Monitoring Food Security

Technical Guidance Sheet 3

**Practical method guidelines
for VAM field practitioners**

September 2014

WFP
World Food Programme
wfp.org

Fighting Hunger Worldwide

Monitoring Food Security

Technical Guidance Sheet 3

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Acronyms

CFSVA	Comprehensive Food Security and Vulnerability Analysis
CHS	Community Household Surveillance System
CO	Country Office
EFSA	Emergency Food Security Assessment
FAO	Food and Agriculture Organization of the United Nations
FEWSNET	Famine Early Warning System Network
FCS	Food Consumption Score
FSMS	Food Security Monitoring System
FSOM	Food Security Outcome Monitoring
GSU	Global Support Unit
HH	Household
HIES	Household Income and Expenditure Surveys
HKI	Helen Keller International
HQ	Headquarters
IMF	International Monetary Fund
IPC	Integrated Food Security Phase Classification
IYCF	Infant and Young Child Feeding
LSMS	Living Standards Measurement Surveys
M&E	Monitoring and Evaluation
MEWS	Malnutrition Early Warning System
MUAC	Mid-Upper Arm Circumference
NGO	Non-governmental Organization
RB	Regional Bureau
SIMA	Système d'Information sur les Marchés Agricoles
TGS	Technical Guidance Sheet
ToR	Terms of Reference
UNDAF	United Nations Development Action Framework
UNDP	United Nations Development Programme
VAM	Vulnerability Analysis and Mapping
WFP	United Nations World Food Programme

1. Why monitor food security? Introduction

The role of a food security monitoring system (FSMS) is to **track short and longer term food security trends.** The overall objective is to inform **changes in strategic programme directions** or – in case of a deteriorating situation – **trigger an Emergency Food Security Assessment (EFSA)** and/or preparedness measures. The main role of FSMS is to monitor household level food security outcome indicators, be it before, during or after shocks.

FSMS require that data is collected on a regular basis among the same groups or areas to allow comparability. However, unlike a population-based food security baseline study such as Living Standards Measurement Surveys (LSMS), Household Income and Expenditure Surveys (HIES), Comprehensive Food Security and Vulnerability Analysis (CFSVAs, and in-depth EFSA) findings are usually not representative at population level.

FIGURE 1. VAM products feeding into programme design
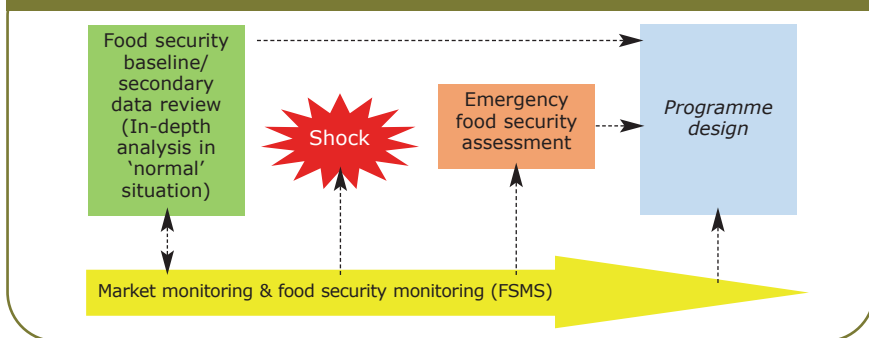
A successful FSMS aims to provide answers to the following **key questions**:

- Is a food security/nutrition situation improving or deteriorating (seasonal/year-on-year)?
- What are the driving factors for changing trends?
- Who are the groups that are mostly affected?
- What are potential future risks?

By definition, FSMS are most frequently found in countries with high levels of chronic food insecurity that are also prone to shocks and crisis that require changes to food security programming. In settings where food insecurity is fairly stable over time, decision makers rely on other tools such as one-off surveys.

While an FSMS should analyse potential underlying causes, in most cases it will not be possible to make statistical inferences because of small sample sizes. Nevertheless, driving factors should be identified based on the convergence of evidence.

If a baseline study exists, an FSMS can help to adjust the estimate of **food insecure people**. If not, it may be useful to trigger a more in-depth study or needs assessment for estimating emergency assistance needs. FSMS may also replace a more in-depth assessment to inform adjustments to programming if there are time constraints, and should there be sufficient corroborating evidence.

Finally, FSMS can also be useful in the context of **programme outcome monitoring**. A successful example for this are the Community Household Surveillance System (CHS) and Food Security Outcome Monitoring (FSOM) implemented in several countries in Southern and Eastern Africa that combine both FSMS and M&E elements.

BOX 1. Key principles of a successful FSMS

- The system needs to be light and cost-efficient.
- Information generated needs to be disseminated as soon as possible to be relevant for decision-making purposes.
- Data should be reported at least twice a year during critical times of the year (e.g. pre-lean season, post-harvest).
- Indicators to be monitored need to be sensitive to change, easy to collect and analyse, easy to transmit and report, and comparable over time and across groups.
- Make use of existing systems and ideally be embedded in national structures to ensure sustainability over time.
- Build on partnerships with governments, other UN agencies including FAO and UNICEF, NGOs, research institutes and other civil organizations.

This guidance is part of a wider project to strengthen food security monitoring in WFP. Three other Technical Guidance sheets are available at http://www.wfp.org/content/monitoring-food-security-technical-guidance-sheet and focus on specific aspects of successful FSMS:

- *Reporting Structure and Content* (TGS 1) – provides guidance on how to synthesize and present information in an FSMS report.
- *Indicators Compendium* (TGS 2)– provides guidance on the interpretation and analysis of primary and secondary data used for food security monitoring purposes.
- *Capacity Assessment for a National FSMS* (TGS 4)– provides guidance on the set-up or strengthening of an FSMS embedded in national framework.

The guidelines are intended for WFP VAM and food security analysts but they will also be useful for programme staff as well as for the governmental, NGO and United Nations partners with whom WFP collaborates in food security monitoring systems.

