# Statement of the Advisory Committee
## for the Estimation of Poverty

Lima, April 23, 2015

The Advisory Committee for the Estimation of Poverty[1] began its work in April 2007 and was officially created in 2010, institutionalizing its operation and regulating its functions, scope and composition[2]. Since its creation, the Commission's work has focused on reviewing the most important methodological aspects associated with the measurement of monetary poverty[3]. Four major issues are treated in the present statement. First, a balance of the recommendations made to the INEI last year when the results of the 2013 poverty measurement were revealed. Second, the balance between that it was done and obtained during the 2014 poverty measurement. Third, recommendations and suggestions for the future work related to poverty measurement. Forth and last, some wider considerations about the future work of the Committee particularly regarding the new Poverty Map that is under elaboration.

## 1. Recommendations of the Committee in 2014 and its implementation by the INEI[4]

(i) *The Committee recommended to include supplementary indicators in the database of public use (price deflators, temporary and spatial).* Temporary deflators (Consumer Price Index), by month, group of expense and city are part of it since the year 2012 of the routines of poverty that are published in the website of the poverty routines that are published in the INEI website. Spatial deflators are being published since the year 2012 in the file named SUMARIA.

(ii) *It was noticed a high rotation rate of interviewer staff and the Committee propose a list of recommendations aimed to reduce this rotation.* Since 2013 the INEI has resumed the training in a focused way.

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[1] The following institutions are members of the Advisory Committee: World Bank (WB), Inter-American Development Bank (IDB), Institute for Development Research (IRD) of the French Government, United Nations Population Fund (UNFPA), Ministry of Economy and Finance (MEF), Ministry of Development and Social Integration (MIDIS), Ministry of Women and Vulnerable Populations (MIMP), National Center for Food and Nutrition (CENAN), Inter Ministerial Commission for Social Affairs (CIAS), Central Bank Reserve of Peru (BCRP), Consortium for Economic and Social Research (CIES), Group of Analysis for Development (GRADE), Institute of Peruvian Studies (IEP), Roundtable for the Fight against Poverty (MCLCP), Pontifical Universidad Católica del Perú and Universidad del Pacífico. Finally, The Advisory Committee is made up of independent researchers, with recognized national and international trajectory. The Advisory Commission is chaired by the Head of the National Institute of Statistics and Informatics (INEI) and its Technical Secretariat is the Technical Directorate of Demography and Social Indicators.

[2] The Advisory Commission for the Estimation of Poverty was created by Supreme Resolution No. 097-2010-PCM. The functions of the Advisory Committee are: (1) to advise on the processes for measuring poverty and other related indicators, as well as to supervise the processes that are adopted; (2) evaluate and validate the results of the estimates made periodically; and (3) propose, when pertinent, 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.

[3] The result of this work served the Committee to make a set of methodologic recommendations. The implemented changes are described in a technical report published in the INEI website, Technical Report: Evolution of Poverty 2004-2010. New Methodology. Lima, March 2012. Available in:
http://www.inei.gob.pe/DocumentosPublicos/Pobreza_InformeTecnico.pdf

[4] See the Statement of Advisory Committee dated, May 2, 2014 where recommendations were done in:
http://www.inei.gob.pe/media/cifras_de_pobreza/declaracion_comision_consultiva.pdf

Also, as part of the INEI institutional policy it has been adopted measures to improve labor conditions, giving special emphasis to field staff during last year. As a result of this, it achieved to decrease the rotation level in 17 percentage points, going from 52% in 2013 to 35% in 2014.

(iii) *The Committee recommended to improve the technical documents where it is defined the construction methodology of some variables. Also, explaining the presentation of monetary values to current prices, constants within the year (that are in their database) and the published data, income and expense for example in real terms.* Since this current year the INEI will include in the chapters that content monetary variables, a document that briefly the distinction of monetary variables that showed in the database, its way of use and limitations (current rate of field, deflated values, imputed values and use of real values; in this last point it will added the syntaxes to carry expenses to "real" values).

