...,s,(s+1).....n$$

equation (4)

We also did not ignore endogenous problem. First we assume that our model may endogenous with hours worked of the child; however, we have tested that and we rejected the 2-stages least squared Probit model. Thus the results from the Instrumental Variables (IV-Probit) is not used for the interpretation in this study.

4.d. Validation

The analysis of this indicator provides child-based estimates of monetary poverty based on the World Bank poverty analysis in the 2009 Cambodian Social and Economic Survey. We show how overall population poverty compares to child poverty (for those aged 17 and under) and then give a range of poverty profiles for poor children. In addition, we show the overlapping populations of children according to monetary poverty and deprivation status – as shown in the UNICEF Cambodia 2012 profile of child poverty using deprivation measures.

Our profiling has been undertaken with Situational Analysis in mind, and we have additionally shown a descriptive multi-variate regression of child poverty risk that shows the correlations between a range of geographic, household and economic factors that can inform discussions of the determinants of child well-being and especially on ‘financial barriers’.

A more in-depth analysis of the relationship between monetary poverty and child deprivation is contained in an accompanying paper, which is more exploratory in nature in order to examine the relationship between deprivation and consumption levels below, at and above the poverty line.

4.i. Quality management

The NIS decided to use statistical methods (calibration) to achieve better comparability between the different rounds of the CSES surveys by adjusting the samples to the population size and structure that was established by the national population census carried out in 2008. To mirror the rapid changes in the population, it proved necessary to project the population forwards to 2017 and backwards to 1993, taking into account fertility, mortality and internal migration rates.

4.j. Quality assurance

Initially, the data has been input by poverty economists, which has been checked carefully together with the metadata information by the central team for monitoring SDGs 1.2.2 in the World Bank. Then data has been sent to the UNDP and UNICEF for further verification.

5. Data availability and disaggregation

Data availability by age and gender, by geographic location: urban/rural and by provinces.

7. References and Documentation

Cambodia Socio-Economic Survey Reports: https://www.nis.gov.kh/index.php/km/14-cses/12-cambodia-socio-economic-survey-reports