



Federal Republic of Nigeria  
National Bureau of Statistics (NBS)

# GENERAL HOUSEHOLD SURVEY - PANEL (GHS-PANEL)

Wave 5 (2023/2024)  
Post-Harvest Visit

## MEASURER MANUAL

JANUARY 2024

## Introduction

The General Household Survey Panel (GHS-Panel) is a longitudinal survey in Nigeria that (i) provides critical information for production of a wide range of socio-economic and demographic indicators, including for benchmarking and monitoring of SDGs, (ii) collects data on household income-generating activities (agricultural and nonagricultural activities), as well as household expenditure and consumption, to enable the link to other facets of household behavior and characteristics (iii) provides statistical evidence and measure the impact on households of current and anticipated government policies. It is the only nationally representative panel survey in Nigeria that allows reporting and analysis across the poverty and agriculture space, and to date, four waves of the have been implemented and all the data are publicly available (2010/11, 2012/13, 2015/16, 2018/19). The post-planting visit of wave 5 was conducted between July and September 2023. This is now the Post-Harvest visit, and it will run from January to April 2024.

The ability to follow the same households over a number of years makes the GHS-Panel a powerful tool for studying and understanding household welfare over time, which has been used extensively to investigate key policy questions that could only be addressed with longitudinal data. This capability was particularly useful during the COVID-19 pandemic when the COVID-19 National Longitudinal Phone Survey (NLPS) was established to measure impacts of the pandemic on Nigerian households. The information collected in the GHS-Panel just over a year prior (2018/19) to the onset of the pandemic provided a wealth of background information to the NLPS. In addition, the GHS-Panel allowed for more robust sample selection and weighting adjustments which reduced biases that can plague phone surveys. In **Phase 1 of the NLPS**, 12 rounds of monthly phone interviews with more than 1700 households were conducted from April 2020 to April 2021. **Phase 2 of the NLPS** commenced in November 2021 with bi-monthly phone interviews to continue monitoring in real-time how the Nigerian households are coping with national and global crises and their effects on the welfare and livelihoods of the households.

Focused on the goal of improving agricultural statistics, the World Bank, through funding from the Bill and Melinda Gates Foundation (BMGF), has been supporting seven countries in Sub-Saharan Africa in strengthening the production of household-level data on agriculture. The over-arching objective of the LSMS-ISA program is to improve our understanding of agriculture in Sub-Saharan Africa – specifically, its role in poverty reduction and how innovation and efficiency can be fostered in the sector. This goal will be achieved by developing and implementing an innovative model for collecting agricultural data in the region.

The table below shows the different activities and their respective timelines for the project:

S/No	Activity	Duration/ Period
1	Training of Trainers	Dec 4 – Dec 12
2	Training of Enumerators	Jan 8 – Jan 20
3	Fieldwork – Post-Harvest	Jan 29 – March 10
4	1st Monitoring (HQs Monitors/ Coordinators)	Jan 29 – Feb 2
5	2 <sup>nd</sup> Monitoring (Zonal Controllers)	Feb 19 – Feb 23
6	Tracking Exercise (HQs Monitors)	Apr 8 – Apr 21
7	Data Processing and Analysis	May – Aug 2024

# Anthropometric Measurement

## DESCRIPTION

**Description:** Child anthropometry is the assessment of nutritional status of children who are LESS THAN 60 MONTHS. The key indicators include underweight, stunting and wasting which are measured by obtaining the height or length and weight of a child along with age in months. A careful measure of the height/length of a child and how to read numbers from the measuring tape is critical to obtaining accurate results. Likewise, operating a scale and reading numbers from the display should be practiced both in class and on actual children.

It is important that measurers are aware of “difficult” situations such as how to deal with physically disabled children (children with deformation that may interfere with the measurements), how to deal with sick and crying children, how to deal with children that resist being undressed for weighing and what to do with children (especially girls) with elaborate hairstyles (for example braids).

**Respondent:** The primary guardian of the child should respond to this module.

**Instruction:** Shoes, socks, clothes and any hair ornament or braids that may interfere with the weight and/or height/length measurements should be removed before taking the measures. **Each measurement should be carried out three times, and all three results for weight and three results for height/length should be recorded.**

**Measurers:** Taking anthropometric measurements of children is the main responsibility of the team measurer and requires that he or she follows the procedures specified in this manual and that no steps in the procedures are omitted. Measurers may be assisted by another trained team member however it should be emphasized that the measurer will hold the overall responsibility for determining final measurements and making sure they have been properly recorded on the under-five questionnaire. The measurer is also responsible for carrying and taking care of the equipment used for anthropometric measurements and reporting to the supervisor immediately if any of the equipment is malfunctioning.

