HUNGaMA Training Module

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Content

I. INTRODUCTION

1.1. ABOUT NAANDI AND HUNGaMA

1.1.1 About Naandi

Naandi Foundation (www.naandi.org) is an autonomous, not-for-profit trust dedicated to changing the lives of India's poorest, with a focus on innovative projects and partnerships in three areas: child rights, safe drinking water, and sustainable livelihoods. Since its inception in 1998, Naandi has touched the lives of over 4 million people in 9 states.

Under the Policy & Advocacy cell of Naandi, the HUNGaMA initiative is the first project. The Policy & Advocacy cell aims to provide data and targeted communications directed at promoting better policies and programming – particularly related to Naandi's verticals of child rights, safe drinking water, and sustainable livelihoods – at every level, from village communities up to the government and international actors.

1.1.2 About HUNGaMA

Almost half of Indian children under five years of age are chronically malnourished

Seven out of 10 Indian children are anaemic

Over 40% of Indian children are underweight, 20 times higher than would be expected in a well-nourished country[1]

Of the approximately 180 million chronically malnourished children worldwide, more than one-third live in India[2]

Malnutrition is one of the greatest challenges that India is facing today. Some estimates indicate that India loses as much as $35 billion every year because of the long-term impacts of malnutrition among the Indian population[3]. Despite many government initiatives, India's children still struggle to get enough nutritious food to eat.

Naandi's HUNGaMA initiative (**HUNG**er **a**nd **MA**lnutrition) aims to mobilize and empower citizens and policymakers to 'create a ***hungama***' for positive change in the battle against hunger and malnutrition.

A key part of the HUNGaMA initiative is a survey of over 100 districts in India, providing the first district-level data on nutrition levels since 2004, and the very first survey of its kind ever to be organized by the citizen sector.

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[1] All statistics from the latest National Family Health Survey (NFHS-3), 2005-06. Report published in 2009.

[2] [2] Based on the "stunting" measure, low height for age. Robert E Black, Lindsay H Allen, Zulfiqar A Bhutta, Laura E Caulfield, Mercedes de Onis, Majid Ezzati, Colin Mathers, Juan Rivera, 2008, "Maternal and child undernutrition: global and regional exposures and health consequences, Lancet; 371: 243–60.

[3] [3] Susan Horton, 1999, Opportunities for Investments in Nutrition in Low-income Asia, Asian Development Review, Asian Development Review, 17(1,2): 246-273.

By providing a foundation of accurate and up-to-date data on malnutrition in India, the HUNGaMA initiative aims to build a movement of advocates, community members, implementers, and policymakers both demanding positive change and empowered to take proactive steps at every level to drive better practices, programs, and policies.

We thank you for being part of the HUNGaMA effort!

1.1.3 HUNGaMA Details

The HUNGaMA survey aims to capture key malnutrition indicators for children under age 5 along with select questions about the household, nutrition practices, and barriers to good nutrition to understand why malnutrition exists and persists. The survey targets children under age 5 since that is the window of opportunity: averting malnutrition in those early years can prevent a lifetime of destructive, long-term effects.

In its first year, the HUNGaMA survey will target 112 rural districts in India. These districts are selected on the basis of a Child Development Index (developed by Indicus Analytics in 2009 for UNICEF) which combines various indicators of child wellbeing – including nutrition indicators – into a single number representing child wellbeing at the district level in India. This index draws on a variety of data sources, one benefit being that some of the data is more recent than the latest district-level nutrition data from 2002-04. It also prioritizes child well-being in a holistic sense, of which nutrition is an important component.

Based on this list, the HUNGaMA survey is targeting:

- *The 100 "Focus" districts*. Data from these areas should help identify districts that are "danger zones" where immediate action is needed. (Two focus districts from Meghalaya were replaced by the next Focus districts, for ease of survey implementation).

- *6 "best" districts*, taking 2 of the best rural districts from each of 3 strong performing states: Kerala, Tamil Nadu, and Himachal Pradesh. Data from these districts will help to show the range of nutrition levels in India, showing the potential and highlighting key differences between the best and Focus performers.

- *The "best" district from each of the 6 "Focus" states*. The 100 Focus districts span just 6 states – Bihar, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh. From each of these states, the HUNGaMA survey will also look at the best rural district, showing the range of nutrition levels within those states.

1.2 NUTRITION

Giving surveyors a clear understanding of what nutrition is and why it is important will help them improvise in the field and understand why measurement procedures and survey questions are important (particularly the logic in the Mother's Voice section). It will also help them understand if Anganwadi Workers and mothers understand the correct definition of malnutrition.

Training should convey the following points:

1) What is nutrition
2) Why nutrition is important
3) What causes good and bad nutrition

4) How nutrition is measured
5) How nutrition has been measured in India

1.2.1 What is nutrition

Nutrition is the process by which living organisms assimilate food to use for growth and health. Good nutrition happens when people get enough food and nutrients to be healthy and grow at a normal pace.

Poor nutrition – often called "malnutrition" – happens when people do not get enough food and nutrients to be healthy and to grow at a normal pace. This can happen for at least three reasons:

1) When people simply aren't getting *enough* food
2) When people aren't getting enough of the *right kinds* of food
3) When people aren't able to absorb sufficient nutrients into their body (such as when people have diarrhoea or worms)

1.2.2 Why nutrition is important

Good nutrition is very important for physical and cognitive growth and development. If children are malnourished in their first years of life, the effects of malnutrition can be long-lived and irreversible. Child malnutrition generally causes the following problems into adulthood:

1) Lower educational attainment
2) Lower productivity in work
3) General cognitive impairment
4) Greater susceptibility to other diseases, and death

The total cost of malnutrition for hard hit countries could be easily amount to 2-3% of GDP annually, translating to $23-35 billion per year for India.

Experts believe that more than half of 2.5 million child deaths in India annually are related to malnutrition, as it weakens children against the many the diseases and environmental challenges they already face. Malnutrition can be a hidden curse: children don't "die of malnutrition." They often die of diseases, whether pneumonia, or malaria, or typhoid. But the truth is that those children would have had a much better chance of surviving had they been well-nourished. This is why nutrition issues have been easy to ignore, but also why they are so important to address. Good nutrition forms a broad foundation for better health that makes children more resilient to any challenges they face.

1.2.3 What are the causes for good and bad nutrition

As described above, good nutrition depends not only on getting enough food to eat, but also getting the right kinds of food and ensuring that the body is strong enough to absorb the nutrients in those foods.

Getting enough food means that children should eat a sufficient amount to cover the basic energy needs of their body. This means that children should eat enough to avoid feeling hungry and to have the energy to run and play.

Getting the right kinds of foods means the children should eat a variety of foods (a "balanced diet") that give them the ideal mix of vitamins, minerals, protein, carbohydrates, and fat. In much of India, children who get enough rice or grain could still be malnourished, as they may not be getting enough fruits, vegetables, nuts, pulses, eggs, and meat to get the vitamins, minerals, and protein they need.

- The best food for babies is breastmilk from the mother. In fact, babies below six months of age should ONLY have breastmilk, as it contains all of the nutrients they need to be healthy and strong (and none of the contaminants that may be found in other food and water). Babies should start suckling the breast as soon as possible after birth, ideally within 1 hour. In all but very rare cases, the baby is able to suckle immediately and the mother can start breastfeeding right after giving birth (even if she is tired, weak, malnourished, had a C-section, etc). While milk may not obviously be coming, the first milk (colostrum) which is yellow in colour will be coming – even if in very small amounts – and is especially healthy for newborn babies. The colostrum may be the only thing that comes for a few days, until the regular milk comes in. By suckling, babies help to bring the breastmilk in larger quantities and more quickly. If a baby doesn't suckle, the milk will be slower to come in. Unfortunately, many mothers in India think the colostrum is not good for babies and discard it. Babies should be given complementary solid foods starting around 6 months of age (in order to get all the calories and nutrients they need as a growing child), though they can be breastfed for up to two years or longer. Giving newborn babies non-breastmilk liquids is dangerous, as those sources may be contaminated (especially in the case of water or honey) and don't have the critical nutrients babies need.

Ensuring the body is absorbing nutrients means that the body is strong and healthy enough to process foods and take in nutrients. Diarrhoea is especially harmful to nutrition, as nutrients from food are excreted before they can be absorbed into the body. Very sick children may also lose their appetite, preventing them from eating the nutrients they need. To prevent children from getting sick, care should be taken to keep food and water free of contaminants and to follow good hygiene practices. In particular, hands should be washed after using the toilet and before handling food; defecation should take place safely away from water and food supplies, ideally in a toilet or in a dry and sunny place; water should be cleaned by boiling, using alum or chlorine, or machine purification before drinking (straining through a cloth and letting water stand are not sufficient to eliminate dangerous contaminants); and children should be taken to a health care centre (if possible) when they have severe diarrhoea, loss of appetite, vomiting, or signs of severe malnutrition (e.g. very thin upper arm, oedema, baggy skin/marasmus) to accelerate their return to good health.

1.2.4 How nutrition is measured

It can be difficult to assess a child's nutritional wellbeing directly without the aid of blood tests and medical facilities. Therefore, one of the most common ways to gauge nutrition worldwide is to measure if children are growing along the expected growth path in terms of weight, height, and mid-upper arm circumference.

The most common measures are:

1) Height for age (HfA): The height of a child as against their age. A child with low HfA is called *stunted* (too short for their age), an indication that they are *chronically malnourished* (malnourished over a long period of time)

2) Weight for height (WfH): The weight of a child as against their height. A child with low WfH is called *wasted* (too thin for their height), an indication that they are *acutely malnourished* (malnourished presently and from recent events)

3) Weight for age (WfA): The weight of a child as against their age. A child with low WfA is called *underweight* (too light for their age), which is seen as a composite of acute and chronic malnutrition

4) Mid-upper arm circumference (MUAC): The circumference of the upper-arm at the midpoint between the shoulder and the elbow (regardless of child age, height, or weight). If the circumference of a child is less than 12.5cm, then the child is considered to be acutely malnourished. An arm circumference of less than 11.5cm is a sign of severe acute malnutrition.

Because these are the key measures to assess nutrition level, **height, weight, age, and MUAC are the crucial measurements to have for each child in the HUNGaMA survey**.

- The term "standard deviation" is used to understand how much a given child is different from an average child.
- A child is considered to be *moderately malnourished* if she is between two and three "standard deviations" below average in HfA, WfA, or WfH
- The healthy child growth path has been defined by the World Health Organization, based on measurements of healthy children across multiple countries (including India).
- The graph (growth path) of a malnourished child is atleast 2 standard deviation below than the normal and healthy child.
- A child would be considered as severely malnourished if they are more than 3 standard deviations below the growth path of an average healthy child.
- A child is considered moderately malnourished if the MUAC is between 11.5 and 12.5cm. If the child's MUAC is less than 11.5cm, the child is considered to be severely malnourished.
- Children who are severely malnourished should receive medical attention. Children with a low MUAC in particular are at an increased risk of death.

1.2.5 How nutrition has been measured in India

The main source of information on nutrition in India is the National Family Health Survey (NFHS), which includes malnutrition indicators. The NFHS reports malnutrition in terms of the percent of children (under 5 years) underweight, stunted, wasted, and anaemic. It does not measure MUAC. The third and latest NFHS was conducted in 2005-06 and covered the whole country, providing results at the state level. According to it, 43% of Indian children are underweight, 20% are wasted (acutely malnourished), and 48% are stunted (chronically malnourished).

National Family Health Survey Results for HUNGaMA States

NFHS-3 (2005-06) (percentages indicate children more than 2 standard deviations below average)	**Chronically Malnourished Children**	**Acutely Malnourished Children**	**Underweight Children**
India	48	20	43
Uttar Pradesh	52.4	19.5	41.6
Bihar	50.1	32.6	54.9
Jharkhand	47.2	35.8	54.6
Madhya Pradesh	46.5	39.5	57.9
Rajasthan	40.1	22.5	36.8
Orissa	43.9	23.7	39.5
Kerala	26.5	15.6	21.2
Himachal Pradesh	34.3	19.9	31.1
Tamil Nadu	31.1	22.9	25.9

In 2002-04, the government included nutrition measurements as part of the second District Level Health Survey (DLHS). The survey measured anaemia and underweight, though it did not measure stunting or wasting. Results were given for the district level. The DLHS did not include nutrition measurements in the latest round. Both the NFHS and DLHS cover all of India using a sampling methodology. No comparable data has been generated since the NFHS-3 was completed.

Ongoing nutrition measurements are supposed to happen through the Anganwadi Centres, which are supposed to measure the weight of children on a monthly basis and report data to the local government.

1.3. NUTRITION LEAFLET AND COUNSELING

The nutrition leaflet gives basic health and nutrition tips that most people – including poor families – can follow. It includes best practices for breastfeeding, diet, hand-washing, sanitation, drinking water, and health care.

Get to know the leaflet before going into the field and be able to give families targeted counselling based on the leaflet if you feel it is necessary or would be helpful to the family after doing the survey (especially for families with children who are “in the red” for the MUAC measurement). For all families, leave a copy of the leaflet, walk them quickly through what it covers, and answer any questions they have.

For a child “in the red” for the MUAC measurement, encourage the mother to take the child to their Anganwadi worker, ANM, Nutrition Rehabilitation Centre (NRC), or Primary Health Centre for appropriate treatment.

II. SURVEY

2.1. ABOUT THE SURVEY

2.1.1 PRE-FILLING SURVEY FORMAT DETAILS

Before you arrive in a village, find the appropriate survey formats (1 Village and Anganwadi Survey sheet and about 30 Household Survey sheets) and make sure they are labelled with the State, District, and Village names and codes. Surveyors should also ensure that they write their names and ID numbers on the formats.

2.1.2 GENERAL SURVEY PRINCIPLES

Surveyors need to be professional, polite, and knowledgeable about the survey protocols and questionnaire. They should also fill out the survey formats clearly and neatly.

Surveyors should follow the general principles below:

Professional

- Dress appropriately
- Hands clean
- Nails cut and clean
- No smoking/chewing tobacco during survey
- No use of phone during survey
- Leave a household if you feel unsafe or threatened

Politeness

- Be polite, respectful of other people's time – think about how you would want the surveyors to behave if they visited your home
- Explain what you are doing in every household
- Be patient and listen to respondents, don't cut them short.
- Both surveyors should not be speaking at the same time
- While doing MUAC measurement if you come across a severely malnourished child, do not announce it
- Never let respondent feel that you are not believing her
- Always thank the survey respondents for their time on completing the survey

Knowledgeability

- Be familiar (fully in control) of the format – don't read out verbatim from it. You should be able to convey questions in local language in conversational tone
- Be alert to conversations going on around you in the household as you administer your questionnaire. You may get a lot of your answers just from that (if household is obviously/visibly poor, then no need to ask questions about TV, car, etc.)

Survey format protocol

- Fill out the survey format in **pen** (correct mistakes by putting a dark **X** over the incorrect answer)
- Write numbers strongly and correctly, e.g. if the answers are: Yes – 1 and No – 2, then please circle the appropriate answer like the example shown: Yes -(1)
- If the surveyor has marked a wrong answer then the surveyor have to mark a **dark X** on the answer and again mark the right answer like: (1)(2) **3 4**
- Write **correct** and **clearly** any **Numeric** answers
- Make **dark** and **clear circles** around the **numbers** that don't spill into other boxes
- Make your handwriting **neat** and **strong** (put yourself in the place of the data entry operator)
- Fill in answers for all the questions to the greatest extent possible, and make sure that all the headers are filled out, including the coding on every page
- Check the survey formats after is has been completed to make sure all the answers were recorded

Other important principles

- If the respondent is unable to provide any answer or she do not know the answer then or provides an answer that is not in the format, then please don't insist her to give the answers in the format. You can mark "**don't know"** or **"other"** as valid responses. Do not waste time trying to elicit a specific answer.
- Don't discount questions as being "obvious" or unhelpful. Every question has a purpose, and questions that may seem obvious in one context may not be so obvious in another. Ask every question with equal care and attention and fill in the responses accurately.
- Don't ask questions in a leading way and expect answer you know. Give freedom to the respondent to answer.
- Don't given sample answers unless prompted to do so in the format
- Ask the questions in a polite way.
- Divide tasks between the two team members and follow the division strictly (e.g. one to manage equipment and one to ask questions). The set of tasks for each member can be exchanged after each household/day/village.
- If a surveyor has a experience of conducting surveys then he/she can use her experience in the survey to get correct and appropriate answers.
- Surveyors should be encouraged to think about past surveys they have done – how did they get good answers?

