# STATEMENT OF THE ADVISORY COMMITTEE FOR THE MONETARY POVERTY ESTIMATION

Lima, May 10, 2017

The Advisory Committee 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 Committee's work has focused on reviewing the most important methodological aspects associated with the measurement of monetary poverty². Four major aspects were included in the present statement. First, the assessment of what has been done and what it has been obtained during the 2016 monetary poverty measure. Second, an assessment of the recommendations made to INEI last year when the results of 2015 monetary poverty measure were presented. Third, recommendations and suggestions for the future work related to the monetary poverty measure. Finally, as fourth point, some more extended reflections about the Committee future work were presented.

## 1. Analysis procedures carried out in the 2016 monetary poverty measure

During the stage of analysis and evaluation of the procedures and protocols used by INEI for the calculation of the 2016 monetary poverty indicators and their consistency with respect to the recommendations made, the Commission met in 4 sessions (March 6 and April 3, 17 and 24, 2017). In the course of these meetings, the Committee thoroughly examined the various methodological aspects applied, as well as the results of the monetary poverty measure. After concluded the performed evaluation, the Committee would like to state the following:

- 1. The 2016 monetary poverty figures have been calculated using the methodology that has been consistently applied during the 2004-2015 period. This methodology includes both procedures used for the calculation of household expenditure and procedures used for the calculation of poverty lines. For that reason, it can be affirmed that the monetary poverty estimated for 2016 and the variations with respect to 2015 truly correspond to changes in the household living conditions according to the approximation of the 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 people are defined as those individuals residing in households whose monthly per capita expenditure is below the value of a basic basket of products and services (poverty lines) that allows 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: <a href="http://www.inei.gob.pe/DocumentosPublicos/Pobreza">http://www.inei.gob.pe/DocumentosPublicos/Pobreza</a> InformeTecnico.pdf

The Advisory Committee for Poverty Estimation was created by Supreme Resolution No. 097-2010-PCM. The functions of the Advisory Committee are: (1) to advise on poverty measure proceedings 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 in the time is ensured.

As a result of this work, the Committee 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 should be noted that, the monetary poverty measures the possibility of acquiring that minimum basket, but not necessarily its effective acquisition. 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 data from the National Household Survey (NHS) about Living Conditions and Poverty. This survey is carried out every year and throughout the national territory at a sample that, in 2016, amounted to 38,386 households<sup>3</sup>. For this reason, 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 robustness of the results.
- 4. The Committee considers as a great asset from INEI the incorporation of technological tools that allows to assure the quality in the collecting process of statistical data. This last aspect had been translated in the implementation of a monitoring and evaluating quality system in the field and in real time for the NHS, which allows to perform a tracking in line of the coverage and execution of the programmed sample, as well as implement controls for the validation of basic variables of the panel sample, review of monetary values, codification in field, among others.
- 5. The Committee, after studied the different quality indicators of the survey (rates of non-total and partial response, percentage of direct and indirect interviews, extreme values, framework errors, correction of the non-response, profile of the non-response, among others) considers that the NHS survey data quality used on the measure of the 2016 monetary poverty measure meet a high quality standard. The Committee acknowledges the seriousness, rigor and celerity in the work performed by the INEI, elements that allows to provide information timely and reliable data.
- 6. Part of the quality and robustness evaluation and validation work of 2016 data in charge of the Committee has been to deepen in important aspects that are mentioned below:
  - ✓ Detailed evaluation of the performance of collecting data operations, control and supervision proceedings implemented by the INEI in order to assure the good quality of the primary data.
  - ✓ Detailed evaluation of the household expenses and incomes data in all the relevant geographic levels, i.e., by expense groups, items and expense groups; information that includes the sampling errors, test of differences and the averages variations. Likewise, it was examined the consistency between the evolutions of total expenses according to the different ways of acquisition; regarding the incomes it was reviewed the aggregated values and the different types of incomes. Finally, it was verified the robustness of the expense and income indicators using the comparisons of the panel component with the total sample of the survey.

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<sup>&</sup>lt;sup>3</sup> Includes 1,334 households of oversampling of high stratum; this increasing of the sample is performed since 2013 according to the Committee recommendation in order to assure the highest robustness in the results of the poverty indicators. In addition, in 2016 it was performed an increase of 2,645 households, at the request of the Ministry of Development and Social Inclusion (MIDIS), in order to improve the focusing of poor households in the General Pattern of Households.