For the anthropometric measurement included in the GHS-Panel W5 Post-Harvest Visit, there would be fifty professional measurers and fifty supervisors (who would play the role of assistants to carry out the measurements). The training activities will include 20 children (ages 1 – 59 months) with different ages.

The aim of this exercise is to collect accurate data on the nutritional status of children under the age of 60 months using the height (or length) and weight variables. The following general principles shall be employed to accommodate the purpose and context of the study:

- Use of standardized measurement equipment and techniques for accuracy and consistency
- Use of calibrated instruments (measuring scales and boards) for accuracy and precision
- Training of personnel carrying out the measurements for minimal human error
- Accurate recording of all measurements for consistency in units and formats
- For ethical considerations, secure informed consent from participants of the anthropometric study and ensure privacy and confidentiality of collected data.

## TRAINING AND DATA COLLECTION GENERAL GUIDELINES

In order to ensure the safety of the participants and the quality of the data we need to follow the next steps:

- Verify that your equipment is properly working.
- Ask for consent from the parent to conduct the anthropometric measurement.
- Wash your hands or clean them before starting the measurement.
- Clean your instruments using the sanitized wipes. Repeat this step before each measurement. We have to ensure that children are not exposed to contagious diseases.
- Ask for help from the supervisor to conduct the measurement.
- Treat children and parents with respect, try to be gentle with the children when conducting the measurement.
- Ensure to follow the protocol discussed below to conduct the measurement.
- If a child is not available at the time of the interview, try to visit a second time to collect their measurements.
- Work jointly the supervisor and interviewer to collect the information as needed.

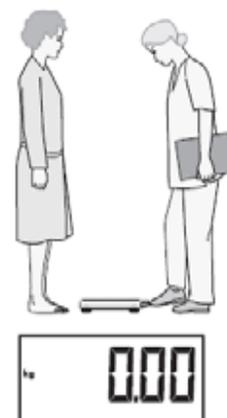
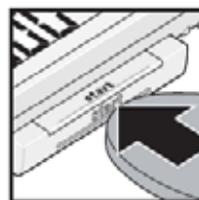
## WEIGHING THE CHILD

Explain to parents/caretakers that the child needs to remove outer clothing to obtain an accurate weight. A wet diaper, or shoes and jeans, can weigh more than 0.5 kg. Babies should be weighed naked; wrap them in a blanket to keep them warm until weighing. When using the **2 in 1** or tared weighing described below, the adult can be weighed holding a blanket, which he/she can then wrap around the naked baby during measurement. Older children should remove all but minimal clothing, such as their underclothes. If it is too cold to undress a child or if the child resists being undressed and becomes agitated, please weigh the clothed child, but PUT A NOTE IN COMMENTS that the child could not be undressed to the minimum and take a note of the circumstances.

### Weighing a child that is less than 2 years old (tared weighing)

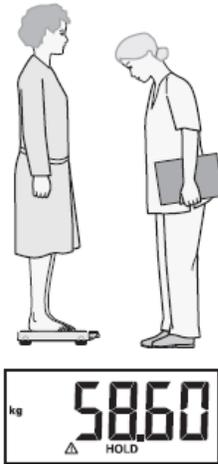
The **2 in 1** function enables the body weight of infants and young children to be determined. The child is held in the arms of the mother/caretaker (or another adult if necessary).

- Switch on the scale with no weight applied.
- Wait until **0.00** appears on the display.

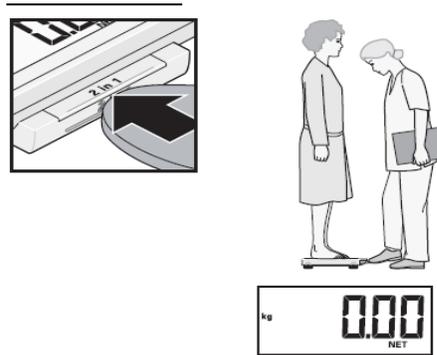


Make sure 000 appears on the scale before the child/mother steps onto the scale. Once on the scale, the child/mother should stand in the middle and stay very still.

- Ask an adult to step onto the scale.  
The adult's weight is displayed.



