STATEMENT OF THE ADVISORY COMMISSION ON MONETARY POVERTY ESTIMATION

Lima, April 10, 2019

The Advisory Commission for the Estimation of Poverty¹ began its activities in April 2007 and was officially recognized in 2010, institutionalizing its operation and regulating its functions, scope and composition. Since its creation, the Commission's work has focused on reviewing the most important methodological aspects associated with the measurement of monetary poverty².

This statement addresses the following aspects:

- ✓ First, the balance of what was done and obtained during the 2018 monetary poverty measurement.
- ✓ Second, the description of what INEI has done in response to the recommendations made by the Commission.

1. Analysis procedures carried out in the 2018 monetary poverty measurement 2.

During the stage of analysis and evaluation of the procedures and protocols used by INEI for the calculation of the 2018 monetary poverty indicators and their consistency with respect to the recommendations made, the Commission met in 4 sessions (February 26, March 05 and 26, and April 02, 2019). In the course of these meetings, the Commission thoroughly examined the various methodological aspects, as well as the results of the monetary poverty measurement. Following the conclusion of the evaluation, the Commission wishes to express the following:

- 1. The 2018 monetary poverty figures have been calculated using the methodology that has been consistently applied in the 2004-2017 period. This methodology includes both the procedures used for the calculation of household expenditure and those used for the calculation of poverty lines. Due to this, it can be affirmed that the monetary poverty estimated for 2018 and the variations with respect to 2017, effectively correspond to changes in the living conditions of households according to the approximation of household expenditures and not to changes in the estimation methodology.
- 2. The poverty indicators presented in the report refer only to monetary poverty. The monetary poor are defined as those individuals residing in households whose monthly per capita expenditure is below the value of a basket of products and services (poverty lines) that allows them to satisfy a set of minimum material needs. The expenditure estimate considers both monetary and non-monetary expenditures (self-consumption, self-supply, donations and transfers in kind and in cash, whether of private or public origin).

Available at : <u>http://www.inei.gob.pe/DocumentosPublicos/Pobreza_InformeTecnico.pdf</u>

¹ The Advisory Commission for Poverty Estimation was created by Supreme Resolution No. 097-2010-PCM. The functions of the Advisory Commission are: (1) to advise on poverty measurement processes and other related indicators, as well as to supervise the processes that are adopted; (2) to evaluate and validate the results of the estimates that are periodically made; and (3) to propose, when appropriate, modifications to the methodologies based on the evaluation of their validity and international experience, provided that the comparability of the indicators over time is ensured.

As a result of this work, the Commission made a set of methodological recommendations. The changes implemented are described in a technical report published on the INEI website Technical Report: Evolution of Poverty 2004-2010. New Methodology. Lima, March 2012.

It is important to emphasize that monetary poverty measures the possibility of acquiring this minimum basket, but not necessarily its actual consumption. Likewise, both the expenditure and the consumption basket for calculating poverty lines underestimate the value of public goods and services received by households (particularly social programs, education and health) for which a satisfactory method of monetary valuation is not yet available.

- 3. The estimation of monetary poverty is based on information from the National Household Survey on Living Conditions and Poverty (ENAHO). This survey is carried out continuously, every year and throughout the year in the national territory to a sample that, in 2018, amounted to 39,820 households. In this sense, the results obtained from this survey should always be interpreted considering the sampling errors that accompany the publication of monetary poverty indicators, which allow us to appreciate the statistical accuracy of the results.
- 4. The Commission has observed the continuous improvement that INEI has been making every year in the monitoring of the online information collection process, by using the available technological tools, through the implementation of real-time validation controls of the main variables, in order to ensure the quality of the statistical information, which provides increasing reliability to the data used to calculate poverty indicators.
- 5. The review and evaluation process that the Commission carries out annually on the National Household Survey data consists of two stages:
 - ✓ Evaluation of the quality of the survey
 - ✓ Evaluation of the quality and robustness of the results of the monetary variables.
- 6. The Commission, in the quality evaluation stage of the survey, has received and analyzed the following information:
 - Survey monitoring system
 - Total and partial non-response rate
 - Indirect response rate
 - Framework problems
 - Non-response correction methods
- 7. At the request of the commission, during the survey quality assessment stage, INEI has carried out the following exercises, among others:
 - Effects of field incidences on survey quality (non-response rate)
 - Variation in the values of the responses, using the panel sample, when they are proxy responses in one of the panel years
- 8. After having analyzed the information and evaluations presented by INEI, the Commission considers that the quality of the ENAHO survey data used in the measurement of monetary poverty 2018 meets a high standard of quality.