- ✓ Evaluation of the robustness of the reference population and prices of the basic food basket used since 2010 base year.
- ✓ Analysis of the results of the evolution of the monetary poverty incidence, gap and poverty severity.
- ✓ Verification of the comparability of the calculation methodologies of monetary poverty guaranteeing that the proceedings used to estimate expenses, incomes and poverty lines are consistent with the applied methodology in previous years.
- 7. The Committee greets and specially acknowledge the INEI effort in making available to the public, via website, the complete original data base, documentation and programming routines that allows to replicate the published results.

## 2. Situation of the formulated recommendations by the Committee to the INEI<sup>4</sup>

## **Recommendations implemented:**

- (i) The Committee recommended systematize the existing practices and define a standard protocol of detection and treatment of extreme values of incomes and expenses to be use in future NHS quality evaluations

  About this particular issue, in the last 2016 quarter, the Survey Management and Monitoring System was implemented in the NHS, which was presented to the Committee members during the first meeting of this year, letting know the main features of quality tracking in field that has been performing, as well as the next actions to be perform during
- (ii) The Committee recommended that the data about basic services quality must be included in the analysis of the basic services results, taking as source other surveys that INEI apply with national coverage (such as National Survey of Program Budgetary (ENAPRES), among others). Taking in consideration the recommendation, the INEI incorporated to the 2017 NHS questionnaire a question that measures the quality of the water service in the households (it collect information about the hours per day that the household Access to the service and how many days a week receive the service).

## **Recommendations in process:**

the year.

has a pending challenge in terms of properly including the monetary valuation of social programs and received transferences from households in health, education and foods (such as SIS, Qali Warma, among others). Due to this issue, what is registered in the survey only corresponds to pocket monetary payments that perform the informant of the received services, which it could involve an underestimate grade of its incomes and expenses. Therefore, the Committee has suggested to the INEI, in coordination with MIDIS and MINSA, to jointly explore the methodological options that allows to rectify the problem.

See the Advisory Committee Statement of April 22, 2016 where recommendations were made: http://www.inei.gob.pe/media/cifras de pobreza/declaracion comision-consultiva pobreza2015.pdf

Regarding this issue, the INEI had been performing coordination with the sectors that are in charge of the social programs, collecting the necessary information to initiate the evaluation jointly with the Committee.

- (ii) The Committee recommended to perform an evaluation of the nutritional intake of foods consumption out of home based on the research performed on 2013; and evaluate its implications in the estimation of the household calorie deficit. To this end the INEI, had concluded the codification of foods consumed out of home (question 559) of the NHS 2013-2016; the following steps to follow are estimate the calorie deficit considering the "Food chart consumed out of home) developed by the National Center of Food and Nutrition (CENAN), after comparing the results with the calculation of the calorie cost per quartile from the expenditure proposed in the 2012 update; and start the evaluation with the Committee.
- (iii) Within the framework of the Sustainable Development Goals (SDG) that sets as one of their axes the "poverty eradication in all their ways", the Committee recommended the INEI the development of a working plan in order to discuss and evaluate the relevance of implement a methodology for multidimensional poverty measure complementary to the monetary poverty measure. This recommendation included the need that the mentioned working plan: define the subjects to be discussed in different sessions, set a meeting and activities calendar and stablish the setup of a technical team composed by INEI specialized technicians and Committee members in order to execute the different specific tasks included in that working plan. Regarding this issue during 2016, there were carried out 4 working meetings; in the first one it was discussed the working plan, activities and strategies to follow; in the second meeting the "international experiences of the region" related to the multidimensional poverty measure were presented; in the third meeting the objectives for the Peruvian case were presented; and in the fourth meeting there were presented "indicators and dimensions inventory of the multidimensional poverty measure" used by the countries, where it was discussed and contributions were given over this particular issue. Concluded the review of the 2016 monetary poverty estimation, the meetings about the multidimensional poverty will resume in order to finish the process of the working plan development mentioned before and to begin the specific actions that will stablish in the mentioned working plan.