(iv) *The Committee recommended to improve the protocols to collect the field information to assure the standardization of the information about the attendance to school.* In 2013 the INEI started to make adjustments in the protocols. The "Interviewer Manual" was standardized, the protocol to collect information about the variable "attending school". In the cases of temporary illness of the student, teachers strike or mid-term vacations, it will be considered the attendance of the student to class because all of them are of short term episodes that can be overcome by the students once the return to classes.

(v) *The Committee ask to make explicit in the databases of public use the distinction of transferences coming from programs such as Juntos and Pension 65.* The INEI had included in the file SUMARIA the variables of incomes by public transferences, of the Program JUNTOS (INGTPU01), Pension 65 (INGTPU03), Program BECA 18 (INGTPU04) and Bond GAS o FISE (INGTPU05).

(vi) *The Committee recommended to systematize the existing practices and determine a standard protocol of detection and treatment of the extreme values of incomes and expenses in order to be use in future evaluations of quality of the NHS (ENAHO).* The INEI had developed a Management Survey System, which is the same that is currently in the validation and revision. Concluded these tests its implementation is programmed during the second semester of 2015.

(vii) *The Committee recommended to improve the capture of modalities not purchased of the expense (self-consumption, self-supply, as part of the payment to a family member, as a gift or given by some member of other home, as a gift or donated by some social program, others) that currently capture with little precision when the same item not purchased has more than one way of acquisition*. Regarding this issue the INEI is developing the migration of programs of data income from PDA to TABLET, in its design has included in the chapters of expense the capture in independent way of each one of the expending sources that are not purchased; it is been planned to finish this process during this current year.

(viii) *In order to build up systems of geographic information, the Committee asked the INEI to include in the database of public use the geo-reference of the populated centers.* In the database of public use of the (NHS) ENAHO of 2007 and henceforth the INEI had included the geo-reference points of the sample, this information had been added in the Chapter 100 "Characteristics of the house and the household"

## 2. Regarding the procedures for poverty measurement in 2014

In order to analyzed the procedures used by the INEI for the 2014 poverty indicators calculation and its consistency regarding the recommendations, the Committee gathered in 4 opportunities (March 12 and 19, and April 9 and 16, 2015). During these meetings, the Committee examined the the methodological features and results of the poverty monetary measurement. Regarding this issue the Committee wish to express the following:

1. The methodology used in the poverty measurement of the year 2014 was identical to the employed for the years 2004-2013. Particularly, the procedures used for the calculation of the expense of households and the poverty lines, had been rigorously the same for the last years. Therefore, it can be stated that the estimated poverty for 2014 and the variations compared to 2013 corresponds to changes in the living conditions of the households according with the approximation of household expenses.

2. The poverty indicators presented in the Report only referred to monetary poverty. Monetary poor are those people that lives in households which their expense per capita is under the value of the basic products basket (poverty lines) that allows to satisfy the minimum needs. The estimation of the expense considers both the monetary expenses as well as the non- monetary (self-consumption, self-supply, donations and transferences in species and in money being from private or public origin). It is important to underline that monetary poverty measures the possibility of acquire a minimum basket, but necessarily its effective acquisition. Likewise, in both the expense as well as the consumption basket to calculate the poverty lines, the goods and public services are excluded (example, education and health) for which there is no satisfactory method of monetary valuation.

3. The poverty estimation is performed with the information coming from the National Household Survey about Living Conditions and Poverty (ENAHO). This survey is performed all the years and all year round in the national territory at a sample that in the year 2014 reached a total of 32,700 household[5]. Nevertheless, the results that are obtained from that survey must been always interpreted considering the sampling errors that accompanying the publication of poverty indicators that allows to appreciate the statistic robustness of the results. The Committee express its satisfaction regarding the good practices applied by the INEI.

4. The Committee, after been examined different quality indicators (fees of total and partial non-response, percentage of direct and indirect interviews, extreme values, framework errors, correction of the non-response, among others) considers that the data quality of the ENAHO Survey used in the 2014 monetary poverty measurement answers to a quality high standard. The Committee congratulate the INEI for the seriousness, rigor and celerity in the work done that allows to give information of poverty in a timely and reliable way.