- Press the **2 in 1** key.  
The adult's weight is stored.  
**0.00** and the word **NET** appear on the display.



- Ask the adult to hold the first baby while standing on the scale and to try not to move.
- Wait until the weight display and the message **HOLD** are no longer flashing.
- Record the baby's weight.
- Ask the adult to step off the scale with the baby.  
The baby's weight remains displayed.  
The adult's weight remains stored. A new measurement is automatically taken as soon as any weight is placed on the scale again.
- Take measurements for other babies in the same way with the same adult. You do not need to reactivate the 2 in 1 function or switch the scale off and on again between measurements.



After each child's weight has been taken, the measurer reads out the value on the display of the scale and the assistant repeats back the value. If the measurer confirms this is correct the assistant records the value. The measurer should check the weight that has been recorded after the weight measurement of each child has been completed. Remember to go through this process 3 times and record the weights each time.

#### Weighing a child that is 2 years or older.

If the child is 2 years or older and willing to stand still, weigh the child alone.

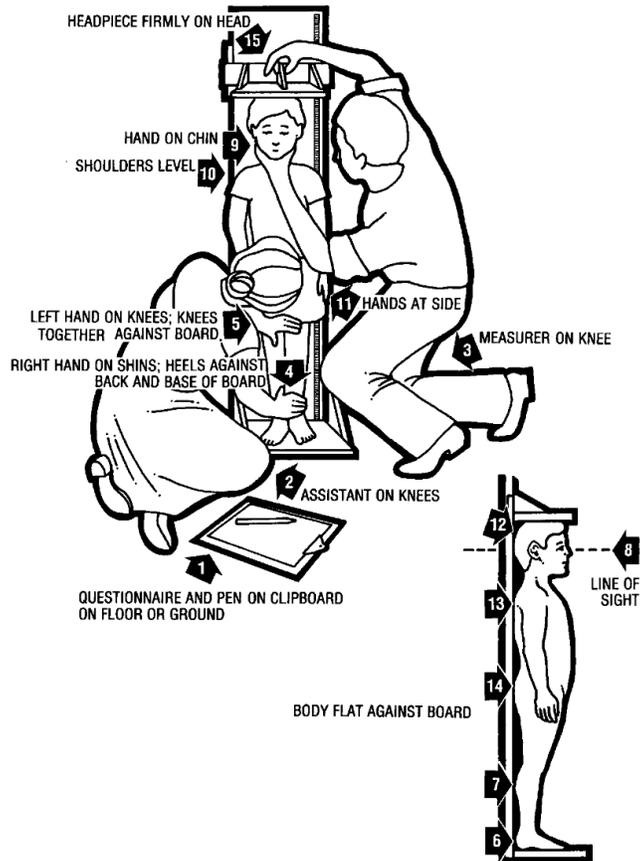
- Explain to the child that they will need to step on the scale alone and stand very still. Communicate with the child in a sensitive, non-frightening way.
- **Measurer:** Switch on the scale with no weight applied.
- Wait until the display shows **0.0** before asking the child to step on the scale.
- Ask the child to stand in the middle of the scale, feet slightly apart and to remain still until the weight appears on the display. Do not hold or support the child as this will interfere with the measurement.
- Once the value is stable for about 3 seconds, the display is retained. This avoids the display jumping around as a result of the child's movements.
- If the child jumps on the scale or will not stand still, you will need to use the tared weighing procedure instead (please see above).
- Read out loud the child's weight from the display.
- **Assistant:** Repeat the weight that has just been called out.
- **Measurer:** Confirm if this is the correct weight. If it is correct, then the assistant will record the weight on the questionnaire.
- **Assistant:** If measurer confirms, record weight.
- **Measurer:** Check the weight recorded to confirm that it matches the weight that was on the display.
- The child can then leave the scale. Repeat two more times and record each weight.

## MEASURING THE CHILD

Measuring a Child's height: Summary of Procedures for when a child is over 2 years of age (see Figure 1)

- (1) **Measurer or assistant:** Place the measuring board on a hard flat surface against a wall, table, tree, staircase, etc. Make sure the board is stable. If the only level surface available to place the board does not have a steady structure against where to lean it, and there are no sturdy pieces of furniture that can be moved behind it, have an adult stand behind the board and provide the support for it not to tip over.
- (2) **Measurer or assistant:** Ask the mother/caretaker to remove the child's shoes and socks. Also ask, if necessary, the mother to unbraided any hair that would interfere with the height measurement and add to the child's height. Then ask her/him to walk the child to the board and to kneel in front of the child.