This guidance consists of **6 sections**. Following the introduction (section 1), section 2 covers the **design phase**. In order to choose an appropriate method, clear objectives need to be articulated through extensive consultation processes. Section 3 describes the process of selecting **key indicators** and identifying appropriate **data sources**. Section 4 focusses on **household-level food security monitoring**, including questionnaire, sampling options, food security classification and budgetary considerations. Section 5 gives some key recommendations on how to present and report results. The final section illustrates how FSMS data can feed into the Integrated Food Security Phase Classification (IPC) process.

This guidance is meant to be as **practical** as possible and therefore draws heavily on lessons learned from existing or newly established systems in various settings.

2. Getting started. Involving decision-makers and partners

At the initial phase of setting up a new or strengthening an existing FSMS, it is strongly recommended to organize **consultations** to sensitize WFP management, programme staff and partners on the potential benefits of an FSMS as well as the associated costs and commitment involved. A longer-term vision is essential to make an FSMS work, as an FSMS delivers most benefits by producing a continuous and comparable time series analysis of indicators, an undertaking which takes years. Initial consultations will be held with Country Office (CO) management and programme staff – followed by consultations with external partners, including line government ministries/agencies, FAO, other relevant UN agencies and NGOs, possible private sector and academic institutions. The best entry-points are already existing structures that are working on food security related issues such as food security and nutrition technical working groups, the food security cluster, etc. Leadership by the the government from the outset will help obtain sustained support from partners.

Objectives of these consultations will be to:

- Agree on objectives and key indicators to be monitored at various levels.
- Discuss data sources, tools and sampling options (contents need to be adjusted depending on whether the audience is technical or non-technical).
- Agree on frequency of data collection taking into account seasonal factors.
- Agree on key outputs (audience, timing, content).
- Identify potential funding sources.
- Receive buy-in and longer-term commitment.

An initial stock-taking exercise can help identify potential partners, data sources, information gaps, and bottlenecks. Partnership opportunities will largely depend on the country-context. Technical Guidance Sheet 4 provides further guidance on how to support the implementation of FSMS within national structures with a set of tools that can be useful during the initial phase.

FIGURE 2. Key steps for designing an FSMS

Discuss objectives and scope with management, programme managers and partners. Develop key questions

Decide on scope, frequency and groups of analysis taking costs considerations into account

Design sampling strategy

Prepare budget and activity plan

Prepare analysis plan, develop tools and pilot-test

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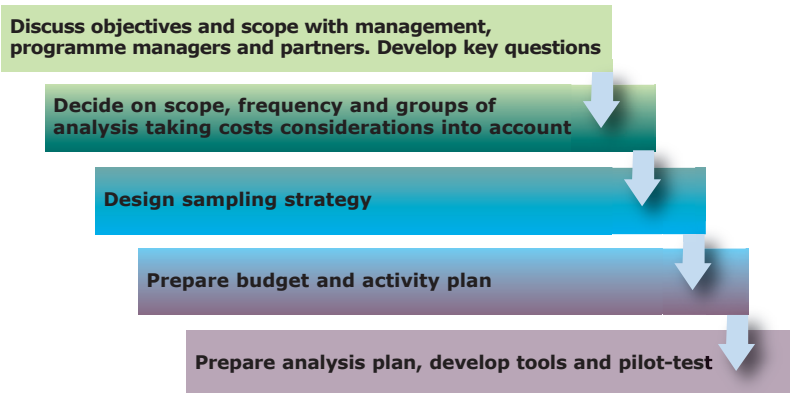
3. What and how to monitor? Data sources and tools

The relatively high, recurrent cost of data collection proves to be one of the main constraints for sustainable FSMS. Therefore, the following should be considered when selecting key indicators and tools:

- Whenever possible use **existing** secondary data sources, only opt for primary data collection when necessary and reliable longer-term financial support is available.
- In case of primary data collection, select indicators that are **sensitive** to change; **easy** to collect, transmit and analyse; and **comparable** over time.
- To ensure synergies, choose **indicators** that are already used in other systems such as WFP corporate M&E indicators, indicators identified in Joint UN Programmes, UNDAF, and/or government plans.

To start the process, it is suggested to map out a **simplified framework** capturing various levels and transmission channels (see Example 1). This can be done based on a literature review and interviews with key informants. The framework helps to identify which information to look for, selection of key indicators to be monitored and to design tools at various levels.

EXAMPLE 1. Mapping transmission channel from the macro to household level in Syria
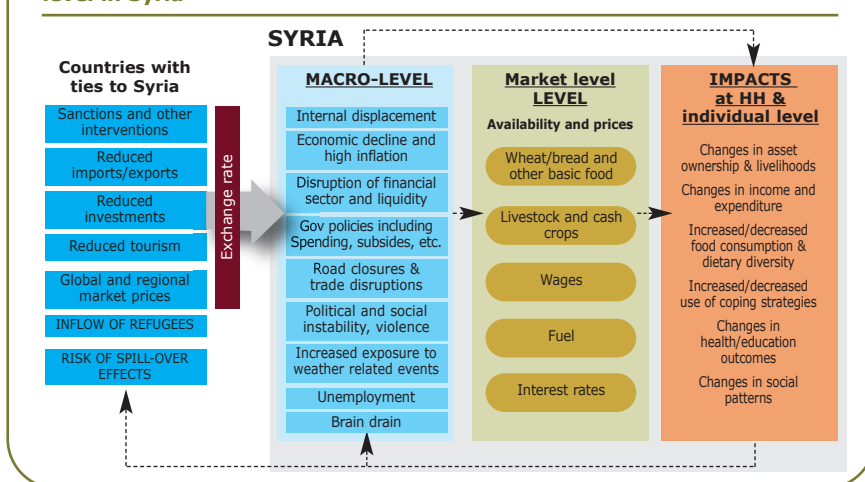
In addition, a seasonal calendar will help identify which seasonal factors ought to be monitored during the course of the year. Such factors include the onset of rainy seasons, dry seasons, planting seasons, harvest seasons, lean seasons, labour migration, livestock migration patterns, seasons with higher risks of morbidity, etc.