- 9. The second stage developed by the Commission corresponded to the evaluation of the quality and robustness of the 2018 monetary data, an activity that involves important aspects mentioned below:
 - ✓ Detailed evaluation of household expenditure and income information at all relevant geographic levels, i.e., by 12 expenditure groups (Classification of Individual Consumption by Purpose-CCIF), expenditure types and items; information including sampling errors, tests of differences and variation of averages. Likewise, the consistency between the evolution of total expenditures according to the different modes of acquisition was examined. With respect to income, the aggregate values and the various types of income were reviewed. In this context, the robustness of the expenditure and income indicators was verified using comparisons of the panel component with the total survey sample.
 - ✓ Evaluation of expenditure and income considering fixed deciles of the total sample and panel sample.
 - ✓ Evaluation of the robustness of the reference population and prices of the food basket used from the base year 2010.
 - ✓ Evaluation of the prices collected by the survey in relation to the prices collected by the CPI in the districts where CPI information is collected.
 - ✓ Analysis of the results of the evolution of the incidence of monetary poverty, poverty gap and severity of poverty, both total poverty and extreme poverty.
 - ✓ Evaluation of the consistency of the results.
 - ✓ Verification of the comparability of the methodologies used to calculate monetary poverty, ensuring that the procedures used to estimate expenditures, income and poverty lines are consistent with the methodology applied in previous years.
- 10. The Commission recognizes the effort made every year by INEI to make available to the public, via the web page, the complete original statistical information, documentation and programming routines that allow the replication of the published results.

2. Status of the recommendations made by the Commission to INEI ³

Recommendations implemented:

(i) It was recommended that a study be conducted to verify the possible biases that could be caused by the constant growth of the indirect response rate. In this regard, during the third meeting of this year, INEI presented to the Commission the "Evaluation of the growth of the indirect response rate in the panel sample", the verification consisted of following up informants from one year to the next in those cases in which there was one year with indirect response and one year with direct response. As a result, it was observed that there are three types of variables: those that do not present differences or are not significant (such as age groups, insurance ownership, illiteracy); those that present variation due to the level of subjectivity involved (such as ethnic self-identification); and those that require the knowledge of specific information (such as chronic disease ownership, mother tongue, activity status, company size, among others)⁴

³ See the Advisory Committee Statement of April 24, 2018 where recommendations were made: <u>https://www.inei.gob.pe/media/cifras_de_pobreza/declaracion-de-la-comision-consultiva-de-pobreza-monetaria-2018.pdf</u>

Recommendations in process:

- (i) The Commission requested to document all the processes of measuring monetary poverty indicators with the methodological update. In this regard, INEI is working on the preparation of the document "New spatial deflator".
- (ii) The Commission recommended evaluating the nutritional contribution of consumption according to the Survey of Food Consumed Outside the Home; and its implications in estimating the caloric deficit of households. INEI presented to the Commission on November 27, 2018 the new estimates of the caloric deficit for evaluation. In this regard, the Commission made some verification observations to the data obtained, the results of which will soon be presented to the Commission. Likewise, it was recommended to deepen this issue in the framework of the household budget survey that INEI will begin to develop.
- (iii) Within the framework of the Sustainable Development Goals SDGs (eradication of poverty in all its forms), the Commission recommended INEI to address the issue of "Multidimensional Poverty Measurement" as a complement to monetary poverty, for which it requested the preparation of a work plan specifying topics and schedule of sessions for discussion and evaluation by the Commission. In this regard, INEI presented the proposed work plan and meeting schedule to the members of the Commission, and there were observations that will be corrected and presented again to the Commission after the review of the 2018 monetary poverty estimate.
- (iv) Educational guidance to the user about the limits of inference that can be obtained from the total sample and a panel sample. INEI has reported that it has a preliminary version of the document that is in the validation stage.
- (v) Explore methodologies that allow for the adequate monetary valuation of social programs and transfers received from households in health, education and food, for which INEI should initiate coordination with the Ministries involved (MIDIS, MINSA, MINEDU). Once the 2018 monetary poverty assessment process has concluded, INEI will send letters to the institutions involved requesting the designation of a representative to sensitize them on the purpose of the work to be carried out and the type of information required.

In addition, the Commission has made a set of proposals to INEI on issues that deserve further analysis and that could be worked on in the near future. For example, they have discussed the need to evaluate the alternatives available to correct the non-response bias in the upper strata, the relevance of preparing a proposal to improve the accuracy of poverty indicators at the departmental level, conduct a study on the investments and savings of respondents, continue working on the construction of food price indexes based on the unit values of the ENAHO, for evaluation with the CPI, among others.

⁴ However, it is necessary to recognize that between two years the health or work conditions may change because the individual's situation changed and not necessarily because of inconsistency in reporting.

Finally, this year the Commission has made additional recommendations, as follows:

- (i) Disaggregate, only for the Commission's analysis, the total income by form of reporting (direct versus indirect reporting), in order to have an idea of the proportion of total income represented by indirectly reported income.
- (ii) Given the time elapsed since the last update of the inputs for measuring monetary poverty, which took place in 2010, it is important to evaluate the need and opportunity to define a new base year, incorporating new statistical information obtained in the National Censuses, the selection of a new reference population, among others.
- (iii) With the results of the 2017 National Censuses, it is necessary to update the sampling frame of the permanent household surveys; as well as the evaluation of potential biases in terms of excluded areas, as a result of the expansion of cities.
- (iv) Recommend to INEI to include in the database presented on the web, the variables of the sample design, so that users can calculate the standard errors taking into account this design.