FIGURE 1 MEASURING A CHILD'S HEIGHT



- (3) **Assistant:** Kneel with both knees on the child's right side (Arrow 2).
- (4) **Measurer:** Kneel on your right knee only, for maximum mobility, on the child's left side (Arrow 3).
- (5) **Assistant:** Place the child's feet flat and together in the centre of and against the back and base of the board. Place your right hand just above the child's ankles on the shins (Arrow 4), your left hand on the child's knees (Arrow 5), and push against the board. Make sure the child's legs are straight and the heels and calves are against the board (Arrows 6 and 7). Tell the measurer when you have completed positioning the feet and legs.
- (6) **Measurer:** Tell the child to look straight ahead at the mother if she is in front of the child. Make sure the child's line of sight is level with the ground (Arrow 8). Place your open left hand on the child's chin. Gradually close your hand (Arrow 9). Do not pinch the jaw. Do not cover the child's mouth or ears. Make sure the shoulders are level (Arrow 10), the hands are at the child's side (Arrow 11), and the head, shoulder blades, and buttocks are against the board (Arrows 12, 13 and 14). With your right hand, lower the headpiece on top of the child's head. Make sure you push through the child's hair (Arrow 15).
- (7) **Measurer and assistant:** Check the child's position (Arrows 6-14). Repeat any steps as necessary.

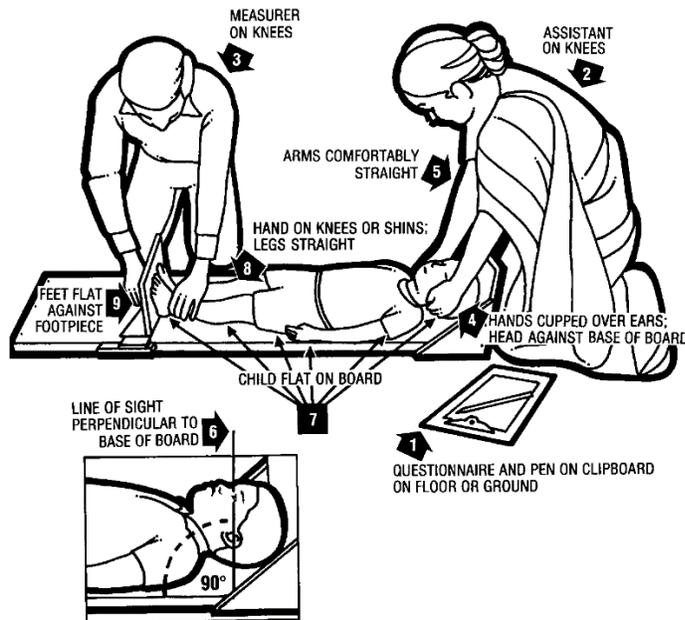
- (8) **Measurer:** When the child's position is correct, read and call out the measurement to the nearest 0.1 centimetre. Remove the headpiece from the child's head, your left hand from the child's chin and support the child during the recording.
- (9) **Assistant:** Immediately record the measurement and show it to the measurer. Alternatively, the assistant could call out the measurement and have the measurer confirm by repeating back.
- (10) **Measurer:** Check the recorded measurement on the questionnaire for accuracy and legibility. Instruct the assistant to cancel and correct any errors.
- (11) **Repeat two more times and record the height.**

Measuring a Child's length: Summary of Procedures for when a child is under 2 years of age (Figure II)