2.1.3 SURVEY STEPS

In each village, surveyors should follow the steps listed below:

1. Meet the Sarpanch
2. Visit the Anganwadi centre. Fill the Anganwadi questions if Anganwadi worker is available. (If not available, surveyors should visit the Anganwadi centre each day until they are able to fill out the Anganwadi format)
3. Walk around the village and talk and fill out Village Questions (V3) items based on the observations made.
4. Map the village and count houses
    a. In LARGE villages, map the distribution of houses, assign house counts to each area based on discussion with multiple, knowledgeable villagers, segment the village into segments of about 100 houses each, and select 2 segments for survey using the instructed methodology

   b. In SMALL villages, make a rough map to understand the village boundaries and count all the houses in the village
5. Calculate the sampling interval (N) for selecting the households (either for a small village or each large village segment)
6. Survey households and complete a full circuit of the village or both segments
7. Follow-up with non-response households until 4 days are over
8. Be in touch with the team leader on whether more houses need to be surveyed, in case not enough completed surveys are attained after making a full circuit of the village/segment and following up with non-response houses.
9. Double check all formats to make sure they are filled out clearly, neatly, and as completely as possible.

Steps 1-7 should take about half a day. Steps 8-9 should take 3.5 days. Step 10 should take place at the end of the 4 days.

Weighing machine calibration:

Every morning, the surveyor should test the scale by measuring the weight of the height board (or the surveyor with and without the height board) to see if the height board weight is registered correctly. It is very necessary to check whether the scale is working properly or not. The scale should be checked while it is kept in a cool, shady location and on a hard, flat surface. If the scale does not register the weight correctly to within 0.2kg, notify the team leader immediately. If the scale measures the weight of the height board correctly, one surveyor should also record his/her weight and remember it for scale adjustments later in the day. While the surveyor's weight will change slightly over the course of the day, it will be an indicator of whether the scale measurements are seriously inaccurate at any point.

2.1.4 MEETING THE SARPANCH

Meet the Sarpanch or a Panchayat Member (at the Panchayat or their home). Tell them about HUNGaMA.

- HUNGaMA is a citizen survey to understand the health and nutrition status of young children in communities across India. The survey results will help to promote better nutrition in communities and to influence the government and other actors to take positive action to improve nutrition.

- Tell the Sarpanch that you will be surveying the Anganwadi centre and about **30** randomly selected households in the village, and that you will be measuring the height, weight, and arm circumference of children. All participation will be on a voluntary basis.

- Answer any questions the Sarpanch has about the survey in a very polite way and if necessary show the survey formats.

- Provide the half-page handout on HUNGaMA to the Sarpanch

2.2. VISIT ANGANWADI/ICDS CENTER

Visit any one Anganwadi centre in the village. If the village does not have access to an Anganwadi centre, check the appropriate box (**No**) on the form. If the village has more than one Anganwadi centre, select one at random by drawing chits.

Only visit on a day and time when the Anganwadi centre **(AWC)** is likely to be open **(Monday to Saturday, 9am-1pm)**. If you arrive in a village on a Sundays then start with the mapping and go to the AWC the next day. If the AWC is closed the day you visit, try to visit it on another day. If the AWC is not open for any of the four days, answer as many of the question as you can and leave the rest blank.

It is important you visit **IN THE MORNING** as most Anganwadi centres are usually closed in the afternoon. Check with villagers to learn the timing. The format for the Anganwadi Centre should take about **30** minutes to complete.

Be polite when interviewing the Anganwadi worker (AWW) and/or helper. Do not make it appear as though you are checking up on their work. Tell them about HUNGaMA and what you are doing.

2.2.1 Anganwadi Centre Questions

- When you arrive at the AWC, note the date of the visit.
- Ask the AWW about the centre hours to help you know when young children are likely to be at home.
- Collect the information for all the Anganwadi Centre Questions. Whenever possible, answer the questions based on observation rather than the AWW/helper reporting (ask to see the records, observe and try the equipment).
    - **A 1. Is there an Anganwadi Centre in the village?** If No, then skip Question A2 to A39
    - **A2. Was the Anganwadi Centre open?** Circle "No" only if the centre was not open for any of the **3 days (4 days in best district)**. If it was open **at least one** of the days, circle **"Yes.**"
    - **A3. How many children are present?** Count this yourself. Count only the children who are there when you arrive at the AWC.
    - **A4. Name of the Anganwadi Centre:** Write the name in bold letters. You can check on the board to get the name.
    - **A5 & A6. Current enrolment of children below preschool (usually age 0-3) and preschool (usually age 3-6).** Get these from the Anganwadi records if possible.

    For the question below, note the answers from observation rather than by asking the Anganwadi Worker (AWW)

    - **A7. Anganwadi worker (AWW) present.** Circle "No" if the AWW is open but the AWW is not present on the day you visit. If the AWW is not present, address the questions below to the Anganwadi helper or another staff.
    - **A8. Anganwadi helper present.** Circle "No" if the AWC is open but the Anganwadi helper is not present.

- **A9. Building Types**

  - **Pucca building.** A pucca building is one, which has walls and roof made of the following material (in at least one room).
    - Wall material: Burnt bricks, stones (packed with lime or cement), cement concrete, timber, ekra etc
    - Roof Material: Tiles, GCI (Galvanised Corrugated Iron) sheets, asbestos cement sheet, RBC, (Reinforced Brick Concrete), RCC (Reinforced Cement Concrete) and timber etc.

  - **Semi-pucca building.** A house that has fixed walls made up of pucca material but roof is made up of the material other than those used for pucca house.

  - **Kutcha building.** The walls and/or roof of which are made of material other than those mentioned above, such as un-burnt bricks, bamboos, mud, grass, reeds, thatch, loosely packed stones, etc. are treated as kutcha house.

  - **No building.** Circle "No" if the AWC is held outside or otherwise is not in a building. Circle "Yes" if the AWC is held in any kind of building when you visit, even if it is a borrowed or rented space.

- **A10. Functioning toilet available?** Circle "Yes" if AWC has any kind of usable toilet facility.

- **A11. Functioning tap/hand pump/well available?** Circle "Yes" if AWC has piped water or a covered well facility.

- **A12. Any health/nutrition-related information posted?** Circle "Yes" if any diagrams about nutrition and/or health practices in the AWC are posted. Such posters may include information about breastfeeding, hand-washing, vitamin supplements, and child illness.

- **A13. National Family Health Survey (NFHS) results posted?** Circle "Yes" if an NFHS-3 chart is posted on the wall.

- **A14. Medical kit available.** Circle "Yes" if kit with medical supplies and medicine is available.

- **A15. Growth monitoring booklet available?** Circle "Yes" if AWW can show you growth monitoring booklets with weight-for-age graphs.

- **A16. Growth monitoring booklet filled up in last 2 months?** Circle "Yes" if AWW shows you weight measurements dated to within the last 2 months.

- **A17. Date of birth of all enrolled children recorded?** Ask the AWW for the register and verify the dates of birth for all children currently enrolled at the AWC (excepting very recently born babies). Circle **"Yes"** if dates of birth are recorded for nearly all of the children.

- **A18. Weighing machine available?** Circle "Yes" if any kind of weighing scale is present (hanging or floor scale, whether or not it is working)

- **A19. Weighing scale working.** Circle "Yes" if scale is able to record correct weight of the height board, a surveyor, or a child (compare to scale used in the survey). Circle "No" if the scale is obviously not working (e.g. if it doesn't register weight at all, if the needle jumps erratically instead of moving smoothly).

- **A20. Ready-to-use food in stock?** Circle "Yes" if the AWC has the fortified, powdered ready-to-use mix (usually stored in large sacks), whether or not the children eat it that day.

- **A21. Freshly cooked food available? (e.g. khichdi, dalia).** Circle "Yes" if the AWC has ingredients to make khichdi, dalia, or other freshly-cooked food, whether or not the children eat it that day.

- **A22. Did you see any signs of food being cooked or distributed?** Circle "Yes" if saw food (any kind) being prepared, served, or cleaned up (such as used plates and pots).

- **A23. In the last one month, has the supervisor visited?** Check with the register to get the answer, if possible. Otherwise, rely on AWW reporting.

- **A24. AWW lives in the same village?** Circle "Yes" if the AWW reports that she lives in the village itself.

For the question below, take the answer given by the AWW and record the number or mark "Don't Know."

- **A25. When was the last time the AWW got her salary?** Write the number of the month when the AWW got her last salary. E.g. For January – 1, February – 2, March – 3 and so on…

- **A26. For which month was that salary?** For the payment referred to in A25, ask the AWW what month that payment was for. Write the number of the month. E.g. For January – 1, February – 2, March – 3 and so on…

- **A27. How long has the AWW been working in that job?** Record the years of Anganwadi experience reported by the AWC (in ANY Anganwadi centre and role).

- **A28. What is the age of the AWW?** Record the age of the AWW.

- **A29. How many trainings has the AWW had?** Record the number of trainings attended by the AWW for her Anganwadi service.

- **A30. What is the highest grade that the AWW has passed?** Write the highest standard of schooling completed by the AWC (0 for no schooling, 1 for first, 2 for second class and so on. If she has studied beyond 10^{th} standard, still put 10)

- **A31. On average, how many homes did the AWW visited last month?** Record the number of home visits in the last month as reported by the AWW.

- **A32. How long as the Anganwadi centre been functioning for (in years)?** Record how many years the village has had any kind of AWC (even if the AWC has changed or moved), as reported by the AWW.

- **A33. In the last month, how many days have the preschool children (3-6 age group) been given food?** Record the number of days that the AWW reports she was able to feed the preschool children in the last month. If it was "every day," write 25. If not given every day, then count the days and write.

- **A34. How many months ago did the centre receive food supplies?** Record how many months have passed since the AWC received food supplies. Put 0 if food supplies were received now (i.e. during the survey period) or put 1 for earlier month. (e.g. If HUNGaMA survey month is Nov put 0, if it is October put 1 etc.)

- **A35. How many months ago were the birth-related figures submitted to a central authority (e.g. Panchayat, ANM)?** Record what the AWW reports. Put 0 if birth data were submitted in this month (i.e. during the survey period) or put 1 for earlier month. (e.g. If HUNGaMA survey month is Nov put 0, if it is October put 1 etc.).

NUTRITION QUESTIONS

- **A36. Have you ever heard the word "malnutrition"?** Circle **"Yes"** if the AWW says she has heard the word, whether or not she knows what it means. Put **"NO"** if the AWW says she has not heard the word and **Skip A37 and A38.**

- **A37. Do you know the meaning of the word "malnutrition"?** Only answer this question if the AWC has heard the word **(answered YES to the question above, A36)**. Circle the answer closest to what the AWW says **("Yes" for knows or mostly knows, "No" for doesn't know or mostly doesn't know, and "Maybe/Not Sure" for anything else).**

- **A38. FOR SURVEYOR – IF YES or MAYBE/NOT SURE, ask the meaning and circle the words/ideas the respondent mentions in her answer.** Do not read the options from the list.
  - Carefully listen to the respondent and mark the appropriate
  - If she lists items not in the list, or if she gives a vague and general response, check "Other."
  - If she doesn't know or doesn't understand the question, check "Don't Know."
  - Only check an answer if you are sure that you understand her specific meaning.

- **A39. What is important for keeping the child healthy and strong?** DO NOT prompt the AWW. Circle ALL the items that she lists.
  - Carefully listen to the respondent and mark the appropriate
  - If she lists items not in the list, or if she gives a vague and general response, check "Other."
  - If she doesn't know or doesn't understand the question, check "Don't Know."
  - Only check an answer if you are sure that you understand her specific meaning.

2.2.2 Training exercise

Each surveyor is given a copy of the Anganwadi format and the surveyor must puts his/her name on it. The surveyors take turns asking questions to the trainer. The trainer answers the question and surveyors have to fill in the correct answer on the formats. Formats are collected and returned to surveyors later with feedback.

2.3. VILLAGE QUESTIONS, MAPPING, COUNTING, AND SEGMENTING THE VILLAGE

2.3.1 Village Questions

When you are walking around the village, observe if you can spot any of the items on the Village Questions list, and if you see them, tick the box. For example, as you are walking around look for wires, poles and other electricity fittings in the village. Similarly, look for an STD booth, post office, etc. If you cannot find an item, ask villagers if it exists and where it is. Do not check off the item until you **SEE IT FOR YOURSELF**. The only exceptions are for the ANM and ASHA, where you can take the word of the villagers and/or the Sarpanch. Record the start date and end date on the form.

2.3.2 Starting the Map

The main reason for making the map is that the surveyors need to be sure they understand the boundaries of the revenue village and the distribution of households across the village, including any outlying hamlets.

To get to know the village, **walk around** the village a bit before you start mapping. **Talk to people**: How many different hamlets/sections are there in the village? Where they are located? What is the social composition of the households in each hamlet/section? What is the estimated of households in each hamlet/section? Tell them about HUNGaMA. The **"walk and talk"** is very important for helping the community learns about HUNGaMA. Since surveyors will be in the village for 4 days, it is important to gain the trust of the villagers and help them understand why you are there and what you will be doing.

2.3.3 Survey Process

1. Enter the Village
2. Meet the Sarpanch and other prominent persons of the village
3. Get the Details of the village:
    - Village details
    - Number of households
    - Hamlet names
    - Number of houses in hamlets
    - Important landmarks
    - Village boundary
    - Details of main roads and other roads
4. Draw a map on the ground with the help of available details and villagers
    - For a LARGE VILLAGE, write the details on number of households in the village & hamlets and then cumulate the number of households in village and the hamlet/s
    - Total household number to be checked with the census data to check for accuracy. If there is a large discrepancy between the estimated number and the Census number, then see if the map needs readjustment, because the estimate given by the villagers may not be correct.
5. Once the map is ready share it with the villagers for their opinion.

6. Once the map is final, draw it on the correct page in the Village and Anganwadi Survey sheet.

For Small Village:

7. Each surveyor team has been provided with the details of large and small village in the village and Anganwadi survey tool. In the small village the team has to start mapping from one end of the village and have to ensure that they start mapping on their right hand side. The team has to tick every house they count in the table (numeric) provided in the village and Anganwadi tool. Both the team members can do the counting together, or they can split up, whatever they think is most efficient.
8. The team has to ensure that houses are counted once and only once. The team has to be very conscious during the mapping, as a mistake in the count will affect the accuracy of the survey results.
9. After completing the mapping, the team has to identify the Interval N. To calculate the interval N, divide the total number of households in the small village by **40 {for best district – divide by 50 (E.g. 220 houses/50)}**. If you get a number with decimals then round down to the nearest number **(e.g. 5.8 rounds down to 5)**
10. The surveyors count to the Nth house in the same direction in which they did the mapping.
11. In every Nth house the surveyor has to find out how many families are living in the house ("Family" refers to a domestic unit consisting of the members of a family who live together and have food from the same kitchen). Out of this select a family that has children below 5 years. If the house has no eligible children below 5, or if it is locked, the surveyors record the details on the house list and move to the next Nth house.

Large Village:

12. Based on the survey tool you will be able to understand that the village visited is a small or a large village. If it is a large village then the total households of the villages has to be divided into segments of about 100 houses. Calculate the number of segments by dividing the total estimated number of houses in the village by 100 and rounding down to the nearest whole number (**e.g. 978/100 = 9.78 rounds down to 9 segments**).
13. Make segments in the map of roughly equal house count (within 10 houses) and all of at least 100 houses.
    - **Be thoughtful and careful in making the segments**: Consider that the surveyors will need to walk around two entire segments to do the survey. Thus, make segments as compact and continuous as possible, with clear boundaries. Also, take time to make sure no segments are much bigger than any others. Talk with multiple villagers to validate the house count estimates. A little more time taken for these steps can save the surveyors a great amount of time later.
14. Starting from a segment on the north side, number the segments in a clock wise direction.
15. Each village has an assigned random number **(X)**. The team leader has to ensure that the random number **(X)** is communicated to the survey teams before the survey.
16. Based on the random number **(X)** the village segment has to be selected for survey. The segment is the **(X)th** segment in order, which may be segment X or – if X is larger than the total number of segments – the segment selected as the surveyor continues counting around the segments until he reaches **(X)**. That segment will be the first to be surveyed.
17. For selecting the second segment, you need to add the random no **(X)** value with the segment interval **(Y)**. To find out the segment interval **(Y)**, divide the total segments by 2 and round down **(e.g. 7 segments / 2 = 3.5, which rounds to 3)**.