The most commonly used tools for FSMS are:
- **Secondary data** (including official statistics, seasonal weather forecasts, programme monitoring reports, partner reports, news, etc.)
- **Price monitoring**
- **Household surveillance**

Other tools used for FSMS include:
- **Community-level tools** (key informants, focus group discussions)
- **Trader questionnaire**
- **Nutrition surveillance**

> **BOX 2. Some definitions**
>
> **Primary data** refers to information that is observed or collected from first-hand experience. The key advantage is that the data analyst has control over the design of the tools, scope, data quality, type of analysis and timing. Disadvantages are the costs associated with data collection.
>
> **Secondary data** is based on already existing sources, such as published reports, bulletins, databases, etc. The key advantage is that costs for data collection can be reduced. It can also strengthen partnerships when different agencies use the same data sources.
>
> **Quantitative methodology:** Quantitative methods of data collection generate quantifiable results in terms of absolute figures or proportions, such as price trends or changes in food consumption score.
>
> **Qualitative methodology:** Qualitative methods synthesize people's opinions, attitudes, behaviour and priorities. Typical tools used include focus group discussions, participatory assessment tools, etc.

An important distinction is the differentiation between **quantitative and qualitative methodologies**. In the context of FSMS, quantitative methods are more commonly used. Typical tools include household food security or price monitoring. Qualitative tools, including focus group discussions or semi-structured interviews, can provide useful background information.

What and how to monitor? Data sources and tools

9

The choice of tools to include (see table below) will depend on the **objective** of the FSMS, the availability of **secondary data**, available **resources**, **partnership opportunities** and other country-specific considerations. Generally, it is recommended not to use too many tools as it enhances the work load of the analyst and also increases costs: every tool, every added question requires additional financial resources. Cost-efficiency is a major bottleneck for any data collection exercise that has to be repeated over time. If, after several rounds, the data collected through a certain module are not being used for reporting, the CO should discontinue its use in following rounds. On the other hand, if a new emerging issue comes up, an option is to introduce a new tool for a specific data collection round.

In this section, various tools are being discussed to monitor food security at various levels, from the bigger picture to the individual level:

	Data sources	Possible tools
Macro-level	Secondary	Desk review
Market-level	Secondary and/or primary	Price monitoring, trader interviews
Community-level	Primary	Key informant interviews, focus group discussions
Household-level	Primary (in some cases secondary)	Household surveillance using structured questionnaires
Individual level	Secondary (in some cases primary)	Nutrition surveillance (e.g. growth monitoring)

3.1. Macro-level

An FSMS should monitor selected macroeconomic issues of relevance to national food security conditions, usually through secondary data provided by the Bureau of Statistics, Central Bank, Ministry of Commerce and/or Agriculture and meteorological agencies. The World Bank and IMF can provide useful secondary data sources for macroeconomic indicators. Depending on the context, informal sources may be considered, such as media, key informants, private sector or reports from NGOs. Policy changes with possible direct or indirect impacts on the food security situation should also be tracked.

To gain an overview, it is advisable to list key indicators relevant to the context, possible sources of information and frequency (see Table 1):

TABLE 1. Template for identifying sources for key indicators at macro-level

Dimensions	Examples of indicators (need to be adjusted according to context)	Source of information	Frequency, data availability
Economic	Consumer price index/inflation (overall, food, non-food)		
	Exchange rates		
	National reserves		
	Remittances		
Political	Changes in government policies and impacts		
Social	Employment and wage rates		
	Security incidences		
	Changes in migration patterns		
Food availability	Weather forecast/rainfall		
	Natural hazards such as floods, livestock diseases, etc.		
	Crop conditions, production estimates		
	Food imports/government stocks		
	Transport		
	Interruptions in trade flows		

The following points should be considered when choosing **secondary data sources**:

• Are data available at the **required level** and **time reference**? (e.g. by quarter)
• Are data available on a **timely** basis?
• Is the data source **reliable**? Are there potential biases?

For data analysis and interpretation it is important to be aware of potential biases. Timely access to information may also be a major constraint; however, through partnership-building, it might be possible to negotiate early access to data. A successful strategy could be to create a win-win situation for both sides, for example by providing capacity-building support for the concerned agency.

Should several sources be available, conflicting information from various sources can present a challenge (e.g. agricultural statistics and macroeconomic data may differ greatly from source to source). In such cases, it is a good strategy to report on a range of available data (e.g. "depending on the source, inflation rates range from xx to xx percent").

3.2. Market level

A clear understanding of market trends helps understand the vulnerability of various livelihood groups that depend on these markets, market data also helps WFP make better business decisions on cash transfers and local procurement. Background information on markets is often available in the form of market reviews that assess market functionality and identify relevant indicators to be monitored.

In general, market indicators commonly monitored include: nominal and real food prices at retail or wholesale level, costs of the food basket, wages and livestock prices, changes in supply and demand, transportation costs, and changes in policies effecting trade. More specific guidance on relevant market indicators is provided in the Technical Guidance Sheet 2.

> **EXAMPLE 2. Use of SMS for market price data collection in West Africa**
>
> Since 2011, SMS has been used for price data collection in Benin, Cote d'Ivoire, Mauritania and Niger. Enumerators are equipped with mobile phones and send freehand SMS messages to a local phone number. A special software then 'translates' the content of the aggregated SMS messages which is transmitted into a spread sheet. The system functions with local SMS (keeping costs low) and does not require a web server.
>
> The project has 'simplified' the task of collating and reporting. SMS works well for high frequency collection of simple data (such as food prices on a weekly basis). In Niger, the national market information system (Système d'Information sur les Marchés Agricoles - SIMA) has switched from paper to SMS for weekly reporting for 70 markets. The SIMA is now able to draw on real-time data to produce a monthly bulletin produced by the government in partnership with WFP and FEWS NET.

As a minimum in the context of FSMS, it is advisable to gather prices of key commodities from key markets either from secondary sources or primary data collection. The advantage is that market price data collection is relatively cost-efficient in comparison to household level data collection. It can also be easily transmitted on a real-time basis and through the use of mobile technologies.