## **Recommendations in progress:**

- (i) The Committee requested to submit a list of the pending methodological documents related with the inputs for the monetary poverty measure based on 2010. Likewise, it requested to submit a working plan and schedule about the documentation of the pending processes regarding the measure of the monetary poverty indicators with the new base. Regarding this particular issue, the INEI is currently finishing the preparation of methodological documents related to the inputs of the methodological update. This documentation will be distributed to the Committee for their insights and/or suggestions.
  - (ii) The Committee also recommended to carry out the construction of an index of food prices based on the NHS unit values, taking on account the urban and rural areas to perform the corresponding evaluations at detailed levels and to compare between them and with the CPI series. The Committee members observed that when a detailed assessment was made to these unit values (for example at the level of variety of products), even when the differences between the elaborated indices based on the NHS household expenses and the price indices collected by the INEI in the points of sale are lower to the

aggregated geographic levels, the differences are higher at levels of disaggregation more elevated. Regarding this issue, the INEI express that its technical team will begin the working meetings in order to determine the proceedings for creating the requested index.

- (iii) Relating to the constant growth that is observed in the indirect non-response rate, an indepth study is required in order to allow to verify the biases that will be affecting the indicators related to the population living standards. Regarding this issue the INEI considers necessary to explore new strategies that allows to reduce the levels reached in the indicator, as well as to start the requested study.
- (iii) Regarding the presence of the non-response high rate in the high strata, is convenient to evaluate if the ongoing correction of the bias through the expansion factors is enough or if it requires to improve the methodology that guarantee an assertive calculation of the inequality indicators in the living standards. Regarding this issue the INEI technical team, will begin the corresponding evaluation and will inform the results to the Committee.
- (iv) It was observed that in the monetary poverty indicators are a few level of statistical significance in the differences compared with the last year in almost all the geographical domains and Departments, for this reason the Committee recommended the INEI to evaluate the NHS design and make a proposal for the improvement in the precision of the poverty indicators at Department level. Likewise, the Committee indicated several options that should be included in this proposal since improving in the stratification for the sample design, amplification of the total sample or about focused samples to specific zones from time to time, etc. Regarding this request, the INEIwill start the evaluation of the sizes of the current sample and will inform the results to the Committee.

### 3. Committee recommendations and suggestions for the year 2017

Based in the discussions performed during the 4 working meetings performed this current year the Committee make the following recommendations:

- a) Regarding the expenses pooling in 8 groups, is convenient to update the classification of the expenses in 12 groups, in view that they belong to the last review of National Accounts (Individual Consumption Classification by Purpose - CCIF); for example in the pooling of 8 groups "education and entertainment" they appear together for which it could be wrongly interpret its variations.
- b) It is recommended to perform a study about the possible bias that could be presenting between the general sample and the panel sample, before the signs observed by the Committee that the differences between both samples could be expanding.
- c) It was recommended to carry out, based in the NHS information, a special study about the family's expenses, investment and savings.
- d) It was recommended to deeply investigate the case of non-response due to the important quantity of unoccupied and abandoned houses, in order to be able to understand better the territorial mobility dynamics and improve the survey designs. The results of the next Census of Population and Household will constitute a valuable input in this sense.

e) It was recommended the generation of education actions oriented to the user regarding the inference limits that could be obtained from the total sample and from a panel sample.

## 4. Committee prospects and work agenda

Bellow the Commmittee has included some subjects in its own work agenda:

- The Committee is consciuos of the importance of keeping updated the methodologies of monetary poverty measure for this reason they consider that it should be part of their agenda and they show a great interest in:
  - ✓ Address the need and oportunity to determine a new base year that incorporates new statistical information such as the National Census to be perform during this current year, the Survey of consumed foods out of home, selection of a new reference population, among others.
  - ✓ Determine the criteria to be considered in the process of goods and services valuation received by the households, provided by the public sector.
- For the Committee is from great importance to contribute with the screening and the discussion around the statistics of national employment measure in which the INEI is working on. For this reason, the Committee suggest to the INEI to create a specific working team to analyse that issue. This last issue is part of the functions defined at the moment of the Committee creation that includes not only the advice in subjects of monetary poverty measure but also in subjects related to other indicators linked to poverty.
- Considering the strong reduction in the monetary poverty rate during the last ten years and the consequent growth of the non-poor population, but that still has basic lacks or risks to relapse in poverty, the Committee considers important that the INEI create a work team in order to explore the concepts, indicators and proper methodologies to identify and describe the vulnerable population.