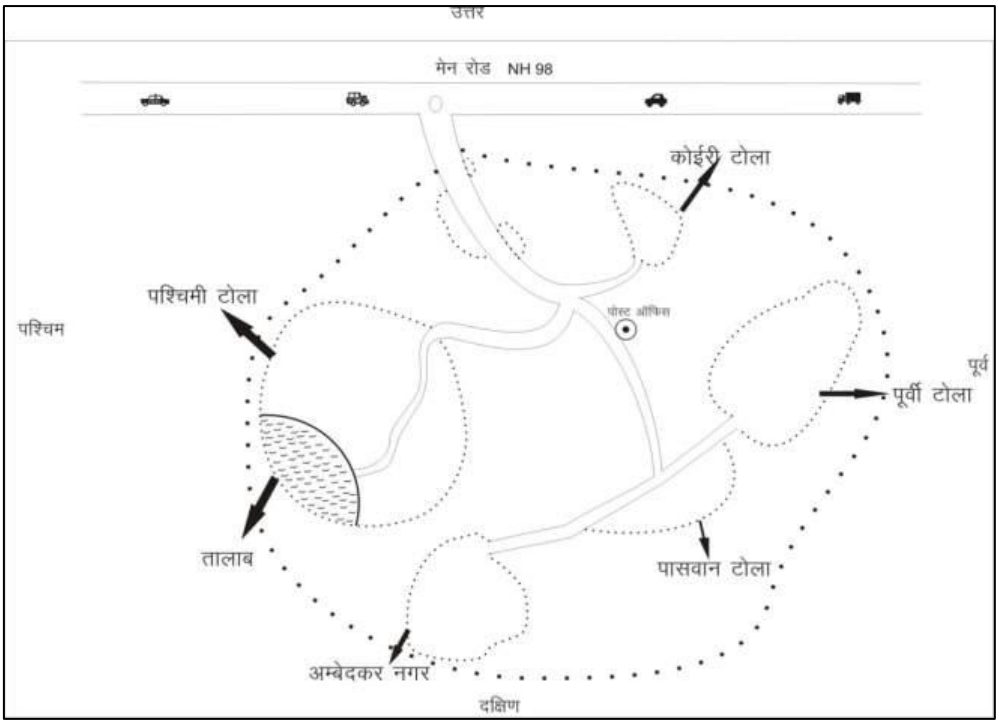
18. The team has to start mapping from one end of the segment, following their right hand side. The team has to tick every house they count in the table (numeric) provided in the Village and Anganwadi format. Both team members can do the counting together or they can split the work, whatever is most efficient.
19. The team has to ensure that no houses are counted twice and no house is missed during the counting.
20. After completing the counting, the team has to identify the Interval N. To calculate the interval N, divide the total number of households in the segment by **20 {for best district – divide by 25 (E.g. 120 houses/25)** and round down **(E.g. 120 houses/25 = 4.8 which rounds down to 4)**.
21. The surveyors can either finish all the counting and surveying in one segment before moving to the next, or do all the counting for both segments followed by surveying in both segments, whatever seems most efficient. However, the surveyors should be careful to spend half of their available time in each segment, and avoid spending much more time in one segment than the other. Surveyors can do this by starting the second segment on Day 3 and returning to finish the first segment (if needed) at the end of Day 4.
22. Surveyors should now fill in the required details (house counts, segments, interval (N) calculation, etc) on the Village and Anganwadi format cover sheet
23. The surveyors find the Nth house in the same direction in which they did the mapping.
24. In every Nth house the surveyor has to find out how many families are living in the house ("Family" refers to a domestic unit consisting of the members of a family who live together and have food from the same kitchen). Out of this select a family that has children below 5 years. If the house has no eligible children below 5, or if it is locked, the surveyors record the details on the House List and move to the next Nth house.

2.3.4 Making a Map

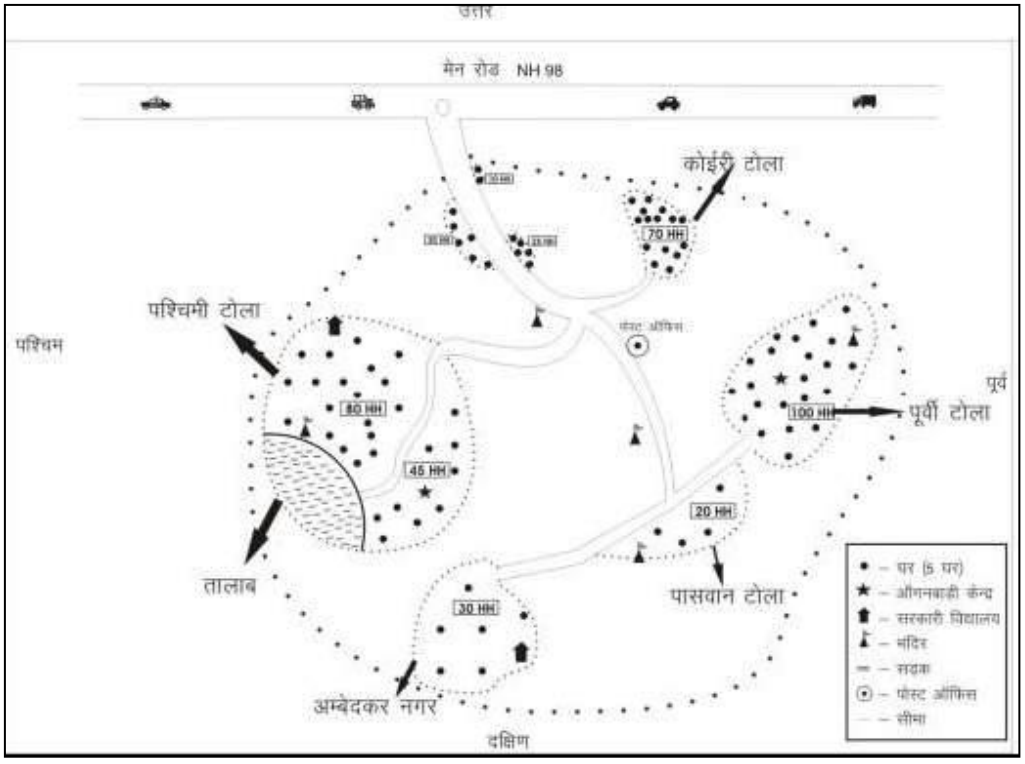
Rough map:

It is often helpful to start with a rough map drawn on the ground so that people around you can see what is being done. This is important to do before counting households as it will enable surveyors to know how houses are distributed, including in hamlets away from the main village. Take the help of local people like Sarpanch, village head, or any other person having knowledge of the village. First take the information on the directions and prepare the map such that the north is on the top, and likewise. You can follow the step listed below for drawing a map:

1. First draw all the roads or paths coming into the village and going out of the village.
2. Draw all the roads or paths going or coming to the hamlet/s.
3. Show the boundaries all the hamlet/s on the map.
4. Show the outer boundary of the village



5. For a LARGE village, write the approximate number of houses in the hamlets by asking knowledgeable villagers
6. Show the **main landmarks** – temples, mosques, river, road, school, bus-stop, panchayat bhavan, shop etc.
7. You can mark the main roads/ streets/paths or any important places in the village prominently on the map.



Final map:

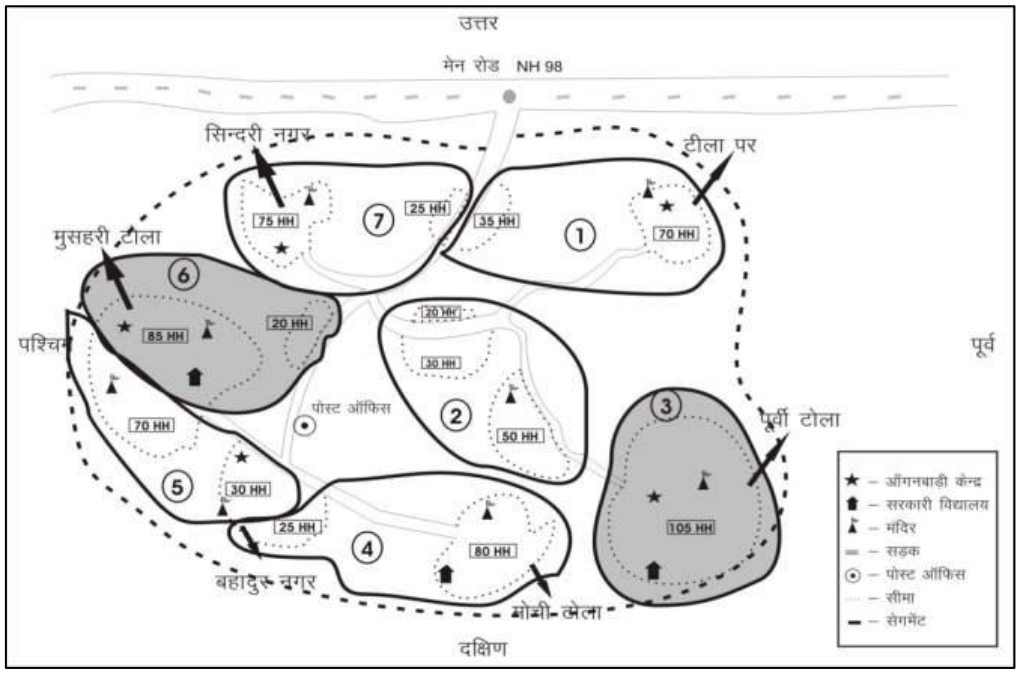
When the map is finished, review it with the villagers or the Sarpanch. Once everyone agrees that this map is a good representation of the village, then copy it on to the map sheet that has been given to you and prepare to do the segmenting in a large village, or to start counting for small villages.

2.3.5 Segmenting and Segment Selection in Large Villages

Segmenting of Large Village:

If the village is considered to be a large village, it must be segmented before being counted and surveyed. To segment the village, the surveyors work with villagers to assign rough household counts to areas on the village map and divide the map into the required number of segments (as noted on the village cover sheet), each having an equal house count and having at least 100 houses. Surveyors can calculate the target number of houses per segment by dividing the total house estimate for the village by the number of segments. All segments should be within 10 houses of that estimate.

Once segments are made, surveyors should choose a segment on the north side to be marked "1". Each segment should be numbered consecutively from there, following a roughly clockwise pattern.



Segment Selection in Large Villages:

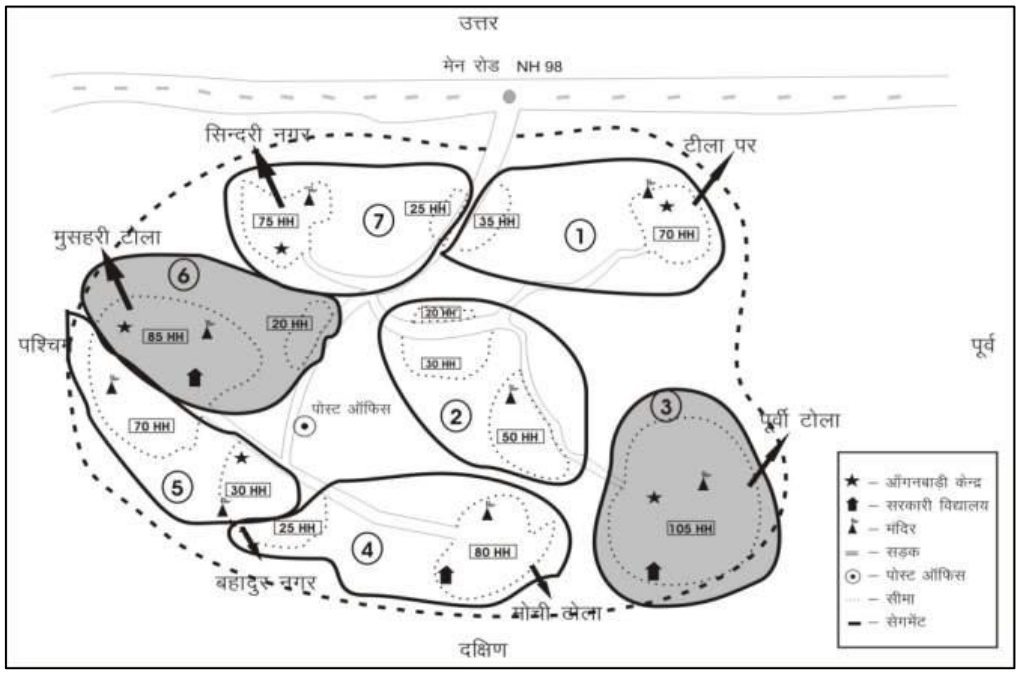
For survey ease, only 2 segments will be surveyed in the village (so regardless of village size, surveyors do not need to cover an area of more than 250 to 300 houses). In every village there is a random number **(X)** given by the team leader. The first segment is selected based on the random number **(X)**.

> E.g. If in the village format the random no is 2 is given then it indicates that the team has to select the segment with the number 2 for the survey. If the random number **(X)** is more than the total number of segments, then the team has to continue counting around the

segments in order until they get to the **(X)th** segment. That is the first segment to be surveyed.

To find the second segment, divide the total number of segments (e.g. 7 in the picture) by 2 (7÷2). The result you get is the segment interval or Y. If you get a decimal number like 3.5, then ignore the numbers after the decimal point **(e.g. if Y = 3.5 then round off and take only 3)**. Add the random number **(X)** (used for selection of first segment) to the segment interval **(Y)** to find the second segment.

For example, in the picture below, there are seven segments. (X) is 10 and (Y) is 7 / 2 = 3.5 => 3. The first segment is found by counting around to the 10th segment (segment 3), and the second segment is found by counting around to the 10 + 3 = 13th segment (segment 6). To do the counting, the last segment is followed by segment 1, and counting continues in order.



2.3.6 Counting Houses

In large villages, only houses in the two segments need to be counted by a thorough count. In small villages, ALL houses in the village need to be counted.

- There is a table provided in the village format to assist the house counting. The team can tick every house they count. For segments, the second segment can be counted using remaining numbers in the number table and the number of houses can be calculated by subtracting the first number ticked in that segment from the last number ticked.
- Counting houses is important to enable "random" selection of houses throughout the village. This is important for statistical accuracy, as it ensures that every house has an equal chance of being selected for the survey.
- A house is defined as a self-contained, residential physical structure designed to house a family or joint families
- Houses should only be counted only if regularly occupied by residents. Do not consider institutions, animal houses etc. as houses. Ask neighbours when there is uncertainty.

- Ensure that no house is counted twice and no house is missed during the counting. Ask villagers to assist in areas where it is difficult to ascertain the exact number of houses (e.g. apartment blocks).
- Surveyors should not rely on the villager's words and have to count the houses by themselves the best they can to get the correct information.
- Once a full house count is available for the segment, calculate the interval (N) as follows, using the calculator.

Small Village:

- Interval N = number of total houses ÷ 50
- Round DOWN to the nearest number

Large Village:

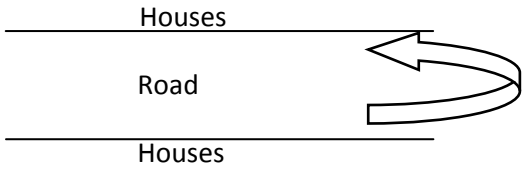
In EACH segment

- Interval N = Total houses in that segment ÷ 25
- Round DOWN to the nearest number

2.3.7 Selecting Houses

- In every village, the **entire area** of the village must be covered by going to every Nth household. Once an entire circuit of the village or both segments is completed, follow-up with non-response households until the 3 days (**4 days for best district**) allotted are finished.

- Conduct the survey with every **Nth** house rule. For example, if you calculated the interval N to be 5, count to the 5th house after exiting a surveyed household and approach that house. If you find houses in both the sides of the road then follow the right hand rule and complete every Nth house on one side of the road before going to the other side of the road, as shown below.



- Surveyors can put a sticker on every Nth house noting whether it was surveyed, ineligible, or locked. This will help the surveyors re-visit locked houses with eligible children and will help the team leader in doing backchecks.

- In every Nth house the surveyor has to find out how many families are living in the house **(A "family" is a domestic unit consisting of the members of a family who live together and have food from the same kitchen)**. Out of this select a family that has children below 5 years.