Below is a list of general recommendations for market price data collection and analysis in the context of FSMS:

- Use secondary price data and strengthen existing price monitoring systems. If existing secondary data are perceived to be unreliable, it will often be worthwhile to invest in the capacities of partners to improve data quality rather than introducing parallel systems. If existing systems have gaps in terms of coverage or commodities, WFP supported market price monitoring should focus on these areas.
- If several parallel systems exist, work towards a harmonization of existing systems in terms of markets to be monitored, frequency of data collection and items to be monitored.

If household level monitoring is conducted, it is key to ensure that market prices of the areas can be linked to the household level (e.g. choose markets that are in the catchment area of sentinel sites).

Community-level

While it is difficult to measure household food security impacts at community level, important contextual information can be gathered through key informant interviews and focus group discussions. These include the monitoring of the agricultural season, changes in people's migration patterns or livestock movements. Other indicators, such as wages, physical access to markets, or transportation costs can also be collected at the community level, as they do not differ between households. Indicators will be highly dependent on the country and livelihood context and tools may have to be adjusted from season to season to account for different stages during the annual cycle. The decision to include or not to include a community level tool will depend on the objectives of the FSMS and the cost-efficiencies of collecting the required information.

Geographic coordinates should always be collected at the community level to support mapping and spatial analysis.

Typical tools at community level include key informant interviews or focus group discussions. The choice of interview partners is critical. Key informants have to be knowledgeable on the subject matter. As much as possible, potential biases should be avoided, such as main-road or respondent bias. Possible groups for interviews include community leaders, women and men farmers, farmers' organizations, traders, health personnel, teachers, etc. To ensure that the views of women and the younger community members are considered, it is useful to conduct separate focus group discussions but the session will depend on the context.

3.3. Household level

Ideally, food security outcomes are monitored at household-level. Several considerations have to be made before initiating regular data collection at this level. Data collection at household level is expensive and should **only be initiated if it can be sustained over a longer time period**. Before embarking on primary data collection, the CO should check whether household level information is not available from other data sources.

To identify key indicators to be monitored, it is recommended to conduct a **literature review**. Useful sources are also recent emergency food security assessments or food security baselines such as CFSVAs, LSMS, or HIES. Generally, it is recommended to at least collect the food security indicators that are relevant to classify the food security status of households (see also section 4.1).

> **BOX 3. Examples of key indicators/themes to be monitored at household level**
>
> **Core**
> - Food consumption score*
> - Household dietary diversity score (7-day average)
> - % food share in total expenditure*
> - Livelihood coping strategies (stress, crisis, emergency)*
> - Reduced coping strategy index
>
> **Optional**
> - Main income sources (using proportional piling)
> - Number of women/men contributing to household income
> - Number of labour migrants
> - Proportion of households receiving remittances
> - Food sources
> - Purchases on credit and indebtedness
> - Difficulties/shocks experienced by households
>   (focus on covariate shocks that affect several households)
> - Food and non-food assistance received
>
> * These indicators are essential for the unified food security classification approach (see section 6)

For the selection of **key indicators**, it is essential that they are:
- sensitive to change
- easy to collect and analyse
- easy to transmit and report
- comparable over time and across groups
- useful for programme decision-making
- acceptable by partners

Careful consideration has to be given to the selection of key indicators in a given context to ensure best use of resources, as a key challenge is keeping questionnaires as light as possible and focused on the information that is used in reporting. A generic questionnaire can be found in Annex 1.

A seasonal calendar can help determine the frequency and best timing for data collection. It is generally recommended to collect household level data at least twice a year during critical times of the year. The decision will also depend of the programming cycle. It might be useful to collect data during the pre-lean season to inform seasonal programming adjustments if required. Different options can be proposed and pros and cons discussed during the consultations processes with management, programme staff and partners.

EXAMPLE 3. Data collection frequency in Kyrgyzstan and Tajikistan

The Country Offices in Tajikistan and Kyrgyzstan have embarked on a joint project with the World Bank to monitor the social impacts of the food price crisis on household food security during three data collection rounds. The data collection period was determined based on the seasonal calendar. The first round of data collection was conducted in end July/early August 2012 to assess the situation during a "normal" season. The normal season is supposed to be average in terms the expected food security situation ("not too good and not too bad"). In this period, income from remittances starts to increase, the harvest has just started, and the risk of natural disasters is generally low. The results will serve as a baseline for the second and third rounds which will be conducted to assess the post-harvest season and pre-harvest season respectively.

SEASONAL CALENDAR IN KYRGYZ REPUBLIC AND TAJIKISTAN TO CHOOSE BEST DATA COLLECTION PERIODS

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Winter storms		Availanches and floods									
							Remittance / Labor migration				
	Lean season					Wheat / potato harvest					
									Land preparation		
					Livestock						

Field data collection (round 3: lean season)   Field data collection (round 1: "average" season)   Field data collection (round 2: post harvest)
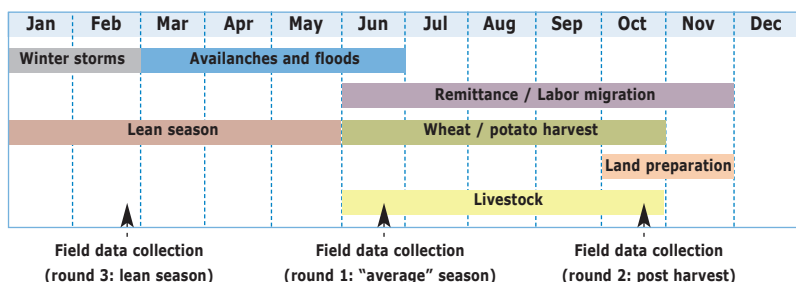
More specific technical guidance on tool development, sampling strategies and data management is provided in section 4.

3.4. Nutrition surveillance

Nutrition surveys that collect data on wasting, underweight and other anthropometric indicators are costly because they usually require a large sample size, specific training and data collection monitoring capacities that a typical FSMS cannot support. It is therefore generally not recommended to combine traditional nutrition surveys (for example SMART-surveys) with regular household level FSMS activities.

