STATEMENT OF THE ADVISORY COMMITTEE FOR THE MONETARY POVERTY ESTIMATION, 2020

Lima, May 13, 2021

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 measure of monetary poverty².

In this statement addresses the following proceedings:

- ✓ First, the balance of what was done and obtained during the 2019 monetary poverty measure.
- ✓ Second, the description of what INEI has done in response to the recommendations made by the Committee.
- 1. Analysis procedures carried out in the 2019 monetary poverty measure

During the stage of analysis and evaluation of the procedures and protocols used by INEI for the calculation of the 2020 monetary poverty indicators and their consistency with respect to the recommendations made, the Committee met in 5 sessions (March 09 and 23, April 13 and 27 and May 04, 2020). It is worth to be mention that following the recommendations given due to the health emergency state, the Committee meetings were carry out virtual way, without any inconvenient limiting the developed activities by this Committee. During the development of these working 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:

- In the context of the measures adopted by the government, that declared National Health Emergency, the mandatory isolation (quarantine) and physical distance as a consequence of COVID- 19, INEI adopted exceptional measures in order to ensure the security of the survey field staff and ensure the coverage of the sample of 2020. For this purpose, it prioritized the main objective in each one of the researches, which in the NHS is the monetary poverty measure and the life conditions in households; a subject which we will deepen later.
- 2. The results of the year 2020 monetary had been calculated using the same methodology that had been applied in a consistent way during the period 2004-2019. The applied methodology includes both the proceedings used for calculate of the household expense and those used for calculate the monetary poverty lines. Consequently, it can be assure that the estimated monetary poverty for 2020 and the variations compared the year 2019, effectively correspond to changes in household life conditions according to the evolution of the household expenses and not to changes in the estimation methodology.

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

¹ 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 proceedings 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, as long as is ensured the comparability in the time of the indicators.

² 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.

- 3. The estimation of the monetary poverty is performed on the basis of the data collected from the National Household Survey (NHS) on Living Conditions and Poverty. This survey is carried out continuously, every year and throughout the year in the national territory to a sample that, in the year 2020, amounted to 37 103 households. For this reason, the results obtained from this survey should always be interpreted considering the sampling errors that complemented the publication of monetary poverty indicators, which allow us to appreciate the statistical accuracy of the results.
- 4. The review and evaluation process that the Committee 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.
- 5. The Committee, in the quality evaluation stage of the survey, has received and analyzed the following information:
 - Field operation report, where there were reported the measures adopted since the health emergency state. In this stage the following was reported:
 - Execution of telephone surveys with the application of the reduced questionnaire, during the period of mandatory quarantine, it means, since mid-March till September 2020, with an exception in September³ of 8 regions where face-to-face interviews surveys restarted.
 - From the sample total, to the 51% applied the face-to-face interview and to the 49% applied telephone interview.
 - During the definition process of the reduced questionnaire there were performed 3 pilot tests, in order to reach optimal times of interview, according to international recommendations.
 - The questions related to poverty measure were not part of the questions that could be excluded, in order to assure the comparability of the methodology.
 - The field staff was trained in the protocols for the execution of the telephone interviews, as well as for checking the selected household.
 - Since October 2020, all the country returned to the face-to-face interviews modality complemented with telephone interviews in order to reduce the exposition time of the staff, due to COVID-19. During the process of returning to on-site work there were stablished protocols and protection mechanisms to assure the physical integrity of the personnel, whom were given a protection kit (facial mask, 3-fold surgical mask, alcohol gel and fluidresistant suit).
 - Operative strategies were adopted to achieve the largest coverage of telephone interviews (send information of the surveyor via WhatsApp of the identification card//DNI/Spot, coordination with the authorities, video call interviews, etc.) and there were established guidelines for face-to-face interviews during pandemic.
 - During the interviews supervision there were incorporated new proceedings to quality control of information quality: virtual supervision (use of video conference platform) and telephone checking.

³ The 8 regions are: Metropolitan Lima, Province of Callao, Lambayeque, Loreto, Piura, San Martín, Tumbes, Ucayali, where since September 2020 the quarantine measure was lifted in all their Provinces, for this reason face-to-face interviews were taken back, prior established protocol in order to assure the physical integrity of field staff.