- In every Nth dwelling (ghar/house), surveyors will encounter one of the following scenarios:

    - **No eligible children (less than 5 years) :** If there are no children under age 5 in a household, **DO NOT** survey the house. Note it as an ineligible house on the House List in the Village Format **(V.HH.1 List every house visited and circle the appropriate option - Code 2)**

- **Locked House:** If the selected house is closed or if there is nobody at home, then ask neighbours if it has eligible children.
    - If the house DOES NOT has eligible children, mark the house as a **No eligible children (Code 2)** on the House List.
    - If the house DOES have eligible children, or if it is NOT KNOWN whether the house has eligible children, check the house as "to be visited again" on the House List. Do not check a box. Re-visit once the village circuit is complete to do the survey. If the houses cannot be surveyed during the four days, mark it as a Locked House on the House List.
- **Refuses/Other:** If a household has eligible children but refuses to participate, note it down on the House List as **Refuses/Other.**
- **Surveyed House**: If the house has eligible children and is willing to be surveyed, mark it as a surveyed house on the House List and proceed with the survey.
- For ALL the scenarios above, the surveyors should record the name of the head of the family. Team Leaders will use this information in doing backchecks.

- Focus carefully to avoid losing the count. Both surveyors should keep count and counts should be consistent. If the count is lost by more than 1, go back to the last house and recount the N.
- Continue visiting every Nth house until the whole village is finished. If it looks like it will take more than 4 days to complete the village, notify your team leader as soon as possible.
- If it is difficult to find eligible children in the village (i.e. fewer than 1 in 3 houses visited has eligible children), notify your team leader as soon as possible.
- If the entire village is finished before the four days are up, return to the locked/non-response houses with eligible children and attempt to do the survey.
- Spend **at least 8 hours a day** in the village for completing the survey. In the **first half of the first day** Village and Anganwadi survey tool and village map can be finished and in the rest of the **three and half days** surveying can be done.
- You can only leave the village when:
    - The survey team has made a circuit of the entire village (or two segments) and successfully surveyed every Nth house with eligible children (including ones that were initially locked) and has found enough houses with eligible children (the team leader will guide them on this point). In this case, the survey team can leave the village before four days are over.
    - The survey team has made a circuit of the entire village (or two segments) and four days are over.
    - The survey team has made a circuit of the entire village (or two segments), taking more than four days (under the instruction of the team leader).

- The survey team has not made a circuit of the entire village (or two segments), but the team leader has verified that they have completed enough of the village and found enough eligible children to leave at the end of four complete days.

- Upon finishing the village, surveyors should make sure all the survey formats are filled out properly and completely, including headers, and are ready to submit forms to the team leader

- Surveyors should try to go to households when children are likely to be at home and the family is receptive. If you start the survey before Anganwadi hours are over, **make sure you ask the parents if any children are at the Anganwadi centre**, and return to the house to measure the children once Anganwadi hours are over. You should also try to finish surveying before dinner preparations start.

For Team Leaders:

- In every village, surveyors should be getting at least 30 completed household surveys. If surveyors look unlikely to get at least 30 completed household surveys after completing a village, notify the coordinator. The surveyors may need additional time, additional manpower, or they may need to continue counting every Nth house from a different point in the village or segment in order to find more houses with eligible children.

2.4 SURVEYING HOUSEHOLDS

Start by giving an introduction and getting consent to survey the house.

Namaste. My name is _____ and I am working with the HUNGaMA survey, a citizen initiative to investigate the health of children in India, including information on households, living conditions, and health practices. We would very much appreciate the participation of your household in this survey.

I would like to ask you some questions about your household, children, and health practices and take height and weight measurements of your children. The survey usually takes about 30 minutes to complete.

Whatever information you provide will be kept strictly confidential.

Participation in this survey is voluntary and you can choose not to answer any question or all of the questions. However, we hope that you will participate in this survey since your participation is important to help us learn about the health of children in your community and throughout India.

At this time, do you want to ask me anything about the survey?

ANSWER ANY QUESTIONS AND ADDRESS RESPONDENT'S CONCERNS.

May I begin the interview now?

If the household members ask why they are being interviewed, you can tell them that their house was selected by chance (because of the random selection methodology).

Record the number of families living in the house (the number of kitchens) in the space provided.

If multiple families live in the same house, or if the house has multiple kitchens, then select one household to survey using the following rules:

- Select a household with children below 5
- If there are multiple households with children below 5, **then** select the household with the youngest child
- If there is more than one household with children below 5 and the age of the children are same, **then** the surveyors can select any household in the house at random by drawing chits.

Collect information about people who are regularly part of the household and all children under 5 in the household. The Mother's Voice section will only be for one mother living in the household with a measured child under age 5.

Be polite. Often people gather around and want to know what is going on. Explain what you are doing and why. Tell them about HUNGaMA. Remember to thank people after you have finished surveying the household.

In each house, one surveyor should ask questions and fill out the answers on the survey format and the other should make sure equipment is set up and put away quickly and properly. Surveyors can switch roles from house-to-house. The equipment surveyor can start setting up the equipment while the other surveyor is asking the questions. Time should not be wasted in setting up and cleaning up equipment while nothing else is going on.

The Child Details in section H2 (including measurements) are the most essential part of the survey. While all the questions are important, these are the most critical and must be entered as accurately as possible.

2.4.1 Section HI. General Information

Note carefully if the answer is supposed to be a CIRCLE or a NUMBER, and if you can CIRCLE ALL THAT APPLY or ONLY ONE. In the column for numeric information please write numeric information only. If the answer is not a numeric or a list e.g. name of the child, please use ENGLISH letters to enter it, if possible. The survey form will guide you.

In the format there are few questions which direct you to other questions or direct you to skip certain questions. The format instructions should be followed carefully to get these details right.

- **H1.1 House type:** Types of houses are defined as follows:
    - Kutcha House: The walls and/or roof of which are made of material other than those mentioned above, such as un-burnt bricks, bamboos, mud, grass, reeds, thatch, loosely packed stones, etc. are treated as kutcha house.
    - Semi -Pucca house: A house that has fixed walls made up of pucca material but roof is made up of the material other than those used for pucca house.
    - Pucca House: A pucca house is one which has walls and roof made of the following material (in at least one room).

- Wall material: Burnt bricks, stones (packed with lime or cement), cement concrete, timber, ekra etc
- Roof Material: Tiles, GCI (Galvanised Corrugated Iron) sheets, asbestos cement sheet, RBC, (Reinforced Brick Concrete), RCC (Reinforced Cement Concrete) and timber etc.

- **H1.2 Religion:** Hindu, Muslim, or Other.

- **H1.3 Caste:** Scheduled Caste (SC), Scheduled Tribe (ST), or Other

- **H1.4 Family Members:** Give the NUMBER for each of items: have food from the same kitchen, children below 5 years living in the house (not visitors or neighbours), and mothers for those children below 5 years.

- **H1.5 List of Mothers Who Have Children Below 5 Years:** List the names of up to three mothers and the number of children they have below 5 years (0-60 months). The S.L. number next to the mother's name will be her S.L. number. The children counted are those that will later be measured. If there are more than three mothers, skip the others. If a mother is no longer living or no longer resides in the household, but her child below 5 is part of the household, still record her name.

- **H1.6 Household Objects:** This question is asked to understand the socio economic status of the family. Mark whether or not the household has the listed items below in their house, whether or not they "own" it (the item should also be functioning):

  - TV
  - Radio
  - Mobile phone
  - 4-wheeler
  - 2-wheeler – motorcycle, scooter, etc
  - Tractor
  - Cycle
  - Electricity connection (of any kind)
    - Observe if the household has wires/electric meters and fittings or not. Note this information irrespective of the fact whether electricity connection in the household is legal or illegal. If the house is using generator for electricity then write 'No".
  - Did you see that there is electricity?
    - Observe if bulbs/tube lights/electric appliances can be put to use to check if there was electricity in the household at the time of the visit.
  - Toilet:
    - Try to find out whether the household has any sanitation facility.

- **H1.7 Services**: Circle "Yes" if the answer is true for any person living in the house. Check "Don't Know" if the family members responding do not know or do not understand the question.
  - BPL card (or another indication that they are a Below Poverty Line family)
  - Received benefit from PDS shop in the last 30 days
  - Have an NREGA card (job card)
  - Got work under NREGA in the last 30 days
  - Has a bank/post office account
  - Have health insurance
  - Have other insurance – for example, crop insurance or life insurance
  - Member in Self-Help Group (SHG)

- Has any loans

- **H1.8 Alcohol and Tobacco Use:** Circle "Yes" if anyone in the household consumes any alcohol/tobacco.

2.4.2 Section H2. Family Information

Fill in a page for EACH mother listed in H1.5 with children under age 5. If the mother is not available, another caretaker can answer the questions, but still fill out one sheet for each mother with children under age 5.

- **H2.1 Father and Mother Details:** Fill the mother details for each mother listed in H1.5, using one sheet per mother. Fill name, age (approximate is OK), and highest grade passed, and mother's age at marriage in the appropriate boxes (if the father or mother never went to school, then put "0". If they have completed education beyond 10 years, still put "10"). If the answer in column 4 is 0, then go to column 5 and ask the mother or father if they can read. If yes, have them demonstrate by reading part of the format. If they can read, mark "Yes" in column 5.

- **H2.2 Child Details:** Take information about the children below 5 years (under 60 months). If the mother has more than two children below 5 years, details can be filled in on additional pages, but be sure to mark the mother's serial number on all those pages (though other details don't have to be re-entered).

  Again, note carefully if the answer is supposed to be a CIRCLE or a NUMBER, and if you can CIRCLE ALL THAT APPLY or ONLY ONE. The survey form will guide you.

  - **<u>Children who are not at home but somewhere in the village</u>**: If the child is in the village, but not at home, take down all the information about the child in H2.2 excluding the height, weight, mid-upper arm circumference, and oedema measurements (H2.2 h to H2.2 k). Ask family members to call the child for the measurements. If she/he does not come immediately, **revisit that household for the measurements** once you are done surveying the other households.

  - **<u>Children out of the village</u>**: If there are children in the family but who are not present in the village on the day of the visit, DO NOT take their details (though they should still count when calculating the birth order of other children from the mother).

  - **<u>Visiting children</u>:** Do not survey or test children who are visiting their relatives or friends in the sampled village or household, and are not regular residents of that household. Data must be noted down **<u>ONLY</u>** for children from household's regular resident of the house. If other children wish to be measured, don't discourage them, but DO NOT include their data in the survey sheet.

  - **<u>Deformed children:</u> Do not include measurements of obviously deformed children on the survey format,** because the nutrition indicators will not be accurate. However, you may measure the children if they want to be included. But do not record their data on the survey format.

  - **H2.2.1 Child's Name:** Record the child's name and use the name to ask the questions to the parents. For example, "How old is [CHILD'S NAME]?"

- **H2.2.1.a Gender (M/F)**: If Male - 1 or Female - 2

- **H2.2.1.b Date of Birth (DD/MM/YY)**: For all children, try to get the age as precisely as possible. Use an official written source (immunization card or birth certificate) if available (return the card or certificate to mother as soon as details are recorded). Otherwise, if the mother does not confidently know the date, try to help the mother remember which season or holiday was associated with the birth using the local event calendar. If the date of birth doesn't match the age, probe to reconcile the differences.

  To use the local event calendar, start by trying to figure out what year the child was born by asking how many times the child has been alive for a particular holiday or asking about a specific major event in the year of the child's birth (e.g. an election). Once the year is determined, "sandwich" the month and day by asking about events that happened before and after the date of birth. If you can narrow down the date down to a specific month, choose a random day. If you can only narrow down the date to within 2-3 months, choose the month in the middle and leave the day blank. If you can't narrow down the date to within three months, leave the day and month blank.

- **H2.2.1.c Birth date accurate?** If the surveyor is confident that the birth date information is correct to the day, then circle all three (Day, Month and Year). If the surveyor think that only month is correct then circle the Month and Year (even if an estimated day is put down). If the surveyor only knows the year, then circle Year (even if a guess for the month has been put down on the format).

- **H2.2.1.d Birth sequence**. Put a number for each child, with 1 for the oldest child, 2 for the next oldest child, and so forth (including children of all ages, NOT ONLY those under age 5). Only count the order among still living children, but include children out of the house or out of the village when calculating the birth order of children at home.

- **H2.2.1.e Institutional delivery?** Indicate whether the child had an institutional birth. Put "Yes" if institutional or else "NO"

- **H2.2.1.e1 Institutional delivery?** If Institutional delivery, mark whether it was Operation, Pre-term delivery, or Ordinary delivery. More than one can be circled.

- **H2.2.1.f. Child weight at time of birth:** Note the weight at birth from the mother's memory or an official record (such as an immunization card of official birth record). If the weight is not known, or if it was not measured, mark the appropriate box.

- **H2.2.1.g Diarrhoea or fever/cough in the last one week?** Note whether the child has had diarrhoea (meaning at least three water-like stools a day), fever/cough, or neither in the last one week.

- **H2.2.1.h to H2.2.1.k Child Measurements.** You will need to measure weight, height, and mid-upper arm circumference (MUAC) for the child, as well as check them for oedema. If the child or family refuses measurement, leave those sections blank (**H2.2.1.h to H2.2.1.k)**. Taking the measurements in the following order can help reduce child anxiety: oedema, MUAC, weight, height. Do the measurements

whenever seems easiest, such as after finishing all the other survey questions. HOWEVER, make sure at least the names of the children have already been noted so the S.L. numbers are available for use in Section H3. If the child is distressed, give the mother or other family members some time to calm the child.

- **Setting up the weighing machine:** Before taking the child measurements, make sure the scale is set up properly by (1) setting the scale on a hard, flat, and level surface, and (2) checking the weight of the height board to make sure it is correct to within 200 grams (if the scale won't record the weight of the height board alone, take the weight of a surveyor with and without the height board). If the weight is not correct, try to find a better location for the scale. If no hard, flat, lever surface is suitable, put the scale on the height board and check a surveyor's weight **(at least one surveyor should know their weight each day, though their weight might fluctuate slightly throughout the day)**. If the measure is correct to within 0.2 kg (200 gms) that indicates that the scale is working properly and it is ready to take the weight of the child.

  For a correct and accurate reading please follow the following instructions:

  - Put the scale on a hard, flat, and level surface (use the height board if necessary)
  - Make sure it does not move once someone is standing on it, even if the person shifts their weight

  Taking a child's Weight: Only weigh children who are between 1 and 60 months. The child should remove any heavy clothing and put down any objects being held that might disrupt the weight. If child cannot or will not go on scale alone, measure an adult on the scale first and then the adult carrying the child. If a very small child can sit or lie on a scale without touching the ground, he/she can be measured that way. However, be careful to ensure that no one is touching the child or holding any of his/her weight once the scale starts working. If in doubt, measure the child again. Always wait for the scale to show 0.0 before weighing an adult, child, or adult with child.

  Take each weight measure at least twice. Always record the First Measure on the format, but don't record a Final Measure until a measure is replicated to within 200 grams (which may or may not be the same as the First Measure). Record the adult with child and child measures on the survey form to the nearest 100g (0.1 kg).

  - **THINGS TO REMEMBER**
    - Only weigh children more than 30 days old and below 5 years
    - Remove any heavy clothing on the child and make sure they are not holding anything when they are weighed
    - Takes all measures at least twice and only record a measure after it is repeated to within 200 grams
    - Small children can be weighed with an adult, but the weight of the adult alone must also be recorded
    - Make sure no one is touching the child or child with adult when their weight is being recorded
    - Make sure the full weight is put on the scale AS SOON AS POSSIBLE after the 0.0 reading shows

- **H2.2.1.i Height:** Only measure the height of children more than 30 days old and below 5 years. Measure the height of all children lying down. The child should remove any hair instruments or footwear that will impact the height reading. One surveyor will be at the top of the height board **(at the 0cm end of the board)**, gently cupping the child's ears and holding its head in place. The first surveyor will also make sure the head right-angle board is flush against the flat height board and the child's head is against it. The other surveyor should be at the footboard making sure the board is straight, the child's knees are straight, and the board is fully against the child's flat feet **(touching the heels as shown in the picture)**.

