An Analysis of Nutrition Surveys in Ethiopia

WORKSHOP REPORT

Addis Ababa
22nd and 23rd September 2009
Appendix 2: Agenda

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1. Introduction

The Emergency Nutrition Coordination Unit (ENCU) of the Early Warning and Response Directorate/Disaster Risk Management and Food Security Sector (EWRD/DRMFSS) in collaboration with GOAL Ethiopia and NutritionWorks (a UK-based partnership of international nutritionists) held a two day workshop to discuss ‘contextual’ information collected in nutrition surveys carried out in Ethiopia.

The workshop was the end point of a study conducted by NutritionWorks examining the methods, indicators and use of contextual data collected in nutrition surveys in Ethiopia from 2003-2008. NutritionWorks facilitated the meeting which was funded by the United Nations Office for Coordination of Humanitarian Affairs /Humanitarian Response Fund (OCHA/HRF) Ethiopia.

1.1 Objectives

The workshop objectives were:
1) To share and discuss the findings of the study
2) To agree standard methods and indicators for contextual data collection in Ethiopia in the future.

1.2 Participants

Workshop participants were those involved in carrying out and using data from nutrition surveys within and outside Ethiopia. Over 50 people from government, non-governmental organisations (NGOs), and UN agencies were invited to the workshop.

A number of those invited were unable to attend. The final list of participants can be found in appendix 1.

1.3 Agenda

The workshop agenda is attached in appendix 2. The workshop began with three presentations. Participants were then divided into working groups and came together at the end for working group feedback and discussion of the way forward.
2. Presentations

Three presentations were made at the start of the workshop. The powerpoint presentations are not attached to the workshop report but are available on demand from the ENCU/EWRD/DRMFSS Isaack Manyama orlao@dppc.gov.et

2.1 Background paper

Fiona Watson of NutritionWorks presented a study on the ‘contextual’ data that are routinely collected during nutrition surveys in Ethiopia. Currently, nutrition surveys collect a large quantity and range of data on context but guidelines on methods and indicators are unspecific. Nutrition surveys carried out between 2003 and 2008 were analysed and interviews were conducted with key staff from a range of agencies to assess how contextual information is used for decision-making.

The background paper is in appendix 3.

2.2 Update on the IPC

Jeremy Shoham of NutritionWorks presented an update on the Integrated Phase Classification System (IPC) and the Food Security and Nutrition Assessment Unit (FSNAU) system for classifying nutritional emergencies in Somalia. The IPC system classifies the severity of transient food insecurity on five levels based on key sets of indicator. It is relevant to the current work because it collates key indicators such as crude mortality rate (CMR), acute malnutrition, stunting, food access/availability, dietary diversity, water access/availability, hazards, civil security, livelihoods assets, destitution/displacement. Indicators are set at different levels depending on phase. A general strategic response framework is associated with each phase of classification.

IPC has been adopted by a number of countries and technical training has already been provided in Ethiopia. The FSNAU classification system is more focused on nutritional outcomes (rather than food security outcomes) with indicators reflecting this focus.

2.3 Update on the SMART

Fiona Watson of NutritionWorks updated the workshop participants on the Standardized Monitoring and Assessment of Relief and Transition (SMART) initiative. The revised Guidelines for Emergency Nutrition Surveys in Ethiopia 2008 produced by the ENCU/EWRD/DRMFSS is based on SMART methods. While the sections on methods for collection of anthropometry and mortality are mostly complete, the section on context is not complete. The approach currently advocated by SMART to assess context is the Household Economy Approach (HEA). It is, however, unclear how widely this has been adopted by those conducting nutrition surveys.

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1 ‘Contextual’ data refers to all information collected in nutrition surveys with the exception of anthropometric and mortality data. These data are sometimes referred to as ‘non-anthropometric’ and are usually collected to help understand the causes of malnutrition.
3. **Working groups**

One of the recommendations from the analysis of nutrition surveys carried out in Ethiopia (see background paper for the workshop) is that a core set of indicators for four key sectors are developed. These sectors are:

1. Health,  
2. WASH  
3. Caring practices  
4. Food security/livelihoods/coping strategies,

These core indicators were developed in four working groups that were convened after lunch on Day 1. For each working group, a lead was nominated who was an expert in their sector and who made an initial presentation on what types of assessment in the sector currently take place in Ethiopia, types of indicator and sources of data. In addition, there were facilitators to work with the groups.