Nevertheless, FSMS can capture nutrition relevant information from primary and/or secondary sources. Some FSMS collect the Mid-Upper Arm Circumference (MUAC) of children under-5 and women of reproductive age. MUAC is a good predictor of mortality in children. It is commonly used for screening and for admissions into treatment programmes. It is also used as a proxy for acute malnutrition (wasting) because it is easier to measure than weight and height and may be more sensitive to changes in nutritional status. The usefulness for monitoring purposes is currently being tested – however it should be noted that nutrition indicators in general are late stage indicators and therefore not useful for early-warning purposes. The peak of acute malnutrition is usually after and not during the annual lean season. In South Sudan, MUAC has been collected during 7 rounds of FSMS, illustrating a deterioration of the situation when comparing the same seasons across years, for example, July 2010, June 2011 and June 2012 trend. As part of the 2012 endorsed Nutrition Policy, WFP is expected to ensure that all

EXAMPLE 4. Monitoring acute child malnutrition using MUAC in south Sudan FSMS
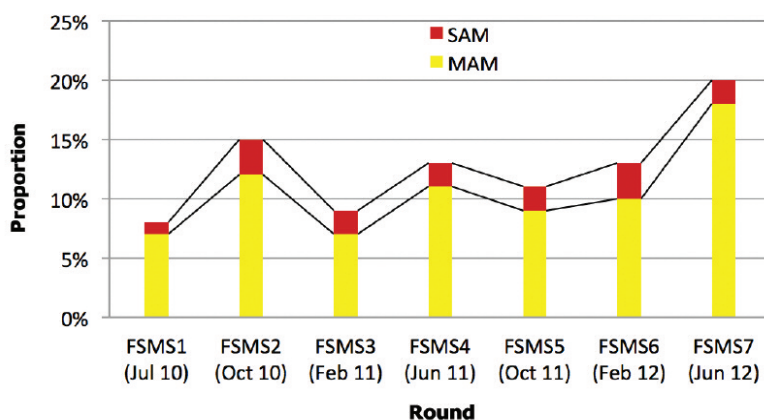
WFP operations, including general food distribution and various transfer modalities are nutrition-sensitive. FSMS as well as general M&E activities provide an opportunity to incorporate selected indicators related to Infant and Young Child Feeding (IYCF) indicators. It is an optional module of the generic FSMS questionnaire and will require some testing within the FSMS context (Annex 2). The following indicators could be calculated for children 6-23 months:

1. **Minimum dietary diversity:** Proportion of children 6–23 months of age who receive foods from 4 or more food groups.
2. **Minimum meal frequency:** Proportion of breastfed and non-breastfed children 6–23 months of age who receive solid, semi-solid, or soft foods (but also including milk feeds for non-breastfed children) the minimum number of times or more.
3. **Minimum acceptable diet:** Proportion of children 6–23 months of age who receive a minimum acceptable diet (apart from breast milk). This indicator is based on a combination of meal frequency and dietary diversity.
4. **Consumption of iron-rich or iron-fortified foods:** Proportion of children 6–23 months of age who receive an iron-rich food or iron-fortified food that is specially designed for infants and young children, or that is fortified in the home.

For information on how these indicators are calculated, please refer to the WFP 2014-2017 Strategic Results Framework Indicator Compendium[1] and the VAM resource center.[2] One important fact is the need to differentiate vitamin A rich and non-rich fruits, vegetables and tubers. *Indicators for assessing infant and young child feeding practices*[3] by WHO, UNICEF, et all provides further insights into the collection of infant and child feeding practices indicators.

While the calculation of these indicators is fairly straightforward, it can be a challenge to cover sufficient children in the context of an FSMS as the proportion of children 6-23 months of age in a household is often low and thus the final number of children in this age group is too small to derive meaningful results. The pros and cons of including IYCF therefore needs to be carefully considered during the sampling and tool design of an FSMS. For food security and nutrition monitoring purposes, the data can be collected for children from 6 to 59 months old children, which increases the sample size.

Sometimes nutrition related secondary information is available which can be useful for food security and nutrition monitoring purposes. Many countries prepare regular nutrition bulletins that can provide contextual information. Also data from

1. http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp266620.pdf
2. https://resources.vam.wfp.org/
3. http://www.who.int/maternal_child_adolescent/documents/child/en/index.html

growth monitoring and admission rates to feeding programmes can be useful to monitor the nutrition situation – though external factors such as changes in coverage or campaigns have to be considered when using this type of information. In Ethiopia, for example, the Emergency Nutrition Coordination Unit of the Government regularly collects the number of children admitted to therapeutic feeding programmes. The 2011 data shows the peak of admissions in May/June. By the end of year, admissions were still 55 percent higher compared to the beginning of the year. This was due to the Horn of Africa crisis which affected the southern and south-eastern parts of Ethiopia, but also an expansion of therapeutic feeding programmes in response to the crisis.

EXAMPLE 5. Monitoring nutrition situation in Ethiopia during the Horn of Africa crisis (source: ENCU/UNICEF database 2011/12)

Admission of children under-5 to therapeutic feeding programmes (2011)
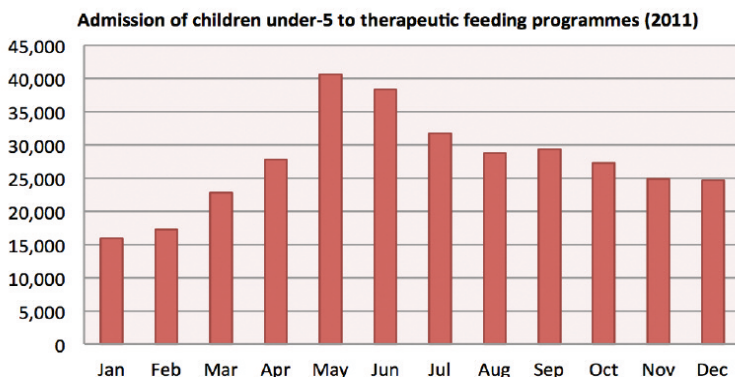
In Bangladesh, Helen Keller International (HKI) has implemented a quarterly nutrition and health surveillance.[4] Findings are shared with programme planners, policy makers and other interested partners within and outside Bangladesh. The second phase of the project was initiated in 2009 and data is available covering stunting, wasting, underweight, MUAC and several food security related indicators, including the FCS and the hunger scale.