Once the child is in place, both surveyors should verify the following:
(1) the right-angle board is flush against the height board
(2) the child's head is touching the head right-angle board
(3) the child's body is straight and centred on the height board

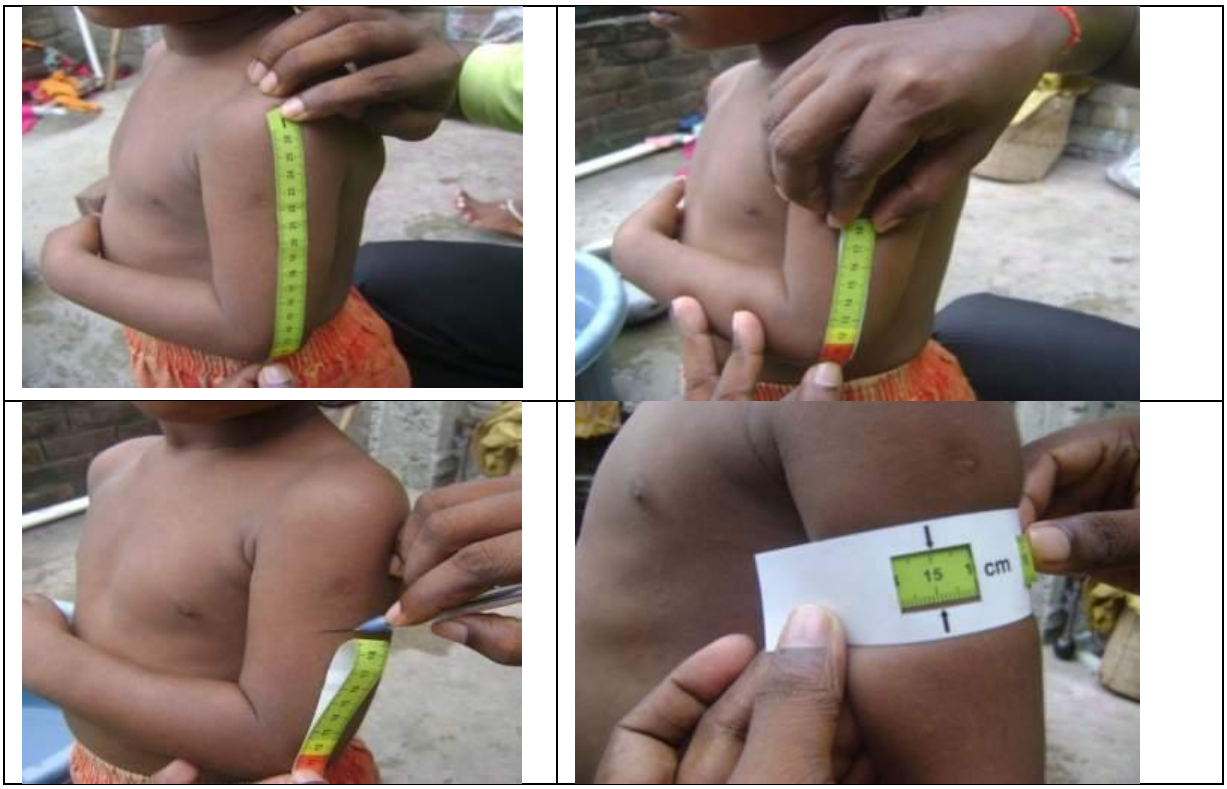
(4) the child's knees are straight (though keep in mind that babies cannot straighten their legs completed – put only GENTLE pressure on the knees)
(5) the child is looking straight up
(6) the foot right-angle board is straight (the reading is the same on both sides of the height board)
(7) the child's feet are flat and fully touching the foot right-angle board.

Once the footboard is in the correct place, the surveyors can take time to read the measurement carefully. Both surveyors should check the final measurement together. The surveyors must be careful in measuring even the nearest 0.1 cm (not rounding to a whole number or to a .5). If there is any uncertainty, the measure should be taken again. If the measure is exactly on a centimetre mark, make sure to put the .1 (e.g. 85.0, 68.0). If the child's height comes near the point of the hinge on the height board, try to get the measurement as accurate as possible even though the hinge is in the way.

If the child is longer than the height board, lay the MUAC strip so that the arrows are pointing to the 100cm mark on the height board and the coloured part of the strap is next to the child's feet. Roughly measure where the child's feet come on the MUAC strip. Add 100cm to that and put that number on the format.

- **THINGS TO REMEMBER**
  - Only take height of children more than 30 days old and below 5 years.
  - Remove hair instruments and footwear that would impact the height measurement.
  - The first surveyor should start at the head of the height board, making sure the right angle board and child's head are properly in place
  - The second surveyor should be at the foot of the height board, making sure the right-angle board and the child's knees and feet are in place (though using only GENTLE pressure on knees, especially for babies)
  - Both surveyors should verify the measure to the nearest 0.1 cm, making sure the reading is the same on both sides
  - When a measurement lies between two numbers, the LOWER number is the base number and count the decimal points from there
  - Use the MUAC strip to help measure children who are taller than the board

- **H2.2.1.j Mid-Upper Arm Circumference (MUAC)**: Only measure the MUAC of children over 6 months and below 5 years in age. Use the MUAC strap to measure the distance from the child's shoulder to their elbow, along the back of their left arm. Find the midpoint by folding the tape and marking the point of the fold with a pen. Wrap the MUAC tape around the child's arm at that point. Put the strap through the slit and record the measurement that falls between the black arrows in the window. Take the measurement when the tape is gently flat against the skin, but do not squeeze. The measurement should be taken without compressing any of the tissues. Both surveyors must verify that the MUAC tape is in the correct location, that it is neither too loose nor too tight, and that the measurement has been taken correctly.



- **THINGS TO REMEMBER**
  - Only take MUAC of children more than 6 months and below 5 years old
  - Find the midpoint by folding the tape and mark it on the child's arm
  - Wrap the tape around the arm at the midpoint, making sure the tape is fully in contact with the skin but NOT squeezing or compressing
  - Take the measure in the window, between the black arrows and measure to the nearest 0.1 cm. Both surveyors should verify the measurement
  - When a measure lies between two numbers, the LOWER number is the base number and count the decimal points from there

- **H2.2.1.k Oedema in both feet:** Measure oedema only for children older than 30 days and below 5 years. Measure oedema by pressing thumbs into each of the child's feet and holding for 10 seconds. Release thumbs. If clear indentations stay on BOTH feet when the thumbs are removed, record that the child has oedema in both feet. DO NOT mark the child as having oedema is only one foot is affected.

Taking oedema

Child with oedema

- **THINGS TO REMEMBER**
  - Use thumbs
  - Put pressure on both of the child's feet for 5 seconds
  - Only mark as having oedema if clear indentations remain in BOTH feet

2.4.3 Section H.3 Mother's Voice

Identify ONE mother with children under age 5 to answer these questions. Any willing mother can be selected, but avoid having two mothers answering the questions, as you will only record answers for one. If multiple mothers wish to answer, select whichever one has a lower S.L. number in Section H1.5. For questions about a specific child, ask her to answer for her ELDEST CHILD UNDER AGE 5 for whom height, weight, and mid-upper arm circumference measures were (or can be) taken. The answers will be most helpful if they can be related to the nutrition status of the child, as calculated through its height, weight, age, and MUAC.

For many of these questions, the mother will express a belief that is not a best health or nutrition practice. In those cases, do not comment and record whatever the mother says. At the end of the survey, the nutrition leaflet can be used to give select counselling on best practices to the families.

- **H3.1 Mother Details:** Put the mother's S.L. number [from H1.5 on page 1] and the name of the eldest child below 5. Also put the child's S.L. number [from H2.2 on page 2] which should already be filled in, even if the child hasn't been measured yet.

- **H3.2 Nutrition Knowledge:** Circle only one for each question.
  - **H3.2.1 Have you ever heard the word "malnutrition"?** Circle whatever the mother says. **(If No (2) or Don't know (99), then go to H3.3)**
  - **H3.2.2 If the mother says YES;** Ask her if she knows the meaning. If she won't say either yes or no outright, circle "Maybe/Not Sure". **(If No (2), then go to H3.3)**
  - **H3.2.3 FOR SURVEYOR – If Yes or Maybe/Not Sure, ask the meaning.** If the mother answered YES for the question above, ask her the definition and mark whatever words she says. Do not read from the list.

- **H3.3 Decision:** Usually, who takes the decision? Circle all that apply for the two questions below (Father, Mother, Grandmother/Grandfather, Other).
  - **H3.3.1 Child wellbeing (e.g. food, health, clothing).** For example, what to feed the children, what clothes the children should wear, when to wash the children, when to take the children to the health centre, when the child goes to Anganwadi, etc.
  - **H3.3.2 Major household purchases (e.g. TV, 2-wheeler).** Keep in mind that the person who actually buys and brings the item is not necessarily the same as the person who decided to buy it.

2.4.4 Section H.3.4 Mother's Practice/Experience

- For the questions below, circle ONLY ONE answer at the first level (H3.4.1-1). If the selected answer at the first level asks you to go to the next level, ask the question at the second level (H3.4.1-2). At the second level there can be multiple answers. You can give sample answers at the first level. Do NOT read out the answers in the second level – record whatever the mother says.

  For these questions, the choice at the first level is generally various options of which only one is the "best practice" that mothers should follow. If the mother is NOT following the best practice, the follow-up question tries to figure out why not. For trainers: further guidance on the logic of these questions is available in Section 2.4.5.

  - **H3.4.1-1 What was the child's first food?** Choices: Breastfeeding 1, Formula 2 (e.g. tin milk, Cerelac), Traditional feed 3 (e.g. honey, jaggery), Other 98, Don't know 99. **(If 2 / 3 / 98 then go to LEVEL 2, or else go to question 2)**

    - **H3.4.1-2 IF NOT BREASTMILK, then why was breastmilk not fed?** Choices: Milk not available (e.g. milk not physically coming), Mother not well (e.g. mother too exhausted or weak to breastfeed), Institutional delivery (e.g. mother not able to give the baby milk first because she didn't get the baby soon enough), Family advice/ tradition, Doctor/ nurse/ midwife advice, Other, Don't know

  - **H3.4.2-1 How soon after the birth breastfeeding was started?** Ask how soon after birth she started suckling, regardless of whether she thinks milk was available. Choices: Within

1 hour - 1, Within 1 day - 2, Within 3 days - 3, After 3 days - 4, Don't know - 99. **(If 2 / 3 / 4 go to LEVEL 2, or else go to question 3)**

- **H3.4.2-2 IF NOT WITHIN 1 HOUR, then why?** Choices: Milk not available (e.g. milk not physically coming), Mother not well (e.g. mother too exhausted or weak to breastfeed), Institutional delivery (e.g. mother not able to give the baby milk first because she didn't get the baby soon enough), Family advice/ tradition, Doctor/ nurse/ midwife advice, Other, Don't know

- **H3.4.3-1 Did you give your child your first milk (yellow in colour)?** If the mother is confused, tell her this refers to the colostrum, the thick yellow substance which starts coming out of the breast right after birth and remains for a few days. Choices: Yes - 1, No - 2, Don't know - 99. **(If 2, go to LEVEL 2, or else go to question 4)**

  - **H3.4.3-2 IF NO, then WHY did you not give?** Choices: First milk is not clean (e.g. the first milk is seen as being unhealthy and not good for babies), First milk not available (e.g. nothing was coming out of the breast), Institutional delivery (e.g. the mother wasn't able to give the first milk because of the logistics of the institutional delivery), Family advice/tradition (this may be in addition to other choices), Doctor/nurse/midwife advice (this may be in addition to other choices), Other, Don't know

- **H3.4.4-1 When was the first time you gave the child water?** Choices: Within 1 month - 1, 1 to 6 months - 2, 6 to 12 months - -3, Over 12 months - 4, Don't know - 99, N/A – child hasn't had liquids - 97. **(If 1 / 2 go to LEVEL 2, or else go to question 5)**

  - **H3.4.4-2 IF WITHIN 6 MONTHS, then WHY did you give water?** Choices: Child mouth/throat dry, breastmilk not available, Family advice/ tradition, Doctor/nurse/ midwife advice, Other, Don't know

- **H3.4.5-1 When was the first time you gave your child solid food?** Solid food includes any non-liquid foods, including rice, dal, etc. Choices: Before 3 months - 1, 3-5 months - 2, 6 to 8 months - 3, 9-12 months - 4, Over 12 months - 5, Don't know - 99, N/A – child hasn't had food - 97. **(If 1 / 2 / 4 / 5 go to LEVEL 2, or else go to question 6)**

  - **H3.4.5-2 IF NOT 6-8 MONTHS, WHY did you start solid food then?** Choices: Good for child's health (e.g. it was healthy for the child, the child was hungry), Breastmilk not available (e.g. there wasn't enough breastmilk), Family advice/ tradition (e.g. that's just what people do), Doctor/nurse/midwife advice, Other, Don't know

- **H3.4.6-1 At what age of child did you stop breastfeeding?** Choices: Less than 6 months - 1, 6 -12 months - 2, Over 12 months - 3, Don't know - 99, N/A – child still gets breastmilk – 97. **(If 1 then go to LEVEL 2, or else go to question 7)**

  - **H3.4.6-2 IF LESS THAN 6 MONTHS, then WHY?** Good for child's health (e.g. the child was hungry, the child didn't want milk), Breastmilk not available (e.g. not enough breastmilk for the child to be satisfied), Family advice/ tradition, Doctor/nurse/ midwife advice, Other, Don't know

- **H3.4.7-1 Is soap used in your house?** Choose "Yes" if the family use soap most of the time. Choose "No" if the family only has soap rarely and not on a regular basis. **(If 1 then go to LEVEL 2, or else go to question 8)**

    - **H3.4.7-2 IF YES, what is soap used for?** Choices: Bathing, Washing hands before food, Washing hands after toilet, Other, Don't know

- **H3.4.8-1 Are you satisfied with the quantity of Non-cereals food (e.g. vegetables, fruit, eggs, meat, pulses – that you're able to feed your child?** Choices: Yes - 1, No - 1, Don't Know - 99, N/A (child not being fed solid food) - 97. **(If 2 then go to LEVEL 2, or else go to question 9)**

    - **H3.4.8-2 IF NO for any, then WHY aren't you able to give the amount you prefer?** Choices: Food is expensive (e.g. not enough money to buy food), Food not available in market (e.g. can't get the food), Food not available from family crops (e.g. would eat the food if the family could grow it), Other, Don't know

For the questions below (H3.4.9 and H3.4.11), more than one answer may be circled at both levels. Answers at the first level can be read out, but not at the second level.

- **H3.4.9-1 In the last 24 hours, what foods did your child eat?** Ask the mother to think only about the last 24 hours for the specific child. Tell her to list everything, including meals, snacks, etc. Choices: Grains (rice, wheat, millet); Milk, curd; Eggs, nuts, pulses, meat, chicken; Vegetable and fruit; Processed foods (e.g. biscuits, bread)

- **H3.4.10-1 Last time your child fell sick, where did you take her?** Ask the mother to think about the last time the child fell very sick, to the point where the parents wanted to do something to get the child treated. Choices: Gov't health centre or sub-centre (ANM, doctor) - 1, Private MBBS doctor - 2, Untrained health worker - 3, Home or traditional remedy - 4, Other - 98, Don't know - 99, N/A – Only child hasn't fallen sick - 97. **(If 3 / 4 / 98 then go to LEVEL 2, or else go to question 11)**

    - **H3.4.10-2 IF DIDN'T GO TO A GOVERNMENT HEALTH CENTER OR TRAINED DOCTOR, then why not?** Choices: Cost more (e.g. family didn't have enough money to pay for treatment), Takes time (e.g. centre too far, waits too long), Services not useful (e.g. the doctors are not good), Others takes the decision (e.g. the mother would have taken the child, but the father decided), No health centre nearby, Other (e.g. better able to treat at home or through another source), Don't know

- **H3.4.11-1 Information about living children.** Ask the mother Are all the children you gave birth to still living? Circle Yes – 1 or No – 2. **(If No (2) then go to LEVEL 2, or else go to section H4)**

    - **H3.4.11-2 IF NO - How many are not living?** Provide the number of the mother's children who have already died, including ones who died at age 5 and above.