The working groups were charged with two tasks:

1. Identify a minimum set of indicators (around 5) which can be used to assess the severity of the situation in the sector. Each indicator should ideally have the following parameters:  
   - Comparative data available  
   - Feasible and easy/quick to collect within context of nutrition survey (non-specialists)  
   - Objective as possible  
   - Applicable across population groups

2. Identify indicators that are associated with malnutrition or global acute malnutrition (GAM) in children. This may include a much larger number of indicators. The indicators should ideally meet the following parameters:  
   - Strong evidence base for association with malnutrition  
   - Direct link between malnutrition and the indicator

Each working group fed back their discussions to plenary on Day 2.

### 3.1 Health working group

#### 3.1.1 Sources of data

A number of different potential sources of data are available in Ethiopia:

1) Health data are available at woreda level, sent monthly to the regions and quarterly to the Ministry of Health (MOH)  
2) MOH administrative reports  
3) Integrated Disease Surveillance and Response (IDSR) is available daily and weekly but limited information.  
4) Demographic and Health Surveys (DHS)  
5) Health facility assessment  
6) Multi agency needs assessment  
7) Individual NGO assessment  
8) UN bodies through annual reports  
9) Universities  
10) Ethiopian Health and Nutrition Research Institute
3.1.2 Minimum set of core health indicators (task 1)
The group methodically assessed a range of indicators based on the following parameters (see appendix 4):

- Comparator available
- Feasibility
- Objectivity
- Population coverage
- Method of data collection

Five indicators were agreed which are presented below in order of priority
1. Measles (occurrence of)
2. Acute Watery Diarrhoea (AWD)/Cholera
3. Malaria
4. Vitamin A supplementation coverage and
5. Access to/utilisation of health services

3.1.3 Health indicators associated with malnutrition (task 2)
1. Measles (coverage and occurrence)
2. Vitamin A coverage
3. Diarrhoea (AWD/non specific)
4. Malaria (Insecticide –Treated Nets ITN coverage and occurrence)
5. WASH indicators
6. Access to health services
7. Level of HIV prevalence

The group noted that further work was needed to see if there are more indicators linked to malnutrition.

3.1.4 Discussion
- Sources of data – the Ethiopian Health and Nutrition Research Institute (EHNRI) will become a more important source of information though still weak in emergencies
- Diarrhoea (non-specific) was considered as an indicator for task 1 but rejected because of lack of baseline data so can’t compare changes in prevalence over time
- Acute Respiratory Infection (ARI) also considered but rejected as an increase in ARI doesn’t necessarily imply a crisis.
- Access to health services was changed to include access/utilisation of health services.
- All indicators for task 1 are secondary and available largely at health centre level and reported to the woreda. Exception is vitamin A and vaccination coverage which are primary data.
- Data gaps in pastoralist areas

3.2 WASH working group

3.2.1 Sources of data
An inventory for assessment of WASH has been agreed for Ethiopia and a national guideline on completion of the inventory is almost finalised and will be endorsed by the Government.
3.2.2 Minimum set of core WASH indicators (task 1)

*Water quality and quantity*
1. % access to safe water (woreda level)

*Sanitation*
2. Access to latrines

*Hygiene*
3. Hand washing (knowing the importance and doing it)
4. The availability of ash
5. Washing their hands after using toilet or after cleaning their child’s bottom
6. Safe water management

3.2.3 WASH indicators associated with malnutrition (task 2)
These indicators were not necessarily the best correlated with malnutrition (GAM in children) but were indicators that could be used for a more in-depth assessment of WASH.

The two key indicators most associated with malnutrition were hygienic practices and access to safe water.