While analysing linkages between food security and nutrition is important, it would be a challenge to do this in a systematic way in the context of an FSMS because of small sample sizes. Nevertheless, a more detailed nutrition situation analysis could be conducted outside the FSMS to identify correlations in a specific context. This would also help to identify key risks and indicators that should be monitored during the food security monitoring.

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4. The project funded by the European Union and implemented in partnership with the Bangladesh Rural Advancement Committee (BRAC)-University and Bangladesh Bureau of Statistics (BSS).

3.5. Gender-sensitive monitoring

Gender analysis refers to a systematic analytical process used to identify, understand, and describe gender differences and the relevance of gender roles and power dynamics in a specific context (USAID 2011). A gender analysis would typically have the following objectives:

- Assess the impact of development policies and programs on women and men
- Collect sex-disaggregated or gender-sensitive data
- Identify roles, rights, and opportunities of men and women and relations between them
- Identify disparities, causes for disparities and ways to address them

Both quantitative and qualitative tools are applied but qualitative tools are critical to gain an understanding on perceptions and behaviour patterns of women and men. Typically these issues are covered in other assessment tools such as food security baseline studies, rapid assessments, specific gender analysis and programme evaluations.

Gender roles do not change quickly in normal situations. Hence, it is not necessary to repeat questions asked on gender roles, perceptions, and behaviours on a regular basis unless there has been a major event that could have impacted gender roles, such as displacements. Issues related to gender and protection tend to be sensitive in many cultures and require specific training. Other tools would be more appropriate. However, an FSMS can support the collection and analysis of **sex-disaggregated data**. For any key indicator monitored, it is therefore recommended to analyse the information in a disaggregated fashion. Sex-disaggregated indicators provide separate measures for women and men or different households types on a specific indicator. Relevant examples in the context of FSMS may include the following – however general small sample sizes of FSMS may pose limitation which has to be taken into account:

- Food security trends by type of household (e.g. women headed, elderly headed, etc.)
- Application of coping strategies by type of household
- Impacts of shocks by type of household
- Changes in consumption and expenditure patterns by type of household
- Changes in income-earning opportunities of women and men
- Changes in school attendance of girls and boys
- Changes in dietary diversity of girls and boys

Throughout the design, data collection analysis and reporting, gender considerations are applicable. For example, it is important to consider the sex of the respondents during interviews. It is ideal when both women and men are present during the interview as their views are often complimentary. During focus group discussions, if culturally appropriate, it might be preferable to separate the group to ensure that women have the opportunity to speak up. It might also be useful to separate age groups, such as youth and elderly. A detailed overview on how gender-sensitive analysis can be conducted is described in the following guidelines:

- USAID (2011) Tips for Conducting a Gender Analysis at the Activity or Project Level
- IDS (2007) Gender and Indicators
- VAM Gender guidelines (2005)

4. Special focus. Household level food security monitoring

4.1. Tool design

There are specific requirements that household level FSMS tools should follow. The instruments should be as light as possible to allow for repeated data collection and analysis. Indicators to be collected should be sensitive to change and comparable over time, space and groups of interest (see section 3). An interview should not take more than 30 minutes, and core questions should be carefully selected. As much as possible, the tool should consist of the same content and format from round to round.

A generic questionnaire can be found in Annex 1, which is based on good practices from various Country Offices and can easily be tailored to various contexts. It includes both **core and optional modules**; core questions are indicated in dark orange, while optional questions are in light orange.

Time reference is a key issue for consideration when phrasing questions in the context of an FSMS:
• It is important to phrase questions in a way that they refer to a specific time period depending on the indicator (e.g. past 7 days, past 1 month, past 3 months).
• Questions that refer to a "normal" situation are baseline questions which should not be part of a regular FSMS tool. For example "how do you usually access land?" – would be more relevant in an EFSA ("before/after shock") or food security baseline context.

To allow for flexibility (e.g. adding new questions, adding response options), changes can be introduced but it should be ensured that comparability with the previous rounds is maintained (at least for key indicators). Any change in the questionnaire should be reflected in the "master" database (see section 4.4).

4.2. Sampling options

Decisions on the sampling strategy will depend on the identified objectives and budget for the FSMS. For food security monitoring at the household level, there are three general options that can also be combined:
• Revisiting same households (panel)
• Sentinel site surveillance
• Population-based surveillance

In the past, a common approach for FSMS was to revisit the same households (e.g. in Rwanda, Burundi, Tajikistan). However in most countries, this approach failed after several data collection rounds due to respondent fatigue (see Tajikistan case study). Some countries replaced 10 to 25 percent of households during each round as an attempt to avoid respondent fatigue – but this also meant that panel analysis (comparing the food security status of each household from round to round) was no longer feasible or at least difficult to implement from a data management perspective as it proved to be challenging to track households over many data collection rounds.

For this reason, only two options are discussed in the context of these guidelines:
• Option 1: Sentinel site surveillance
• Option 2: Population-based surveillance

Option 1: Sentinel site surveillance

For household level data collection in the context of FSMS, it is generally recommended to keep the sample size small to ensure that the system can be sustained over time. At the same time, the system should be able to detect trends. A statistically representative sample at geographic level is usually too costly. This guidance therefore recommends the use of **sentinel sites**, which are revisited from round to round. In brief, the first step is to select sentinel sites which remain the same from round to round. The second step is to randomly select households in each sentinel site. This step is repeated during each data collection round. In each round, every household should have an equal chance to be selected. There is a chance that a household is revisited but the probability for this to happen is small if the sentinel site is large enough – at least it is very unlikely to happen in consecutive data collection rounds. This approach has the advantage of maintaining comparability, while minimizing the risk of respondent fatigue.

BOX 4. What is sentinel surveillance?

Sentinel surveillance originates from medical research and is mainly used to collect and compare individual patient related data. A principal advantage is that the sentinel surveillance method utilizes fewer required resources by reducing the required sample size compared to a population based sample. In brief, findings from sentinel data collection are useful for documenting trends but are not population-based. Unlike population-based surveillance, sentinel surveillance does offer greater design flexibility, however, it is usually not possible to calculate food security or nutrition prevalence rates with this method. It is important to note that, results are not representative of the entire population.