- Rate of Non-total response and partial response.
- Rate of indirect response, profile of absent people, profile of the indirect informant.
- Frame problems.
- Correction methods of the non-response.
- 6. At the request of the Committee, in the evaluation stage of the survey quality, the INEI extended the information submitted in reference to:
 - Adjustments performed on each NHS questionnaire for telephone interview.
 - Chronology of the measures adopted by the government, from March to December 2020, in the scenario of the health emergency state, related to the restrictions and reopened economic activities.
 - Evaluation of the possible presence of bias in the application of the 2020 NHS, before the measures implemented in the context of the COVID-19 Health Emergency, detecting 4 potential factors of bias:
 - Selection of the sample: The panel sample and the non-panel sample was evaluated, according to household and population of the sample with telephone and without telephone profiles, contacted and non-contacted, according to the obtained results and according to the number of observations of each one, it was verified that both the sample with telephone and the sample without telephone present very similar characteristics in their profiles.
 - Type of questionnaire and Type of interview: It was statistically showed, through the Chi-square test and Cramer's coefficient test, the high correlation between both variants. The profiles were presented according to the modality of the interview. According to the type of interview, face-to-face and by telephone, there were no significant differences in the characteristics of the households and population, except in the type of fuel for cooking, gender and age group.
 - Impact of operational factors: Type of supervision was evaluated (traditional and new methods), average of visits, average time of interview and rotation of surveyors. The logistic method was applied in both types of interviews (face-to-face and telephone) observing that the supervision increases the probability that the interview being direct; meanwhile the resignations have a negative impact in the direct information. On the other hand, time of interview has a positive impact in a face-to-face interview in order to have direct information, while in a telephone interview has a negative impact.
- 7. The period of strict quarantine at the beginning of the pandemic led to the need of performing adjustments in the questionnaire extension, as well as the interviews modalities. INEI submitted field reports and evaluations of the comparative non-response of the telephone interviews compared to those face-to-face interviews, as well as the consistency of the estimated expenses. The Committee considered that the efforts performed by the INEI and its field staff achieved that the collected data maintains its consistency and quality.
- 8. Having analyzed the data and the evaluations submitted by the INEI, THE Committee consider that, as a whole, the quality of the NHS Survey data used in the 2020 monetary poverty measure meet a high quality standard, conditions that allow to provide reliable data.
- 9. The second stage developed by the Committee corresponded to the quality evaluation and robustness of 2020 monetary data, activity that involves important aspects, such as mentioned as follows:

- Detailed assessment of the expenses and incomes information of the households in all relevant geographical levels, for saying, robust groups, distribution of frequencies, by 12 expenses groups (Classification of Individual Consumption According to Purpose COICOP), types of expenses and items; information that includes sampling errors, evidence of differences and the averages variation. Likewise, the consistency between the evolutions of the total expenses according to the different modes of acquisition was examined. Regarding the incomes the aggregated values and the different types of income were checked.
- The robust of the expense and income indicators was verified using the comparisons of the panel component with the total sample of the survey.
- Evaluation of the robustness of the reference population and the prices of the food basket used since base year 2010.
- Evaluation of the collected prices by the survey regarding to the prices collected by the CPI in the Districts where it is collected CPI information
- Analysis of the results of the evolution of the monetary poverty incidence, gap and poverty severity, both of the total poverty and extreme poverty.
- Evaluation of the results consistency.
- Verification of the comparability of calculation methodologies of monetary poverty guaranteeing that the proceedings used to estimate the expenses, incomes and poverty lines are consistent with the methodology applied in previous years.
- 10. At the request of the Committee, in the quality and robustness evaluation stage of the 2020 monetary data, the INEI developed the data provided regarding to:
 - Health expenses, that were disaggregated according to items (consultation, medicine, analysis, ophthalmology service, etc.) identifying those that had a greater decrease, and those that remained constant or increase, according to the expense period.
 - Expenses by demographic strata, verifying that the greater decrease of the expense happened in the great cities.
 - Head of household, which profile remains similar to the last year, without prejudice. Nuclear households had increased, and extended and composed households had increased; meanwhile in the rural area also decreased the unipersonal households.
 - Coverage of 2020 Qali Warma Program, it was explained the data processing performed, which now it enters as foods in a category of donated food (foods consumed inside household)
 - COVID-19 Bonus, coverage between the survey and the administrative records, thereon it was
 informed regarding the received data base, number of beneficiaries, link criteria (deterministic and
 probabilistic) profile of bonus recipient, estimated coverage of the bonus and the results of the
 income.
- 11. The Committee also evaluated the consistency and correction proceedings by sub-declaration of the different COVID-19 Bonus registered by the NHS. In order to achieve this, the administrative records of the bonus beneficiaries were combined with the data collected by the NHS. As a result of doing this process it was achieved the correction of the number of beneficiaries so there were no significant differences regarding to the beneficiaries registry. Thanks to the INEI neat work, the incomes sub-declaration linked to this item could be corrected in large extent.
- 12. The Committee had observed the effort and constant improve that INEI performed, in order to assure the quality of statistic data, which provide reliability to the data used to calculate the monetary poverty indicators. In a complex context such as the year 2020, the effort deployed only confirm the great professionalism and commitment that has the Institution to produce reliable statistic data.