*Water quality and quantity*
1. Distance and transportation to take the available water to home
2. The quality and the quantity (size) of the storage place
3. How much dipping affects it

*Sanitation*
4. Latrine availability
5. Latrine use and maintenance
6. Distance to latrine
7. User friendly aspect of latrine
8. Hand washing
9. Dispose kids’ faeces

*Hygiene*
10. House ventilated
11. House clean floor
12. House separate kitchen
13. House separate place for animals
14. Personal cleanliness of hands, house, and compound

3.2.4 Discussion
• Can survey teams collect all this data?
• Discussion about best sources of data – woreda or household. No decision taken but important issue is to agree indicators and then look at methods.
• Point raised that major indicator in a crisis is: Has availability of water changed?

3.3 Caring practices working group

3.3.1 Sources of data
The prime source of information for caring practices is:
For national comparison the team used:
2) Baseline National Nutrition Survey (NNS), which is now managed by the EHNRI and is an elaboration of the 5 year DHS survey

3.3.2 Minimum set of core caring practices indicators (task 1)
1. Feeding of infants (0 to 6) months and of young children
   a. when to start complementary feeding
   b. what food (dietary diversity score)
   c. meal frequency
2. Time spent with the child (and the mother’s work load)
3. Hygiene
   a. frequency of child washing
   b. hand washing norms (before food preparation and feeding, after latrine, disposal of child’s waste, sanitation and use of soap/ash)
4. Care of sick child: % children sick with DD, and / or fever
   a) percentage of the sick children (broken into 2 questions, one for DD and the second for Fever action and home care)
      a. home care/ when and where to refer
      b. what actions to take

3.3.3 Caring practice indicators associated with malnutrition (Task 2)
1. Breast feeding practices from:
   a. initiation of breastfeeding, 1 hr post partum
   b. % exclusively breast feed (ORS, medications allowed)
   c. month complementary feeding starts
   d. diet quality- using IDDS- dietary diversity score - for the youngest child and
   e. frequency of feeds – to be compared to best practice for specific age groups above 6 months
2. Time spent with the child (and the mother’s work load)
3. Hygiene
   a. frequency of child washing
   b. hand washing norms (before food preparation and feeding, after latrine, disposal of child’s waste, sanitation and use of soap/ash)
4. Care of sick child: percentage of the sick children
   a. home care/ when and where to refer for specific illness (diarrhoea and fever)
   b. what actions to take
5. Maternal health
   a. Ante-natal care service uptake
   b. Post-natal care + birth by traditional birth attendant
   c. Birth spacing

Literacy level of the mother- to be recorded by secondary data.
3.3.4 Discussion

- All data has to be collected through interviews with mothers but there is a problem of subjectivity.
- Comparative data will be available through the NNS. However, geographical differences will not be identified by the NNS and there are potentially large variations in practices between woredas.
- Difficulty with relating practices to severity of situation. There is a lack of evidence base for how caring practices change in an emergency.
- Some data on changes in practices by pastoralists e.g. Pastoralists stop giving milk in times of crisis so indicator of milk given in last 24 hours is a good indicator of the severity of a crisis but not relevant to non-pastoralist communities because don’t give milk anyway.
- Anthropometric surveys don’t include children <6 months currently – would have to alter methodology to include interviews with mothers/carers of young children.
- Some indicators are very broad-brush indicators of the severity of a situation and may be difficult to define precisely. For example, information on meal frequency doesn’t indicate the value of the food (volume or density of the 'meal') and whether a separate 'meal' was offered or the same bowl, partially consumed, offered again for the second ‘meal’. Without observation we can only record the mother’s view of approximate number of feeds per day and compare to optimal / best practice.

3.4 Food security/livelihoods/coping strategies

3.4.1 Sources of data

1) WFP
2) Background material (NutritionWorks)
3) Questionnaire in the Nutrition Survey
4) SPHERE
5) Early Warning Information System
6) Emergency Nutrition Intervention Guidelines

3.4.2 Minimum set of core food security/livelihoods/coping strategy indicators (task 1)

In the process, the group noted the following challenges or concerns:
- It was relatively easy to identify types of info needed but the related one question leads to another resulting in several questions
- Comparison among seasons and across years was noted as one challenge
- Repetitive questions are asked at times: at hh, community, kebele levels
- Alot of data are gathered which are not used
- More than data gathering, analysis of data requires multi-disciplinary team
- Identify level of information: 1) Woreda/Kebele levels and 2) Household level.