- (1) **Measurer or assistant:** Place the measuring board on a hard flat surface, such as the ground, floor or a steady table.
- (2) **Assistant:** Kneel with both knees behind the base of the board, if it is on the ground or floor (Arrow 2).
- (3) **Measurer:** Kneel on the child's right side so that you can hold the footpiece with your right hand (Arrow 3).
- (4) **Measurer and assistant:** With the mother's/caretaker's help, lay the child on the board by doing the following:  
**Assistant:** Support the back of the child's head with your hands and gradually lower the child onto the board.  
**Measurer:** Support the child at the trunk of the body.
- (5) **Measurer or assistant:** Ask the mother/caretaker to kneel on the opposite side of the board facing the measurer to help keep the child calm.
- (6) **Assistant:** Cup your hands over the child's ears (Arrow 4). With your arms comfortably straight (Arrow 5), place the child's head against the base of the board so that the child is looking straight up. The child's line of sight should be perpendicular to the ground (Arrow 6). Your head should be straight over the child's head. Look directly into the child's eyes.
- (7) **Measurer:** Make sure the child is lying flat and in the centre of the board (Arrow 7). Place your left hand on the child's shins (above the ankles) or on the knees (Arrow 8). Press them firmly against the board. With your right hand, place the foot piece firmly against the child's heels (Arrow 9).
- (8) **Measurer and assistant:** Check the child's position (Arrows 4-9). Repeat any steps as necessary.
- (9) **Measurer:** When the child's position is correct, read and call out the measurement to the nearest 0.1 centimetre. Remove the foot piece, release your left hand from the child's shins or knees and support the child during the recording.
- (10) **Assistant:** Immediately release the child's head, record the measurement and show it to the measurer. Alternatively, the assistant could call out the measurement and have the measurer confirm by repeating back.
- (11) **Measurer:** Check the recorded measurement on the questionnaire for accuracy and legibility. Instruct the assistant to cancel and correct any errors.
- (12) **Repeat two more times and record the child's length each time.**

**NOTE:** If the interviewer is not confident in the precision of the child's age (under age 2), please take measurement as described above. If the child's length is measured to 85 cm or more, you must instead measure the child's height.

**FIGURE 2 MEASURING A CHILD'S LENGTH**



## COMPLETING THE INFORMATION IN CAPI

**MAIN INSTRUCTIONS:** The interviewer will be responsible of submitting the information in CAPI after the measurements are conducted.

**INTERVIEWER:** PLEASE SELECT THE HOUSEHOLD MEMBER WHO IS WITH [NAME] AT THE TIME OF THE MEASUREMENT. There should be an adult household member with the child during the measurements. Select from the household roster, the adult household member who is with the child.

**INTERVIEWER:** PLEASE CONFIRM YOU ARE MEASURING [NAME]. Confirm that you are measuring the child's whose name appears on the screen.

3. Select YES, if NAME was measured for weight and skip to S4BQ5; otherwise select NO and continue.
4. Select the reason that best describes why the child was not measured. "NOT AT HOME DURING SURVEY PERIOD" should only be selected after multiple attempts were made to reach the child in the household's dwelling while the team was in the area.

Ask the respondent to confirm the age of the child and select “YES, CORRECT” if accurate. If this not accurate, select “NO, INCORRECT”, then follow instructions on the CAPI and return to the Household Flap to make the necessary changes to the child’s date.

- 4a. Confirm the age in months of the child with the parent/caretaker.
- 4b. Ask for the day of the month the child was born. If the child was born December 25, then record 25.
- 5. Select YES, if the child can stand on the scale on their own. If the child must be carried by an adult standing on the scale, select NO.
- 8. If the child was measured for length/height, select YES, and skip to S4bQ10.
- 4. Select the reason that the child was not measured for length/height. See above for further instructions.
- 52. Weigh the child and record the WEIGHT of the CHILD in kilograms.
- 53a. Measure the height/length of the child and record in centimeters. Children under 2 years of age must be measured lying down (length) and older children should be measured standing (height). Remember to include decimal points if applicable.
- 53b. Select the option that describes how the child was actually measured.

*WAS THERE ANYTHING THAT ADDED TO [NAME]'S WEIGHT IN MEASUREMENT TODAY? (SUCH AS LIGHT CLOTHES THAT YOU COULDN'T REMOVE, HEAVY BRAIDS ETC).* If you had to weigh the child with clothes on or they had anything on that could not be taken off at that time, select YES.

*WAS THERE ANYTHING THAT ADDED TO [NAME]'S LENGTH/ HEIGHT TODAY? (SUCH AS THICK BRAIDS, ORNAMENTS ETC).* If the child had on anything that added or increased the child’s length/height while taking the measurement, select YES.

*DO YOU HAVE ANY COMMENTS ON THE ANTHROPOMETRICS SECTION FOR [NAME]?* Select YES, if you have any comments that will allow anyone reviewing the data to have clarity on discrepancies.

*WHAT IS YOUR COMMENT?* Leave comments pertaining to any irregularities that occurred while you measured the child. For example, if you had to measure the length of a child over 2 years, instead of measuring their height, you can explain that here. Also explain any disruptions, such as clothing on a child or braids when weighing them.