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[5] Includes 1,100 households of over-sample of the high strata. This increase of the sample was performed in the year 2013 by recommendation of the Committee in order to assure a greater robustness in the results of poverty indicators.

5. Part of the Committee work has been to evaluate and validate important aspects such as the following:
   ✓ Detailed evaluation of the information of expenses and incomes of households in all the relevant geographic levels, by deciles, by expense groups, expense types and items. This information included sampling errors, tests of differences and the average variation. Likewise, it was verified the robustness of the expense and income indicators used in the component panel of the ENAHO.
   ✓ Evaluation of the robustness of the population of reference and prices of the basic food basket used since the base year 2010.
   ✓ Determine the comparability of poverty calculation methodologies guaranteeing that the procedures used to estimate the expenses, incomes and poverty lines are the same of last years.

6. The Committee greet and congratulate that INEI continues making information available to the public, via website, the complete original database, the detailed documentation and the programming routines that allows to replicate the published results.

## 3. Recommendations and suggestions

In so far as the improvements in the quality of the social indicators is a continuous process, the Committee had made some recommendations to the INEI in addition include subjects in the work agenda of the same Committee. The recommendations made by the Committee during the 2015 meetings are the following:

1. Take preventive methodology actions in the case of Tacna, since is the Department with higher rate of non-response during the last three years.

2. Include in the published database the socio-economic strata, with a brief technical document that explain the criteria of its elaboration:

3. Regarding the valorization of social programs and transferences received by household's where the survey was done, this correspond just to the monetary payments of the household pockets (this procedure is part of the poverty methodology). This could imply an underestimation of the total expense of households and of the poverty lines. Due to the expansion of social programs it was necessary to propose jointly with the Committee methodological options that allows to rectify this problem (for example: make use of administrative data, among others). The Committee had suggested the INEI to coordinate with MIDIS and MINSA and explore the alternatives of complementary information.

4. Include in the analysis the results of the basic services, quality information, these data could come from other surveys that apply the INEI with national coverage.

5. To perform an evaluation of the nutritional intake of the food consumption out of home base on the results of the performed investigation performed in 2013; to evaluate its implications in the estimation of the household's caloric deficit.

## 4. Perspectives and Poverty Map

- Since we have new results about the aspects related to the poverty measure (survey of food consumed out of home, better measure of public transferences, etc.), it must be part of the Committee agenda to make a reflection about the need and opportunity of incorporate these new elements in the definition of a new base year (the base year of the current poverty line is 2010).

- The Committee started in 2014 a quality evaluation process of the quality of the monetary poverty maps that INEI had performed during the las years. To this date it had been held 6 working meetings to discuss about this issue.  The evaluation confirmed that the poverty maps are reasonable to levels of major spatial aggregation (Departments, Provinces) and even to District level, when the District population size is big. Nevertheless, there are greater difficulties in order to estimate poverty in an adequate way when the Districts are too small. The work performed by the INEI confirmed the convenience of stacking more than one annual survey in order to improve the efficiency which is calculated the poverty District estimates.

- The Committee puts on records the huge effort performed by the INEI in order to guarantee the consistency in the integration of the information coming from different database such as the District Census of Population and Household (SISFOH) 2012 – 2013, The National Household Survey (ENAHO) collected 2012 – 2013, The IV National Agricultural Census  2012, The School Census 2013, Census of Educative Infrastructure 2013, as well as contextual information provided by the National Registry of Municipalities 2014 and the National Census to Local and Regional Governments 2014. This information, once the consistency is done, not only will allow the construction of a more robust poverty map but also will constitute in database that could been used for other purposes.

- The Committee made a list of recommendations in order to improve the quality of the poverty maps. It was suggested to use the method of cross-validation in order to assure the quality of prediction of expense models. Likewise, it has been suggested a protocol in order to validate the quality of variables to be use in the per-capita expense prediction models. (Minimize co-linearity and maximize theory coherence).

- It is expected that during the following months it can culminate the construction process of the new poverty map. The Committee had recommended that next to the poverty map that is going to be published the INEI  document the protocol to define every four years and with what information will be updated the poverty maps  in order to assure a higher predictability and transparency in the production of this instrument.