Basic information

Note: If the team leader goes to field two to three days before the rest of the team, all the background work will be done

Profile woreda (decision to be taken if woreda or kebele is best source of information):
1) Population, livelihood strategies, seasonality of sources.
2) Market trends and terms of trade (livestock – cereals)
3) Rainfall data, distribution and normal pattern
4) Production patterns and trends (livestock and crop)  
5) Common diseases and increased case-load  
6) School drop-outs  
7) Relief and PSNP users  

Questions at community level (cluster):  
8) Most affected groups and why  
9) Coping strategies employed and what percentage of the community are employing these strategies  
10) Responses and recommendations  

Household level information  
11) Food: sources at this time of the year, prioritize, normal/not normal (comparison), when change happens, why, how much (possibly expressed in percentage). Only column on ‘changes’ is completed from household information.

<table>
<thead>
<tr>
<th>Source (background)</th>
<th>% (background)</th>
<th>What in normal year (from background)</th>
<th>Changes (question)</th>
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<tbody>
<tr>
<td>Crop production</td>
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<td></td>
<td>Poor-normal and good</td>
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<tr>
<td>Market</td>
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<td>Relief</td>
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<tr>
<td>Livestock production</td>
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<td>Gift</td>
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12) Income: sources at this time of the year, prioritize, normal/not normal (comparison), when change happens, why, how much (possibly expressed in percentage).

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<th>Source (background)</th>
<th>% (background)</th>
<th>Changes (question)</th>
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<td>Livestock</td>
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<td>Poor-normal and good</td>
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<td>Crop</td>
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<td>Labour</td>
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<td>Gift</td>
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Note: ‘Background’ information on Food Sources (1) Income Sources (2) and Livestock holding (3) are available from LZ Baseline Profiles by wealth group. To compare and assess changes from baseline, Focus Group Discussions should be conducted with households divided by wealth groups. FGD seems more feasible than individual household interviews (unless the wealth status of the household is clarified).

13) Livestock: holding, condition, mortality, changes

<table>
<thead>
<tr>
<th>Holding (number)</th>
<th>Condition</th>
<th>Mortality &amp; morbidity</th>
<th>Changes (including migration)</th>
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Note: ‘Background’ information on Food Sources (1) Income Sources (2) and Livestock holding (3) are available from LZ Baseline Profiles by wealth group. To compare and assess changes from baseline, Focus Group Discussions should be conducted with households divided by wealth groups. FGD seems more feasible than individual household interviews (unless the wealth status of the household is clarified).
14) Dietary diversity score by age-group(?) – methodology to be decided (food-basket composition - WFP). Who is the most affected in the household and why?

15) Coping mechanisms: how do households cope, why and how much?

<table>
<thead>
<tr>
<th>List of strategies (background available from LZ background profiles)</th>
<th>Name and rank</th>
<th>Level / remark</th>
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16) Who is most affected (nutritionally vulnerable groups)

17) Recommendations: 2 sub questions – open question on recommendations and rank from list.

3.4.3 Food security/livelihoods/coping strategy indicators associated with malnutrition (task 2)

Indicators most strongly linked with nutrition:
1) Dietary Diversity Scoring broken down by age-group (intra-household distribution).
2) Pastoralist groups: 1) Terms of Trade (milk – cereals) and 2) Milk production.
3) Agricultural groups: Composite Table of: 1) Sources of food; 2) Sources of income; 3) Coping Strategy. Note: this would summarize the livelihood shortfalls.

3.4.4 Discussion

- This is the most complex area and therefore it is difficult to identify a few core indicators as for the other groups.
- Key people in food security in Ethiopia were unable to attend workshop e.g. WFP, LIU
- Too many indicators were identified - not sufficiently streamlined.
- Tension between comprehensiveness of data and feasibility (time, skills needed to collect information).
- FANTA has developed 5 key questions for household food security assessment.
- Problem with length – e.g. dietary diversity score takes time to complete.
- Given existence of HEA national baselines, are there a few indicators that can be put into the HEA spreadsheet (SMART developing this package for nutrition surveys)?