- 13. The Committee acknowledge the effort that INEI performs every year in making available to public, via website, the complete original statistical data, documentation and the schedule routines that allows to replicate the published results.
- 14. It is important to emphasize that the INEI made significant efforts in order to provide the country data of the main economic, demographic and social features, joint work of the Institute workers, of great value for policy-making.

2. Situation of the recommendations made by the Committee to the INEI⁴

Implemented recommendations:

- (i) The INEI had documented the modification process of collection strategy from face-to-face interview to telephone interview during the mandatory social distancing, which will be available to the Committee and the users.
- (ii) A methodological sheet had been elaborated with the explanation of the expansion factors of the survey, a document that will be published with the 2020 data.
- (iii) Regarding the measure of the economic vulnerability, the INEI worked during the year 2020 in a joint way with the Committee, providing the country the 20219 vulnerability results, data published in November 2020. Likewise, in the publication of the "Technical Report Peru: Vulnerability Estimation to the Monetary Poverty"⁵, had been incorporated the recommendations given by the Committee of including in the analysis, variables that had acquired increased relevance in the current living conditions.
- (iv) Regarding the good statistical practices that had been applied by the countries in the COVID-19 context; the INEI technical staff had learn and adopted this good methodological practices as part of the continuous improving process attending international events for learning and exchange of experiences.

Recommendations in process:

- (i) In relation to the subject of the "Measure of the Multidimensional Poverty", the INEI is developing the proposal of meetings Schedule, that will be submit to the Committee, in order to resume the work agenda about the subject during the current year. In doing this, in order to making advances, regarding the monitoring of the Sustainable Development Goal 1.2 that invoke the countries to adopt official definitions of multidimensional poverty complementary to the monetary poverty measure.
- (ii) About the evaluation of the nutritional intake of the consumed foods inside and outside home and its implications in the estimation of the calorie deficit on households; as part of this process the INEI had requested the technical support of the Food and Nutrition Center (CENAN), that is estimating the calorie component of the new preparations that had been collected through the survey.
- (iii) Regarding the validation process to assure the comparability of the collected data through telephone interviews and face-to-face interviews, this year the Committee propose the conformation of a Work Group, that jointly with the INEI, evaluated the presence of possible bias in the survey during the

⁴ See the Advisory Committee Statement of May 20, 2020 where recommendations were made: <u>https://www.inei.gob.pe/media/cifras_de_pobreza/declaracion_comision_consultiva_2.pdf</u>

⁵ https://www.inei.gob.pe/media/MenuRecursivo/boletines/estimacion-de-la-vulnerabilidad-economica-a-la-pobreza-monetaria.pdf

Health emergency state. The work results of the mentioned Work Group were submitted in two meetings of the Committee.

Likewise, in this year the Committee had performed complementary recommendations detailed below:

- Due to the changes in Peru household living standards since 2010, it is necessary to define a new base year that incorporates information obtained from new statistical sources (2017 National Census, 2019 National Survey of Family Budgets and Administrative Records).
- (ii) It is indispensable to develop a technical report detailing the implemented innovations in the 2020 field operation in order to assure the quality of the survey due to the implemented health emergency. Likewise, it is important to share these experiences in the implementation of the household surveys with other countries of the region.
- (iii) Develop the inform of the performed evaluation process, about the presence of possible bias in the 2020 NHS data collection, and evaluate the possibility of performing some type of experiment of ex-post evaluation.
- (iv) Document the integration process of the administrative records referred to the 2020 granted monetary transferences (COVID Bonus) and the NHS that includes both the positive aspects and the process limitations among other relevant aspects.
- (v) When asked: What was the impact of the bonus and other public transferences over the 2020 monetary poverty incidence?, the Committee state the following: The determination of the impact of the bonus and other public transferences over poverty is a complex task that requires of situations based in various scenarios that considers at the same time the direct and indirect possible effects (the indirect effects operate through the impact over the aggregated demand and its different components). Monetary poverty estimations are based in the collected data –self-declared– about the consumption. For this reason, this data incorporates the bonus impact. INEI work accounts the bonus coverage and the donations in species received by the households. The INEI considers relevant that the academic community, using different statistical modelation strategies, evaluates the impact of those measures in the monetary poverty estimation.
- (vi) Continuing with their good practices, the INEI will keep releasing free availability the NHS data bases, extending its invitation to the academy, as well as other public and private entities to deeply investigate the impact of different bonus about the monetary poverty, as well as other subjects of this survey.

Finally, the Committee reiterate its commitment of continue supporting the work that performs in support to the INEI, which its firm commitment with the country is also recognize, keeping high quality levels, even more in these difficult circumstances which our country is going through.