H4. Have you ever used any of these services of an Anganwadi Centre? Give the options below and circle Yes, No, or Don't know for each

- **H4.1 Food at the centre for children 3 – 6**. Food provided at the centres for children aged 3-6, either freshly cooked or ready-to-eat (whether or not education also happens). If the mother has never had any children eligible for pre-school, circle "No."
- **H4.2 Take home rations for mothers and young children**. Food brought by children to the home, or delivered by the Anganwadi worker to the home
- **H4.3 Immunization.** Immunizations for newborn children.
- **H4.4 Antenatal checkups.** Health check and counselling for mothers of newborn children.
- **H4.5 Children's health check up**
- **H4.6 Growth monitoring of children (child weighed).** Weighing children once a month and plotting their weight and age on growth charts.
- **H4.7 Health referral services.** Referral of children to health centres for malnutrition or other health problems.
- **H4.8 Pre-school education (for children 3-6).** Education at the Anganwadi centre for children age 3-6 (whether or not food received). If the mother has never had any children eligible for pre-school, circle "No."
- **H4.9 Health and nutrition counselling for parents.** Discussion of child growth monitoring results, prenatal and antenatal advice, breastfeeding advice, immunization advice, etc.
- **H4.10 Home visits by Anganwadi worker.** Visits by the Anganwadi worker to the home to check on children and/or to provide counselling.

H5. The government provides many services to help keep your children healthy and strong. What would be the MOST useful thing the government could do to help your children? Give the options but circle only one. Make the mother choose which would be the MOST useful. Choices: Provide better services (e.g. PDS, Anganwadi, NREGA), Provide cash directly to families instead of providing services (take the cash being spent by the government on the services and give those directly to the families), No opinion / Can't choose / Don't know (choose this option if the mother cannot understand the question or if she does not readily express a preference between the other two options.

H6. For the surveyors, record who were the main respondents for this survey? Circle all who responded to a large number of questions. Choices: Mother, Father, Grandmother or grandfather, Other family member, Other (e.g. neighbour, family friend, aunt/uncle)

H7. Phone Number: Take the phone number.

H7.1 Record whether the mobile number belongs to the family or their neighbours

Survey End Time.

2.4.5 Mother's Voice Logic Guide

All these questions deal with important issues that influence the nutrition status of the child. If best practices are not being followed, then the second level generally asks why. The answers to the second level questions provide insight into the barriers to good nutrition practices that exist: for example, resource constraints, lack of understanding, or disempowerment (other people took the decision).

This guide provides logic for why each question is included and what the best practice the question explores.

H3.4.1-1 What was the child's first food?
H3.4.2-1 How soon after the child's birth did you start suckling the baby?
H3.4.3-1 Did you give your child your first milk (yellow in colour)?

A child's first food should be breastmilk. Breastfeeding should start immediately (within 1 hour of birth if possible) and mothers should give the "colostrum," a thick yellow substance that is the first secreted by the breast after birth and is incredibly healthy for babies. Babies should not have any other substance, not even water, until they are six months old. Honey is especially dangerous for babies.

The second level in these questions assesses why the best practice was NOT followed.

- **H3.4.1-2 IF NOT BREASTMILK, then why was breastmilk not fed?**
- **H3.4.2-2 IF NOT WITHIN 1 HOUR, then why?**
- **H3.4.3-2 IF NO, then WHY did you not give?**

Sometimes families believe that the mothers are not capable of giving milk right after birth, that milk was not physically coming, or that it is not healthy for the baby to have milk (especially colostrum, which some families incorrectly believe to be "dirty"). These beliefs are almost always wrong. In virtually all cases, even if a mother is very malnourished, she is able to start breastfeeding right after birth. Babies are able to suckle right after birth, and by suckling the breast, they help to promote milk generation. Even if it does not look like milk is coming out, usually there is some colostrum, which is very important for the baby.

H3.4.4-1 When was the first time you gave the child water? Sometimes mothers say they have breastfed exclusively even though they have given the baby water. Babies should not have water before six months, especially as many water sources are contaminated and can cause the baby to get sick.

- **H3.4.4-2 IF WITHIN 6 MONTHS, then WHY did you introduce water when you did?** The second level asks why the mother introduced water before six months.

H3.4.5-1 When was the first time you gave your child solid food? Solid foods should be given at around 6 months. At that point, growing babies need more calories and nutrients than are available from breastmilk alone.

- **H3.4.5-2 IF NOT 6-8 MONTHS, WHY did you start solid food then?** The second level asks why the mother did not introduce complementary foods at 6-8 months (meaning that she introduced the food either too early or too late)

H3.4.6-1 At what age of child did you stop breastfeeding? Breastfeeding should continue for at least six months. However, it can continue until the child is two years or older. Continued breastfeeding can be especially beneficial for malnourished children in need of the kind of nutrients found in breastmilk.

- **H3.4.6-2 IF LESS THAN 6 MONTHS, then WHY?** The second level asks why the mother did not breastfeed for at least six months. It does not ask about why or when breastfeeding stopped generally.

H3.4.7-1 Is soap used in your house? For this question, the second level is more important than the first. The first level simply asks if a family uses soap, as the second level question isn't relevant otherwise.

- **H3.4.7-2 IF YES, what is soap used for?** If soap is available, families should use soap to wash their hands after using the toilet and before handling food, eating, or feeding others. Otherwise, the hands may have dangerous contaminants that can cause diarrhoea and other diseases, which in turn inhibit the body's ability to absorb and process nutrients.

H3.4.8-1 Are you satisfied with the quantity of Non-cereals food (e.g. vegetables, fruit, eggs, meat, pulses – that you're able to feed your child? While many children get enough rice or rotis to eat, they often are not getting enough of other nutrient-rich foods, like vegetables, fruits, eggs, meat, and pulses. Good nutrition requires a balanced diet with many types of food.

- **H3.4.8-2 IF NO for any, then WHY aren't you able to give the amount you prefer?** The second level asks why mothers who understand that their child's diet is insufficiently varied are not able to provide a more varied diet.

H3.4.9-1 In the last 24 hours, what foods did your child eat? The previous question asked if the mother was satisfied with the types of food the child was able to eat; this question asks about the actual diet. While a 24-hour recall is not the perfect way to assess a child's diet, it is one of the most accurate ways to understand what a child is actually eating on a day-to-day basis.

H3.4.10-1 Last time your child fell sick, where did you take her? Families that take their children to a government hospital or a trained doctor when their children fall sick are more likely to save a child if it becomes severely malnourished. When a child is severely malnourished, s/he often needs special feeds and care to get better. A malnourished child may become so weak that s/he does not even have the desire to eat, and regular food will not be effective. In such cases, it is important that the child see a trained medical professional, such as at a government or private (MBBS) hospital.

- **H3.4.10-2 IF DIDN'T GO TO A GOVERNMENT HEALTH CENTER OR TRAINED DOCTOR, then why not?** Families choose not to seek professional medical services for many reasons, including some that may seem to be beyond their control. This question asks why the family did not go to a government health centre or a trained doctor to understand what the barrier was.

2.5. EQUIPMENT MANAGEMENT

2.5.1 SURVEYOR KIT

Below is the detailed list of the contents of the Surveyors' Kit:

a) Introductory handout - 5 per village
b) Village survey format – 2 per village
c) Household survey format – 50 per village
d) Extra mother/child survey formats – 10 per village
e) Blank sheets of paper for mapping – 5 per village
f) Pen, sketchpen, clipboard, stapler, plastic folders, cleaning cloth, disinfecting liquid (Dettol), roll of clear tape, box of chalk – 1 set per team
g) Weighing machine – 1 per team
h) Height board (and 2 right angle boards) – 1 set per team
i) MUAC strips - 5 per team (damaged strips replaced weekly)
j) Local events calendar, laminated - 2 per team
k) Leave-behind leaflet - 40 per village
l) Bag(s) to carry the above – 2 per team

All items should be replaced as needed during the weekly meeting so that the surveyors always have the full kit above for each village they visit.

2.5.2 EQUIPMENT OVERVIEW

The equipment used for anthropometric measures is outlined in this chapter. For each piece of equipment, information is provided on the make or model, along with a brief description of the unit, what it is used for in this study, and how it is prepared for use, if appropriate. The detailed procedures for actual measurement are located in the survey questions section.

For each piece of equipment, the surveyors should understand the following:

- How it works
- The importance of accuracy
- Calibration procedure (for weighing scale)
- Measurement procedures
- Common mistakes
- Care instructions

They should also have practice sessions measuring themselves, each other, and children.

2.5.2.1 Weighing machine

Used to measure weight either of child alone or mother alone and mother and child

Description:

- Portable floor scale with a maximum capacity of about 150kgs
- One 3 volt battery is used to power each scale.
- The scale works by converting pressure into an electric current which is then translated into the

weight reading. Anything that affects the pressure (such as a soft or an uneven surface) or the electric current (such as heat and humidity) can impair the correct functioning of the scale.

Set-up and operation:

- To set up the scale initially, 0.00
- Place the scale on a hard, level surface in the shade
- Tap the scale to turn it on and wait until the display reads "0.0 kg."
- If the tap-on automatic switch-on has been deactivated, open the battery compartment and use the switch to turn this function on.
- The scale will automatically turn off after a couple minutes of inactivity.

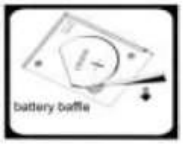
Directions to Use:

Battery:

- One lithium battery,
- To start using, please remove the cover of the battery, and insert it carefully by looking at the + and – Signs.

Surveyors may need to be familiar with various weighing machines. The battery can be changed in one of the following ways:

- *Option 1*: Gently press the small button towards outside and the battery will come out.

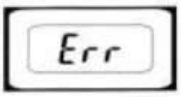


- *Option 2*: With the help of any sharp pointed article (pin) remove the battery.

Steps to take weight:

1. Put the scale on a hard, flat surface in the shade.

2. Press on the right side of the machine to start and wait for the scale to read 0.0 before putting on weight



3. During measuring the weights if the message "error" or "err" appears than follow the step two.

4. When a person is standing on the machine, s/he should be comfortable. S/he should stand still until the reading shows a still number.

Automatic switching of the machine

The machine gets automatically switched off when the weight is removed from the machine.

Suggestions to use:

- Stand still while measuring the weight
- Be cautious of any damage to the machine
- Be careful in using the machine
- Use slight wet cloth with disinfecting liquid to clean the machine every day after surveying. Ensure that water does not enter the machine.
- Store the machine in a cool and dry place
- Keep the machine on a upright position
- If the machine is not functioning then check the battery and if needed replace the battery.
- If the machine is showing the message “error” or “err” for a longer period or if it is not switching off then remove the battery for at least 3 seconds and put it back again. If the problem still persist then contact the dealer

Common errors:

- Not putting the scale on a hard, flat surface in the shade
- Not waiting for the scale to read 0.0 before putting on weight
- Not putting on the full weight in the centre of the scale as quickly as possible
- Trying to record the weight of a person or object while touching or holding the person or object (and therefore holding of some of the weight)

2.5.2.2 MUAC tape

Used to measure mid-upper arm circumference (MUAC)

Description:

- Coloured flex tape with 0 to 16 cm measurement and a window with a slit.

Operation:

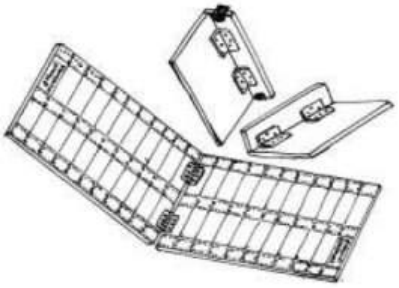
- Use the MUAC strap to measure the distance from the child’s shoulder to their elbow, along the back of their left arm. Find the midpoint by folding the tape.
- Mark the point of the fold with a marker pen.
- Wrap the MUAC tape around the child’s arm at that point.
- Put the strap through the slit and record the measurement that falls between the black arrows in the window.
- Take the measurement when the tape is gently flat against the skin, but do not squeeze.
- The measurement should be taken without compressing any of the tissues.
- Both surveyors must verify that the MUAC tape is in the correct location, that it is neither too loose nor too tight, and that the measurement has been taken correctly.

Common errors:

- Not finding the correct midpoint
- Squeezing the MUAC strip too tight (compressing the muscles and tissues) or leaving it too loose (not fully in contact with the skin)
- Reading the measure from the wrong number (e.g. 17.3 instead of the correct 16.7)
- Not reading the measurement at the point between the two black arrows

2.5.2.3 Height board

Used to measure recumbent (with child lying down) height.



Description:

- Folding wooden board with measurement flex affixed
- Two right-angle boards, one with edges for sliding

Operation

- Put the right angle board without an edge at the 0.0 measurement of the height board and use other right angle board at the child's feet. The large panel should be touching the child's head or feet.
- One surveyor will be at the top of the height board (where 0 is written), gently cupping the child's ears and holding its head in place. The position must be such that both the surveyors should face each other.
- You can take help of the mother to keep the child calm.
- Before taking the measurement ensure that
    - The head right-angle board is standing at 90 degrees from the floor
    - Make sure the head right-angle board is flush against the flat height board
    - Make sure the child's head is against the head right-angle board and the child is looking straight up
    - Make sure the child's knees are straight
    - Make sure the foot right-angle board is fully against the child's flat feet
    - Both the sides of the height board should have the same reading when the reading is taken

Common errors:

- Not making sure that the head right-angle board is flush against the flat height board and aligned straight up and down
- Not making sure the child is aligned properly (centred and straight on the height board, head against the head right-angle board, looking straight up, knees straight, heels and feet flat against the foot right-angle board)
- Forcing the knees of small children too straight (babies cannot straighten their legs fully)
- Not aligning the foot right-angle board to make sure the reading is the same on both sides (the board is straight across)
- Reading the measure from the higher instead of the lower number (e.g. 87.3 instead of the correct 82.7)

2.5.3 CLEANING AND MAINTENANCE

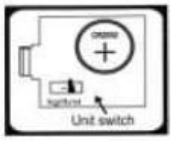
The anthropometry equipment requires minimal maintenance; however, all equipment should be monitored regularly for proper maintenance and functioning. All the equipment (weighing machine, height board, right angle boards, and used MUAC strips), should be cleaned daily using a clean cloth and dipped in a mix of disinfecting liquid and clean water then squeezed out so it is not dripping wet. The damp cloth should be run over all surfaces that have come into contact with children or surveyors. The cloth should be rinsed and dried well and the equipment should be left to dry for sufficient time.

Avoid leaving the equipment in the sun or in hot/humid areas. When not in use, leave the equipment in the bag compartments designed to hold the protect them.

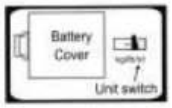
2.5.4 TROUBLESHOOTING

The information below should be used to troubleshoot some common problems with the anthropometric equipment.

If the machine is showing the reading in pound then use the switch to change in to Kg. You can try the below methods to change the readings

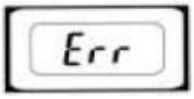


Rule 1: If the switch is near the battery, remove the battery cover and move the switch to convert the pound in to Kg.

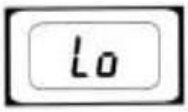


Rule 2: If the switch is behind the machine, try to find the switch and move the switch up and down to convert

1. **Signal for excess load:** Maximum capacity is written on the machine and if shows the error while taking the weight then the person should get down of the machine immediately.



2. **Signal for low battery:** Some machines will indicate when the battery is almost over and needs to be replaced with a new battery



If the portable floor machine is not functioning properly then follow the instructions given above. Inform the team leader immediately so that the team leader can take a decision whether to replace it or not. Team leaders need to verify whether the scale is not working or the surveyors are using it improperly.

Some small problems for some of the scales can be addressed as outlined below:

For ALL weighing machines

- If the machine is not switching on then open the battery box and see whether the battery is fixed properly or not and check whether the pin (to join the battery with the instrument) is touching the battery properly.

For Venus Plastic machines:

- If you hear any sound when the machine is moved then it might be the sound of the spring. The spring must be in a proper position for getting a correct measurement. If the spring has come off, then try to open the machine and put the springs in the correct positions. If you are unable to do that then please replace the machine.
- If the panel above the digital reading component comes off, use a cello tape to affix it.

For Nova Plastic machines:

- If during the measurement an error is displayed on the machine, then it indicates that weight is not taken properly. The measurement must be taken again.
- If the legs of the machine are "locked," then the readings will not be correct. If the leg cannot be fixed, replace the machine.
- These machines are not good at recording weights below 4 kgs. If you have to measure the weight of the child below 4 kgs then measure the child with an adult.

2.5.5 EQUIPMENT VERIFICATION

Quality control (QC) procedures ensure the collection and documentation of accurate, reliable data. The procedures were developed to reduce inter-examiner variability, reduce error, and ensure data quality.

2.5.5.1 Equipment Quality Control

The equipment used for measurements must be monitored on a regular basis for maintenance, cleaning, and verification checks as appropriate. All data collectors will be responsible for knowing the operation, use, and maintenance of the equipment they are using for measurements. For some equipment, the maintenance and cleaning procedures may be done each time the equipment is used.