4. General discussion

- ENCU improvement in quality control of context indicators – increase scope of current quality control
- Involvement of donors in process – keeping them updated and not excluded from process.
- Responsibility of nutrition agencies viz a viz follow up i.e. responsibility to follow up on recommendations.
- A lot of secondary data available. Task is to identify and prioritise important data and include in standardised format within reports.
- There is still insufficient distinction between different purposes for surveys. Without clarification, it is difficult to decide which indicators are the most crucial.
5. The way forward

These recommendations incorporate and develop recommendations from the background paper.

5.1 A Consultant should be employed to further develop the ENCU/EWRD/DRMFSS guidelines.

The tasks will include:

5.1.1 Clarify and classify the different purposes of nutrition surveys

- The guidelines need to be revised with a clear section on the main underlying purposes for doing surveys in Ethiopia. Greater clarity over purposes will determine what type of context data to collect, which in turn will determine indicators and methods.

Suggested categorisation of purposes are:

- Rapid emergency nutrition survey. This could replace the rapid nutrition assessments (RNAs) currently carried out. Standard nutrition methods would be applied and a core set of contextual indicators from the four sectors would be included. The overall purpose would be to provide a precise GAM prevalence and a broad indication of the severity of the situation in each of the other four sectors. The surveys findings could be used to indicate immediate nutritional interventions (such as selective feeding and GFD). Information from other sectors could be used to indicate immediate needs and to indicate the need for further in-depth sectoral assessment.

- In-depth nutrition survey. These may be conducted as part of emergency response planning or longer-term response to chronic nutritional emergency. A broader range of context indicators would be collected and a greater commitment of human resources to collecting these contextual data would be required. These surveys would enable analysis of associations between malnutrition and context (some of which may be causal).

- Monitoring/follow-up surveys. These surveys could include a specific set of indicators which could be compared with indicators collected in in-depth nutrition surveys to look for change.

5.1.2 Identify and agree a set of indicators and methods of indicator collection for rapid emergency, in-depth nutrition surveys and monitoring/follow-up surveys

- Using workshop outputs as a starting point, further develop and agree indicators and methods of collection. This will involve a series of meetings and consensus building of sector experts to agree indicators for Ethiopia. The indicators may be from primary or secondary sources. Methods of collection will be agreed.
5.1.3 **Standardise report formats**
- Develop clear guidance on report formats, including tables of results, linking recommendations with findings. Ensuring that recommendations are specific, can be implemented and time-bound and prioritised (not shopping lists).

5.1.4 **Train on new methods/indicators in the revised guidelines**
- Develop a training strategy to train agencies conducting emergency nutrition surveys in Ethiopia (MANTF group).

5.1.5 **Pilot revised guidelines**
- Coordinate formation of a steering group that are prepared to pilot and evaluate the revised guidelines. The steering group will be members of the MANTF group.

5.2 **Research should be commissioned related to nutrition assessments.**

5.2.1 **Explore the potential for developing software for analysis of causes of malnutrition**
- Develop software to be able to examine the statistical association between GAM and context indicators. This could be linked to existing software analysing GAM prevalence.

5.2.2 **Examine changes in caring practices during crises**
- Commission research to examine how caring practices (including infant and young child feeding practices) are affected in Africa during a crisis. Although the impact of emergencies on bottle feeding is established, there is little known about the impact of crisis in an environment where bottles and formula are not accessible.

5.3 **A database of baseline data for core indicators should be developed**
- Develop a database, accessible via the internet, of baseline data for core indicators used in nutrition surveys. The database would be continually updated as information are available.

5.4 **Regional meeting to further develop core indicators**
- Convene a meeting in the East Africa region to reach consensus on appropriate context indicators to collect in nutrition surveys for specific sectors with a view to standardising as much as possible across the region. The meeting will be preceded by compiling short background papers for each country on their experiences of context data collection and use. These background papers will be used to draft an over-arching document with recommendations for standardised contextual data collection which will form the basis for discussion at the meeting.