Sentinel sites needs to be easily identifiable and accessible year-round. In the context of FSMS at household level, examples are villages, enumeration areas or project sites. Ideally sentinel sites consist of 80 to 200 households that for practical reasons should not be too widely dispersed. It is highly recommended that **geo-references** for sentinel sites are collected during the first data collection round.

TABLE 2. Advantages and disadvantages of sentinel surveillance compared to population-based sampling

Key advantages	Key disadvantages
Less costly and burdensome on resources	Data may have biased findings
Flexible system design	Data cannot be generalized to geographic populations
Useful for monitoring trends	The method does not collect prevalence rates

If a new system using the sentinel surveillance approach is to be established, the following **steps** can be undertaken:

1. Choose the appropriate **groups of interest** that you would like to report on based on country knowledge, literature review and internal and external consultations. In statistical terms this process is referred to as stratification. For example, groups of interest or strata could be specific livelihood groups, geographic areas, livelihood zones, surplus/deficit areas, areas exposed to various types of shocks, intervention areas vs. non-intervention areas, beneficiaries, vs. non-beneficiaries, displaced vs. refugees, etc.). These groups should be characterized by a certain level of homogeneity. For FSMS purposes, 5-10 groups or strata are ideal, and it is recommended not to exceed 15 to 20 groups.

2. For each **group**, prepare a **list** of all possible **sites**. For example, a site could be a village in a specific livelihood zone or targeted areas, etc. depending on how the group of interest was defined. Each site should ideally consist of a sufficient number of households to avoid revisiting them within a short time period. They should also not be too large to ensure that a list of households can be easily be obtained (see point 4), and the distance between households to be interviewed not too far. From experience, any site between 80 to 200 households is ideal.

3. Within each list, **select 5 to 10 "sentinel sites"**. This can be done on a random basis or also on purpose if the justification for the choice is well documented. For example, sentinel sites should be accessible year-round and access could be a limiting factor for allowing random selection. Once selected, sentinel sites should not be replaced to ensure comparability from round to round. In practice, sentinel sites may have to be replaced (e.g. in dynamic situation where people are on the move for various reasons, or access is prevented due to insecurity or another shock). Solutions for this will be country-specific and should be documented.

4. Prepare a list of eligible households as the sampling frame. During each round, **10-20 households** should be randomly selected from this list. Once interviewed, households should remain in the sampling frame which should not be changed from round to round. After a certain time (this depends on how

dynamic the situation is), the sampling frame list should be updated to account for new arrivals and departures.

5. For the first round, make sure that sentinel sites are geo-referenced. For the next round, only step 4 has to be repeated.

As a rule of thumb, **at least 100 households** should be interviewed in 5 to 10 sentinel sites per group of interest (e.g. 5 sites *20 households or 10 site *10 households). if respondent fatigue starts to become a major constraint at sentinel site level, it might be necessary to start replacing few sentinel sites per round. To allow comparability over time this process should happen slowly and only affect 1 to 2 sites per group of interest per round. Sites with similar characteristics in the same geographic area should be chosen.

EXAMPLE 6. Tajikistan

In the original sampling design, the same households were revisited from round to round. The country was originally divided into relatively homogeneous livelihood zones. Per zone, 5 sites were selected (one site is usually equivalent to one village or jamoat, sometimes several depending on the population size. Per site, 7 households were interviewed. After the 4th round, respondent fatigue started to emerge. For this reason, the entire sample (households and sites) were replaced between rounds 6 and 7 which makes comparison between the rounds before and after this change impossible. Also following round 11, the implementing NGO reported increasing respondent fatigue and requested to change the sample.

To solve the issue it was agreed to opt for a sentinel site approach. The country is now divided into 13 zones as the livelihood map was recently updated by FEWSNET and WFP. With some small adjustments to account for the chance of the livelihood zones, the same 5 locations will be visited. During each round 20 households will be randomly selected and interviewed. During each round, households should have the same chance to be selected; hence some households will be revisited by chance. However, probability for this to happen for several rounds in a row is extremely small.
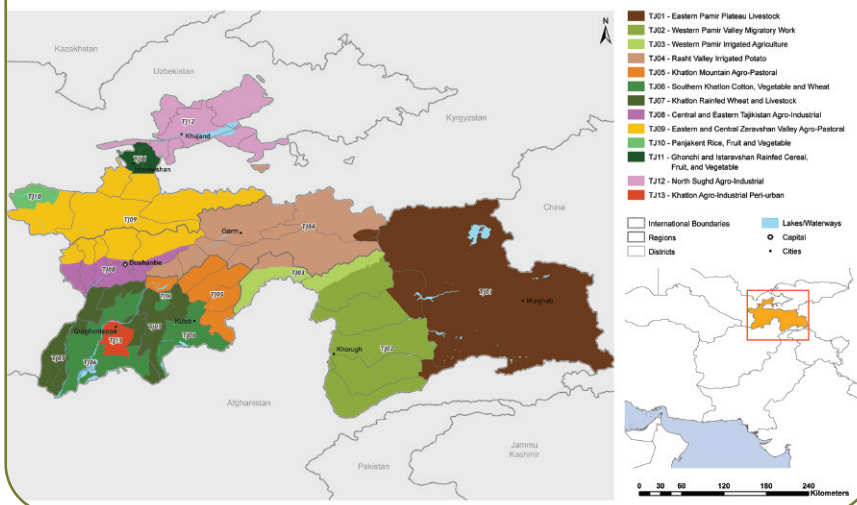
Option 2: Population-based surveillance

Sentinel surveillance does not allow the generation of prevalence rates, which is not a major constraint for food security monitoring purposes. Nevertheless the expectation by decision-makers is often to generate the number of food insecure people to justify the size of programmes. It has to be emphasized that population-based surveillance is much more expensive than sentinel surveillance. An option for consideration is to apply a two stage cluster sampling approach. The first step would be to to randomly select 30 clusters (or a minimum of 20) proportional to population size per administrative unit of interest (e.g. at national level).