The team leaders will perform equipment verification checks at specific intervals (weekly and between survey phases).

Equipment will also be checked as soon as it arrives to make sure is it accurate and measuring correctly before use.

In the field, survey teams will test the scale by measuring the weight of their height board (boards should be measured as soon as they are received and the exact weight recorded for reference) OR, if the weighing machine is on the height board, by measuring the weight of a surveyor. At least one surveyor should check their weight each field day in an ideal setting (hard, flat floor out of the sun and without too much heat and humidity). Remembering their weight will help them find optimal placement for the weighing scale in the field, by finding the setup where the scale records their weight most accurately.

2.5.5.2 Verification Checks

Regular verification checks for anthropomorphic measures are required for the floor scales. The table below summarizes the equipment verification intervals.

Interval	Equipment
Weekly	Partial scale verification: the scale must record a 2 kg weight correctly to within 200 grams on five consecutive measures while a person is holding it

Monthly	Full scale verification: 2, 5, and 10 kg weights and a person + 2kg weight must read to within 200 grams of the correct weight in 3 of 3 measures.

1. *Procedure*
   - Partial Scale Verification—Weekly
   1. Place the portable scale on a hard surface.
   2. Activate it by tapping the surface with your foot.
   3. Verify that the scale is in "kg" by looking at the display. If the display reads "lbs," press and hold the tare button until the display reads "kg."
   4. Wait for the display to read 0.00 kg.
   5. Step on the scale and record that weight
   6. Add 2kg to your weight and record that as the "Target Weight"
   7. Step on the scale with the 2kg weight 5 times and record each measure
   8. If any of the measures is more than 200 grams off from the target weight, repeat 5 more times and record the weights measured in "Round 2"
   9. If any of the weights from Round 2 are off from the target weight by more than 200 grams, the weighing machine fails the test
   10. Notify the team leader and get the equipment exchanged.

   - Full Scale Verification—Monthly
   1. Same as the procedure above but needs to be done for a 2kg weight, 5kg weight, 10kg weight, and person with a 2kg weight. Each test only needs to be done 3 times. Follow the instructions in the Weighing Machine Verification format.

III. TRAINING, MONITORING, AND COORDINATION

(Please refer to the actual training schedules and reporting formats, which are more updated that this section of the training guide)

3.1. TRAINING

Trainers are critical to the success of the survey. A well-trained surveyor will avoid common mistakes and understand the importance of executing the survey in the proper fashion.

Throughout the training, it is imperative that the trainers emphasize the importance of data accuracy. The paramount objective of the survey is to provide accurate data on nutrition levels in the selected districts. While training is important to familiarize surveyors with the methodology and survey formats, much of the training needs to focus on anticipating where mistakes and errors can happen and teaching surveyors how to avoid those mistakes. See Section 12 on "Common Sources of Data Error" for more information.

3.1.1 TRAINING SCHEDULE

The training will take place along the following timeline:

Training of surveyors

DAY 1

1. Introduction and Overview
    - Personal introductions
    - What is HUNGaMA
    - History/context (NFHS, DLHS, ASER?)
    - What is nutrition (and why it matters, how it is measured)
    - Survey snapshot

2. Entering a Village/Mapping
    - Meeting the Sarpanch
    - Importance of "walk & talk"
    - Mapping and counting
        - Why map
        - Mapping essentials
        - Calculating N
        - Choosing HHs (inc. eligibility and non-response issues, filling out HH list)
        - Following up NR

3. Survey Formats
    - Household questionnaire
        - Introduction for families and thank you for the families after the survey
        - Choosing a family in the HH
        - General principles
        - HH indicators question by question
        - Family info (child measurements) question by question
        - Mother's voice question by question

    - Village questions
        - Question by question

    - AWC questions
        - Introduction for AWW
        - See vs. hear
        - Question by question

    - General protocol
    - Handwriting (thinking like a data entry operator)
    - Importance of filling in answers for every questions
    - Key information (HH #s, SL #s, checks)

DAY 2

1. Practising:
    - Drawing Map and Segmenting
    - Selection of family and interval N
    - Village and Anganwadi format
    - Household format

2. Measurements and Equipment Care
    - Equipment overview (counts, types)
    - General principles (don't round, recording to the nearest 0.1)
    - Weighing scale

- How it works
- Importance of accuracy
- Measuring twice
- Calibration practices
- Common mistakes
- Care instructions
- Practice session (weighing calibration weights, each other)

- Height board
  - How it works
  - Importance of accuracy
  - Verification by both surveyors
  - Calibration practices
  - Common mistakes
  - Care instructions
  - Practice session

- MUAC strap
  - How it works
  - Importance of accuracy
  - Verification by both surveyors
  - Common errors

- Age
  - Why important
  - Importance of accuracy
  - Techniques for getting good data (asking for written records, local events calendar)

- Trip to NRC/ICDS to measure children

DAY 3

Field Practice

- Village to do full day of introductions, mapping, village and AWC questions, and HH surveys
- Physical verification
- Information triangulation

DAY 4

Field Practice

- Village to do full day of introductions, mapping, village and AWC questions, and HH surveys
- Feedback

DAY 5

Feedback and Preparation

- Sharing field experiences (difficulties, necessary improvements)
- Activity: thinking like a data entry operator
- Things to remember
- Pre-filling forms and calibrating/prepping equipment
- Spot check details
- Back check details
- Editing

- Weekly reporting format for surveyor
- Weekly reporting format for team leader
- Weekly meeting – Team leader and surveyor

3.1.2 TRAINER RESPONSIBILITIES

Trainers will be responsible for:

1) Delivering the training as per Naandi requirements
2) Arranging a training venue
3) Ensuring the required equipment and material are available for training
4) Arranging a visit to a centre to measure children (a health centre, Anganwadi centre, or similar centre)

3.2 MONITORING

Team leaders will be responsible for overseeing three survey teams and in covering the 30 required villages in a district.

As part of this, team leaders will have the following responsibilities:

1) Supporting their survey teams during the training
2) Ensuring that survey teams have the materials and equipment required for the survey
3) Assigning survey teams to selected villages
4) Ensuring that survey form headers are pre-filled accurately and completely
5) Monitoring teams in the field
6) Submitting completed surveys to coordinators
7) Conducting back-checks (checking filled formats with the household surveyed) for quality control (at least 20% of all formats)
8) Conducting spot-checks (first-hand observation of surveyors) for quality control (at least 5% of all formats)
9) Completing reporting documents and submitting to the coordinator
10) Tracking surveyor performance and giving feedback to help them improve
11) Replacing surveyors who are ineffective

Reporting is a key aspect of monitoring. The following reports are required:

1. Weekly report (for surveyor)
2. Weekly report (for team leader)
3. Daily activity report (for team leader)
4. Daily activity report (for coordinator)
5. Weigh machine verification format (weekly)
6. Weigh machine verification format (monthly)

Before data is submitted, every format must be checked over by the surveyors and their team leader to ensure all the codings are written in, the answers are marked clearly, and the answers logically follow the survey rules (e.g. single answer versus multiple answers, conditional questions).

Data accuracy is imperative for the survey, and inaccuracies can be introduced at many levels. Thus, surveyors and team leaders must strive to minimize error as much as in their power. Each step is important. Examples of errors that can occur are below:

Sampling error

- Non-random selection of households (having the wrong "N", or not following the "every Nth household" rule)
- Not enough households

Equipment error

- Faulty measuring instruments

Equipment setup error

- Failure to zero instruments
- Failure to set up equipment in an appropriate location (e.g. hard, flat surface)

Equipment reading error

- Reading the measuring instruments incorrectly
- Rounding off values to nearest whole number (or nearest 0.5)

Recording error

- Recording the numbers in the wrong place
- Writing the numbers illegibly (so data entry operators can't read them)
- Not writing the complete number (e.g. 89.0, not just 89)
- Skipping a question

Survey damage

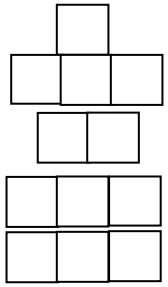
- Survey forms getting wet or dirty (so numbers can't be read properly)

Data entry error

- Data entry operators typing the numbers incorrectly

Village and Anganwadi Center Survey

1. State _____ State Code
2. District _____ District Code
3. Village _____Village Code
4. Surveyor 1 _____ Code
5. Surveyor 2 _____ Code
6. Start Date _____/_____/20_____
7. End Date _____/_____/20_____



Small Village	Large Village
1	2
Total number of houses _____ Interval (N) = Total houses / 40 Interval (N) = _____ (in whole numbers)	Total number of segments _____ Segment interval = Total segments / 2 Segment interval = _____ First segment number _____ Total number of houses _____ Interval (N) = Total houses / 20 Interval (N) = _____ (in whole numbers) Second segment number _____ Total number of houses _____ Interval (N) = Total houses / 20 Interval (N) = _____ (in whole numbers)

House Number Chart

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130	131	132	133	134	135
136	137	138	139	140	141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160	161	162	163	164	165
166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190	191	192	193	194	195
196	197	198	199	200	201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	220	221	222	223	224	225
226	227	228	229	230	231	232	233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248	249	250	251	252	253	254	255
256	257	258	259	260	261	262	263	264	265	266	267	268	269	270
271	272	273	274	275	276	277	278	279	280	281	282	283	284	285
286	287	288	289	290	291	292	293	294	295	296	297	298	299	300

State code | | District code | | | | Village code | | |

MAP SHEET

N

W

State code | | District code | | | | Village code | | |

V.HH.1 List every house visited and circle the appropriate option (Table 1)						
House No.	Name of Head of Family	Surveyed houses	Not surveyed houses			Check if house to be visited again
			No eligible child	Refused /Other	Locked house	
1		1	2	3	4	
2		1	2	3	4	
3		1	2	3	4	
4		1	2	3	4	
5		1	2	3	4	
6		1	2	3	4	
7		1	2	3	4	
8		1	2	3	4	
9		1	2	3	4	
10		1	2	3	4	
11		1	2	3	4	
12		1	2	3	4	
13		1	2	3	4	
14		1	2	3	4	
15		1	2	3	4	
16		1	2	3	4	
17		1	2	3	4	
18		1	2	3	4	
19		1	2	3	4	
20		1	2	3	4	
21		1	2	3	4	
22		1	2	3	4	
23		1	2	3	4	
24		1	2	3	4	
25		1	2	3	4	
TOTAL Table 1						

V.HH.1 List every house visited and circle the appropriate option (Table 2)						
House No.	Name of Head of Family	Surveyed houses	Not surveyed houses			Check if house to be visited again
			No eligible child	Refused / Other	Locked house	
26		1	2	3	4	
27		1	2	3	4	
28		1	2	3	4	
29		1	2	3	4	
30		1	2	3	4	
31		1	2	3	4	
32		1	2	3	4	
33		1	2	3	4	
34		1	2	3	4	
35		1	2	3	4	
36		1	2	3	4	
37		1	2	3	4	
38		1	2	3	4	
39		1	2	3	4	
40		1	2	3	4	
41		1	2	3	4	
42		1	2	3	4	
43		1	2	3	4	
44		1	2	3	4	
45		1	2	3	4	
46		1	2	3	4	
47		1	2	3	4	
48		1	2	3	4	
49		1	2	3	4	
50		1	2	3	4	
TOTAL Table 2						

State code | | District code | | | | Village code | |

V2. Total	Number of Houses		
	Table 1	Table 2	Total
No of surveyed houses			
No eligible children			
Refused/other			
House locked			
Total number of houses visited			

V3. Circle the appropriate answer after observation	Yes	No
V1. Does the village have electricity?	1	2
V2. Is the village connected with a pucca road?	1	2
V3. STD phone booth?	1	2
V4. Post office?	1	2
V5. PDS shop?	1	2
V6. Pucca drain?	1	2
V7. Bank? (Any kind)	1	2
V8. Anganwadi center?	1	2
V9. Government primary school (Class 1-5)	1	2
V10. Government middle school (Class 6-8)	1	2
V11. Government high school (Class 9-10)	1	2
V12. Primary Health Centre/Sub-Centre?	1	2
V13. Other (Private) trained doctor?	1	2

Ask these questions to the Sarpanch or a village resident		Yes	No
V14. Accredited Social Health Activist (ASHA) worker available?		1	2
V15. Auxiliary Nurse Midwife (ANM) available?		1	2
V16. What is the source of drinking water in the village?	A. Handpump	1	2
	B. Tap/pipeline	1	2
	C. Well	1	2
	D. Pumpset	1	2
	E. Other	1	2

State code | | | District code | | | | Village code | | |

Anganwadi Center Questionnaire

A1. Is there an Anganwadi Center in the village? **(If No, Skip Q A2 to A 39)**	Yes - 1	No - 2
A2. Was the Anganwadi Center open? (During any of the days of the survey)	Yes - 1	No - 2
A3. How many children are present? (Do a head count)		

A4. Name of Anganwadi Center	
A5. Number of 0-3 children enrolled (from the AWC register)	
A6. Number of 3-6 children enrolled (from the AWC register)	

Circle Yes or No for each question
(Answer from observation rather than by asking the Anganwadi Worker (AWW))

		Yes	No		Yes	No
A7. Is the AWW present?		1	2	A15. Is the growth monitoring booklet available?	1	2
A8. Is the Anganwadi Helper present?		1	2	A16. Is the growth monitoring booklet updated in the last 2 months?	1	2
A9. Type of building (Circle only one)	Pucca?	1		A17. Are the dates of birth for most children recorded?	1	2
	Semi-Pucca?	2		A18. Is a weighing machine available?	1	2
	Kutcha?	3		A19. Is the weighing machine functioning? (Check with the weighed details)	1	2
	No building?	4		A20. Any ready-to-use food available?	1	2
A10. Is there a functioning toilet?		1	2	A21. Children given freshly cooked food?	1	2
A11. Is there a functioning handpump/tap/well?		1	2	A22. Have you seen any signs of food being cooked or served?	1	2
A12. Are there any health/nutrition posters?		1	2	A23. Has the supervisor visited in last one month? (Check with the register)	1	2
A13. Is there any NFHS data poster?		1	2	A24. AWW lives in the same village?	1	2
A14. Is a medical kit available?		1	2			

For every question, write a number or circle 99
(Ask the Anganwadi Worker these questions)

	Number (a)	Don't know (b)
A25. When did you get your salary last? (Write the number of the month, e.g. 1=Jan, 2=Feb, etc.)		99
A26. For which month was it? (Write the number of the month, 1=Jan, 2=Feb, etc.)		99
A27. How many years as an AWW?		99
A28. Age of AWW?		99
A29. How many trainings has the AWW undergone in the last 2 years? (In numbers)		99
A30. AWW studied till which grade? (Highest qualification)		99
A31. How many homes were visited in the last 1 month? (If 99 home then write 100 homes)		99
A32. How many years has the Anganwadi Center been functioning ?		99
A33. Last month, how many days was food given to 3-6 year olds? (If all days write 25)		99
A34. When was the last time food stocks were received? (0 for this month, 1 for last month, etc)		99
A35. How many months ago was date of birth data given to ANM/Panchayat/Supervisor? (0 for this month, 1 for last month, etc)		99

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Nutrition questions for Anganwadi Worker/Helper (Circle the correct answer)

A36. Have you heard the word "malnutrition"? (If No (2) or Don't know (99), then go to A39)	Yes – 1	No – 2	Don't know – 99
A37. Do you know the meaning of "malnutrition"? (If No (2), then go to A39)	Yes – 1	No – 2	Maybe/Not Sure – 3

A38. FOR SURVEYOR – If Yes or Maybe/Not Sure, ask the meaning. Circle the words respondent mentions in her answer. (Please do not read from the list)	
	1. Link between food and nutrition 1
	2. Balanced diet 2
	3. Adequate food 3
	4. Nutritious food 4
	5. Breastfeeding 5
	6. Safe water 6
	7. Hygiene and cleanliness 7
	8. Other 98
	9. Don't know 99

A39. What is important for keeping the child healthy and strong? (Do not read these. Circle the ones applicable.)

A39.1 Breastfeeding soon after birth	1	A39.9 Clean food	9
A39.2 Exclusive breastfeeding up to 6 months of age	2	A39.10 Adequate food	10
A39.3 Beginning supplementary food at 6 months	3	A39.11 Balanced diet	11
A39.4 Timely and full immunizations	4	A39.12 Washing hands with soap before eating	12
A39.5 Going to a doctor if the child falls sick	5	A39.13 More money to buy food	13
A39.6 Supplementary vitamins	6	A39.14 Keeping the child clean	14
A39.7 Clean house	7	A39.15 Other	98
A39.8 Clean water	8	A39.16 Don't know	99

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HUNGaMA Tool – Household Survey Format

State and Code		District and Code		Village and Code		1- Surveyor Name/Code		2- Surveyor Name/Code	

H0. Number of families in the house	

H1. GENERAL INFORMATION: Applicable to all persons eating regularly from one kitchen

H1.1 Type of house (Circle only one)	
Kutcha	1
Semi-pucca	2
Pucca (wall + roof of bricks and cement)	3

H1.2 Religion (Circle only one)	
Hindu	1
Muslim	2
Other	3

H1.3 Caste (Circle only one)	
SC	1
ST	2
Other	3

H1.4 Number of persons eating from one kitchen	
1. Total number of family members	
2. Number of children below 5 years	
3. Number of mothers with children below 5 years	

H1.5 List of mothers with children below 5 years		
S.L.	Name	Number of children below 5 years
1		
2		
3		

H1.6 Objects in the house (Circle those available)	Yes	No	Don't Know
1. Television	1	2	99
2. Radio	1	2	99
3. Mobile phone	1	2	99
4. 4-wheeler	1	2	99
5. 2-wheeler	1	2	99
6. Tractor	1	2	99
7. Cycle	1	2	99
8. Electricity	1	2	99
9. Did you see electricity being used?	1	2	99
10. Toilet	1	2	99

H1.7 Services (Circle whichever is applicable to any member of the family)	Yes	No	Don't Know
1. Do you have a BPL card?	1	2	99
2. In the last 30 days, did you get any benefit from the PDS shop?	1	2	99
3. Do you have a NREGA job card?	1	2	99
4. In the last 30 days, did you get any work through NREGA?	1	2	99
5. Do you have a bank/post office account?	1	2	99
6. Do you have health insurance?	1	2	99
7. Do you have any other insurance?	1	2	99
8. Member of Self-Help Group?	1	2	99
9. Does the family have any loan now?	1	2	99

H1.8 Consumption of liquor and tobacco (Put circle if applicable to any member of family)	Yes	No	Don't Know
1. Does any family member consume alcohol?	1	2	99
2. Does any family member consume tobacco? (cigarette, gutkhek)	1	2	99

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H2. CHILD INFORMATION: Ask questions of any one mother on Page 1 in H1.5. If it is not possible to measure any one of the children, leave H2.2h to H2.2k blank.

H2.1 Information about the mother and father	**Mother serial number** (from H1.5 on page 1)	**Name**	**Age** (Approx)	**Highest grade completed** (If class 1-10, to go column 6)	**Can read** (If 0 in column 4)	**Were you less than 18 years old when you married?**
	1	2	3	4	5	6
1. Mother					Yes – 1 No – 2	Yes – 1 No – 2
2. Father					Yes – 1 No – 2	

Note: In column 4, write 0 if no schooling, 1 for Grade 1, 2 for Grade 2, 3….., 9 for class 9, and 10 for class 10 and above

H2.2 Name of Child (Only children below 5, from older to younger)	**H2.2.1 Name**	**H2.2.2 Name**
a. Gender	a. Male – 1 Female – 2	a. Male – 1 Female – 2
b. Date of birth (day/month/year)	b. ☐☐ / ☐☐ / ☐☐	b. ☐☐ / ☐☐ / ☐☐
c. Accurate date of birth (Circle applicable one)	c. Day – 1 Month – 2 Year – 3	c. Day – 1 Month – 2 Year – 3
d. Birth sequence (For eldest child in living children, put 1)	d. ☐☐	d. ☐☐
e. Institutional delivery (If No (2), to go to f)	e. Yes – 1 No – 2	e. Yes – 1 No – 2
e.1. If institutional delivery, circle the appropriate option	e.1. Operation– 1 Pre-term delivery– 2 Ordinary delivery– 3	e.1. Operation– 1 Pre-term delivery– 2 Ordinary delivery– 3
f. Was your child weighed at birth? If Yes, what was the weight in kg?	f. ☐.☐ kg Did not weigh – 96 Don't know – 99	f. ☐.☐ kg Did not weigh – 96 Don't know – 99
g. Did the child suffer from diarrhoea, cold/cough in the last 1 week? Note: Diarrhoea is at least 3 times stools like water in a day. (Circle all that apply)	g. Diarrhoea – 1 Fever/cough – 2 Did not have – 3 Don't know – 99	g. Diarrhoea – 1 Fever/cough – 2 Did not have – 3 Don't know – 99
h. Weight - If the child cannot stand alone on the machine, weigh with an adult. Notes: - Remember to weigh the adult alone first - Record weight to the closest 100 gms - Surveyor to record weight in **a** and **b** OR in **c** only. That is, if a and b are recorded, then c will NOT be recorded	h. 1st measurement / Final measurement With adult: a. Adult alone ☐☐.☐ kgs; b. With child ☐☐.☐ kgs Alone: c. Child's weight ☐☐.☐ kgs Final measurement: a. Adult alone (final) ☐☐.☐ kgs; b. With child (final) ☐☐.☐ kgs; c. Child's weight (final) ☐☐.☐ kgs	h. 1st measurement / Final measurement With adult: a. Adult alone ☐☐.☐ kgs; b. With child ☐☐.☐ kgs Alone: c. Child's weight ☐☐.☐ kgs Final measurement: a. Adult alone (final) ☐☐.☐ kgs; b. With child (final) ☐☐.☐ kgs; c. Child's weight (final) ☐☐.☐ kgs
i. Height - Measure all children lying down. To be recorded only after both surveyors verify	i.. ☐☐☐.☐ cm	i. ☐☐☐.☐ cm

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j. Mid-Upper Arm Circumference (MUAC) - For children over 6 months. To be recorded after verification by both surveyors.	j. ☐☐.☐ cm	j. ☐☐.☐ cm
k. Swelling (oedema) in both feet	k. Yes – 1 No – 2	k. Yes – 1 No – 2

H2.2 Name of Child (Only children below 5, from older to younger)	**H2.2.3 Name**	**H2.2.4 Name**
a. Gender	a. Male – 1 Female – 2	a. Male – 1 Female – 2
b. Date of birth (day/month/year)	b. ☐☐ / ☐☐ / ☐☐	b. ☐☐ / ☐☐ / ☐☐
c. Accurate date of birth (Circle applicable one)	c. Day – 1 Month – 2 Year – 3	c. Day – 1 Month – 2 Year – 3
d. Birth sequence (For eldest child in living children, put 1)	d. ☐☐	d. ☐☐
e. Institutional delivery (If No (2), to go to f)	e. Yes – 1 No – 2	e. Yes – 1 No – 2
e.1. If institutional delivery, circle the appropriate option	e.1. Operation– 1 Pre-term delivery– 2 Ordinary delivery– 3	e.1. Operation– 1 Pre-term delivery– 2 Ordinary delivery– 3
f. Was your child weighed at birth? If Yes, what was the weight in kgs?	f. ☐.☐ kg Did not weight – 96 Don't know – 99	f. ☐.☐ kg Did not weight – 96 Don't know – 99
g. Did the child suffer from diarrhoea, cold/cough in the last 1 week? Note: Diarrhoea is at least 3 times stools like water in a day. (Circle all that apply)	g. Diarrhoea – 1 Fever/cough – 2 Did not have – 3 Don't know – 99	g. Diarrhoea – 1 Fever/cough – 2 Did not have – 3 Don't know – 99
h. Weight - If the child cannot stand alone on the machine, weigh with an adult. Notes: - Remember to weigh the adult alone first - Record weight to the closest 100 gms - Surveyor to record weight in **a** and **b** OR in **c** only. That is, if a and b are recorded, then c will NOT be recorded	h. 1st measurement / Final measurement With adult: a. Adult alone ☐☐.☐ kgs; b. With child ☐☐.☐ kgs Alone: c. Child's weight ☐☐.☐ kgs Final measurement: a. Adult alone (final) ☐☐.☐ kgs; b. With child (final) ☐☐.☐ kgs; c. Child's weight (final) ☐☐.☐ kgs	h. 1st measurement / Final measurement With adult: a. Adult alone ☐☐.☐ kgs; b. With child ☐☐.☐ kgs Alone: c. Child's weight ☐☐.☐ kgs Final measurement: a. Adult alone (final) ☐☐.☐ kgs; b. With child (final) ☐☐.☐ kgs; c. Child's weight (final) ☐☐.☐ kgs
i. Height - Measure all children lying down. To be recorded only after both surveyors verify	i.. ☐☐☐.☐ cm	i. ☐☐☐.☐ cm
j. Mid-Upper Arm Circumference (MUAC) - For children over 6 months. To be recorded after verification by both surveyors.	j. ☐☐.☐ cm	j. ☐☐.☐ cm
k. Swelling (oedema) in both feet	k. Yes – 1 No – 2	k. Yes – 1 No – 2

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H3. MOTHER'S VOICE: Ask any one mother. Child-related question should be answered for her oldest child below 5 years.

H3.1 Detailed information about the mother

Mother Serial Number (from H1.5 on page 1)	**Name**	**Name of oldest child below 5 years**	**Child's serial number** (from H2.2 on page 2)
H1.5. ☐			H2.2. ☐

H3.2 Nutrition Question (Circle the appropriate answer)			
1. Have you heard the word "malnutrition"? (If No (2) or Don't know (99), then go to H3.3)	Yes – 1	No – 2	Don't know – 99
2. Do you know the meaning of "malnutrition"? (If No (2), then go to H3.3)	Yes – 1	No – 2	Maybe/ Not Sure – 3

3. FOR SURVEYOR – If Yes or Maybe/Not Sure, ask the meaning. Circle the words respondent mentions in her answer (please do not read from the list)	
1. Link between food and nutrition	1
2. Balanced diet	2
3. Adequate food	3
4. Nutritious food	4
5. Breastfeeding	5
6. Safe water	6
7. Hygiene and cleanliness	7
8. Other	98
9. Don't know	99

H3.3 Decision: Usually, who takes the decision?	Child's Mother	Child's Father	Child's Grandmother/ Grandfather	Other
1. Child welfare (e.g. food, clothing, health, etc.)	1	2	3	98
2. Other major purchases (e.g. TV, 2-wheeler, etc.)	1	2	3	98

H3.4 Mother's Practice/Experience

LEVEL 1						**LEVEL 2**						
Read out the answers to the respondent and circle the appropriate answer (only one).						DO NOT read out the answers. You may circle one or more, as answered by the respondent.						
1.	**What was the child's first food (drink)?** (If 2 / 3 / 98 then go to LEVEL 2, or else go to question 2)					**Why did you not give breastmilk?**						
	1	**2**	**3**	**98**	99	1	2	3	4	5	98	99
	Breastfeeding	**Formula (e.g. tin milk, Cerelac)**	**Traditional feed (e.g. honey, sugar water)**	**Other**	Don't know	Milk not available	Mother unwell	Institutional delivery	Family/traditional advice	Doctor/nurse/ ANM advice	Other	Don't know

2.	**How soon after birth was breastfeeding started?** (If 2 / 3 / 4 go to LEVEL 2, or else go to question 3)						**Why not breastmilk within 1 hour?**						
	1	**2**	**3**	**4**	99	97	1	2	3	4	5	98	99
	Within 1 hour	**Within 1 day**	**Within 3 days**	**After 3 days**	Don't know	N/A - Child was not breastfed	Milk not available	Mother unwell	Institutional delivery	Family/traditional advice	Doctor/nurse/ ANM advice	Other	Don't know

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	Did you give the child the first (yellow) milk? (If 2, go to LEVEL 2, or else go to question 4)			Why did you not give the first milk?						
3.	1	**2**	99	1	2	3	4	5	98	99
	Yes	**No**	Don't know	Not clean	Not available	Institutional delivery	Family/traditional advice	Doctor/nurse/ ANM advice	Other	Don't know

	When was the first time you gave the child water? (If 1 / 2 go to LEVEL 2, or else go to question 5)						Why did you give water before 6 months?					
4.	**1**	**2**	3	4	99	97	1	2	3	4	98	99
	Within 1 month	**1 to 6 months**	7 to 12 months	After 12 months	Don't know	N/A – child not given fluids till now	Child mouth/throat drying up	No breastmilk	Family/traditional advice	Doctor/nurse/ ANM advice	Other	Don't know

	When was the first time you gave your child solid food? (If 1 / 2 / 4 / 5 go to LEVEL 2, or else go to question 6)							Why not at 6 to 8 months?					
5.	**1**	**2**	3	**4**	**5**	99	97	1	2	3	4	98	99
	Before 3 months	**3-5 months**	6 to 8 months	**9-12 months**	**After 12 months**	Don't know	N/A – child not given solids yet	For child's good health	No breastmilk	Family/traditional advice	Doctor/nurse/ ANM advice	Other	Don't know

	At what age of child did you stop breastfeeding? (If 1 then go to LEVEL 2, or else go to question 7)					Why below 6 months?					
6.	**1**	2	3	99	97	1	2	3	4	98	99
	Less than 6 months	6 -12 months	After 12 Months	Don't know	N/A – child still gets breastmilk or never breastfed	Good for child's health	No breastmilk	Family/traditional advice	Doctor/nurse/ ANM advice	Other	Don't know

	Is soap used in your house? (If 1 then go to LEVEL 2, or else go to question 8)		What do you use soap for?				
7.	**1**	2	1	2	3	98	99
	Yes	No	Bathing	Washing hands before meals	Washing hands after toilet	Other	Don't know

	Are you satisfied with the quantity of non-cereal foods (e.g. vegetables, fruit, eggs, meat, pulses) that you're able to feed your child? (If 2 then go to LEVEL 2, or else go to question 9)				Why are you not satisfied?				
8.	1	**2**	99	97	1	2	3	98	99
	Yes	**No**	Don't know	N/A	Food is expensive	Food not available in market	Food not available from family crops	Other	Don't know

For the questions below, circle the answer given by the mother. Do not read them out. More than one answer may be circled.

	In the last 24 hours, what foods did your child eat?					
9.	1	2	3	4	5	6
	Grains (rice, wheat, millet)	Milk, curd	Eggs, nuts, pulses, meat, chicken	Vegetable and fruit	Processed foods (e.g. biscuits, bread)	N/A – Child on breastmilk

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10.	When your child last fell ill, where did you take her? (If 3 / 4 / 98 then go to LEVEL 2, or else go to question 11)							Why didn't you take the child to a health center or a trained doctor?						
	1	2	3	4	98	99	97	1	2	3	4	5	98	99
	Gov health center/sub-center (ANM, doctor)	Private MBBS doctor	Untrained health worker	Home or traditional remedy	Other	Don't know	N/A –Child hasn't fallen sick	Costs more	Takes time	Services not useful	Others take the decision	No health center nearby	Other	Don't know

11.	Information about living children			Number
	Are all the children you gave birth to still living? (If No (2) then go to LEVEL 2, or else go to section H4)	Yes – 1	No – 2	If not, how many are not living? (In numbers)

H4. Have you ever used any of these services of the Anganwadi Center? (Circle the appropriate answer)	Yes	No	Don't know
1. Food at the center for children 3-6 years	1	2	99
2. Take-home rations for women and infants	1	2	99
3. Immunization	1	2	99
4. Antenatal check up	1	2	99
5. Health check up for children	1	2	99
6. Growth monitoring of children (child weighed)	1	2	99
7. Health referral services	1	2	99
8. Pre-school education (for children 3-6 years)	1	2	99
9. Health and nutrition counseling for parents	1	2	99
10. Home visits by Anganwadi worker	1	2	99

H5. The government has a number of services for keeping your children healthy (e.g. ICDS program/Anganwadi, Health Centre, Midday Meal, etc.). In your opinion, what can the government do to help your children further?
(Read out the answers. Circle only one)

1. Improved services within the current programs (e.g. Anganwadi Centre, Primary Health centers etc.)	1
2. Cash instead of programs/services	2
3. Haven't thought about it / Can't choose / Don't know	3

H6. FOR SURVEYOR: Who were the main respondents for this survey?
(Circle one or more appropriately)

1	2	3	4	98
Child's Mother	Child's Father	Child's grandmother or grandfather	Other family member	Other

H.7 Mobile Number		**H.7.1**	Own – 1	Neighbors - 2
Survey End Time			☐☐:☐☐ AM/PM	