Thirty is the recommended number per stratum because fewer sites would increase the design effect, thereby reducing the statistical representativeness. Selecting more clusters will not add additional information. However, in case the sample is further stratified into sub-regions that are relatively homogeneous, then 20 clusters may be sufficient.

The findings will then be representative at national or sub-national level, in case the population is further divided into sub-groups (stratified). During the following round, the same clusters would be revisited. The following steps would be required to follow this approach:

1. Calculate required sample size using a two-stage cluster sampling design approach. Support can be provided by the VAM units in the Regional Bureau or headquarters.
2. Divide the sample size by the number of clusters to obtain the number of households that have to be interviewed per cluster.
3. Prepare a list of eligible clusters (e.g. villages, settlements, p-codes, etc.).
4. Randomly select clusters (and in addition 5 alternates).
5. Within each cluster, prepare a list of households and select randomly the required number of households.
6. During the follow-up data collection rounds, the same clusters will be revisited but households within each cluster will be randomly selected.

The rationale for **revisiting the same clusters** from round to round is to (1) increase statistical representation to analyse trends (if clusters are resampled, the design effect is higher); and (2) make data collection more efficient based on the fact that the sampling of sites does not have to be repeated, teams can easily revisit sites, and households lists only have to be prepared once and only require an update after a certain period of time. In some cases, however, it may be necessary to **resample the clusters**.

Population-based surveillance will provide population-based prevalence rates at a predefined level (e.g. national level, rural level, etc.) with a certain confidence level that can be defined during the sample size calculation. If the sample is to be further

stratified into sub-groups (e.g. urban vs. rural), the sample size has to be multiplied by the number of strata. This can easily become too costly over time. It should therefore be considered to promote the inclusion of food security relevant indicators in existing national household surveys.

EXAMPLE 7. Proposed sampling strategy for country X

The following objective was identified by the Country Office: Assess food security trends/outcomes by region of intervention and beneficiary/non-beneficiary status. In total, there are 5 intervention regions.

In terms of sampling methodology, a stratified two-stage cluster sampling was recommended. In total there are 10 strata (5 regions divided by beneficiary versus non-beneficiary status).

During the first stage, 20 clusters (project sites) are randomly selected per region. This is also referred to as primary sampling unit. In the second stage, 12 beneficiary and 12 non-beneficiary households are sampled in each cluster. This is also referred to as the secondary sampling unit.

Using the standard sample size calculation formula and the assumptions below, it was estimated that 240 households have to be interviewed per stratum, hence the entire sample size in this example would be 2,400 households (1,200 beneficiary and 1,200 non-beneficiary households).

Assumptions *(adjust depending on country context)*

- Estimated prevalence of key indicator 30% - Key indicator could be, for example, the proportion of households with poor or borderline food consumption. The rate can be estimated based on previous assessments or baselines. The closer the estimated prevalence to 50%, the higher the required sample size.
- Level of precision (margin of error): ±5%
- Confidence coefficient: 80% - This means that we are 80% certain that the results are within the +-5% level of precision. The typical standard is 95% but would require a much larger sample size.
- Design effect: 1.5 – In the example, we choose 1.5 given that the targeted communities per region are likely to be relatively homogeneous. However, for a two-stage cluster sampling, often 2 is assumed. This number has to be multiplied with the sample size.
- Response rate: 90% - this means that 9 out of 10 households will be willing to respond.

These assumptions can easily be entered into an online sample size calculator that can generate the number of household to be interviewed by stratum (e.g. region).

Sample size overview table					
	Beneficiary*			Non-beneficiary	
	Sites	*HHs*		*Sites*	*HHs*
Region A	20	240		20	240
Region B	20	240		20	240
Region C	20	240		20	240
Region D	20	240		20	240
Region E	20	240		20	240
Total	100	1200		100	1200

4.3. Data collection

Data collection is the most costly part of the household level monitoring system and therefore every effort should be made to reduce its costs. Opportunities for **outsourcing** this task to an entity specialized in data collection, for example the national statistics office private sector company, an NGO or academic institute, should be explored. A link to a local university could be a win-win for both sides: a relatively cost-efficient solution while also providing opportunities to advanced students (Master/ post-graduate in social science, geography, economics, demography, public health etc.) to have a first work/field experience.

If several companies are available, it is recommended to conduct interviews and compare offers. **Criteria** to look out for include: number of years of experience with quantitative and qualitative data collection, field presence to manage data collection and control at decentralized level, number of field offices/staff in sub-regions, experience of field staff including turnover, training and computer facilities, recommendations by other clients (ideally in the humanitarian/development sector).

It is important to specify the process, expected timeline and deadlines in a binding agreement that should be prepared with the support of the procurement and the legal services of WFP to ensure that all internal WFP rules and regulations are followed. Also the data ownership and access issues should be covered in the **agreement**. Final payment should be made upon successful submission of the clean database. The following items should be mentioned in the Terms of Reference which should be annexed to the agreement.

BOX 5. Items to be mentioned in the ToR annexed to the agreement

Data collection
- Objective
- Timeline, expected deliverables and deadlines
- Number of enumerators and supervisors
- Expected experience and qualification of enumerators/supervisors
- Enumerators' training (number of days, content)
- Logistical arrangements
- Geo-referencing
- Transfer of data to central base
- Backstopping, quality control
- Budget and payment modality (e.g. in tranches)

Data entry
- Preparation of data entry interface
- Training of data entry operators
- Data entry quality control (e.g. double entry, etc.)
- Data cleaning, dealing with missing values
- Deadline for submission of clean database
- Budget and payment modality (e.g. in tranches)

Even if data collection is outsourced, it will be important to ensure that data collection is monitored and verified by WFP staff to ensure quality. While a certain level of control is important to maintain a good partnership with the company, regular meetings will help to identify bottlenecks and solutions. If interviewed households have mobile phone, it is a good practice to collect their mobile phone numbers on a voluntary basis. Follow-up phone calls could then be made to cross-check data and also obtain general information regarding the data collection process.

In some rare cases, data collection has to be conducted by WFP field staff, e.g. Sub-Offices. While this can be a suitable short-term solution, it is unlikely to work in the longer-run as Sub-Offices have many other work priorities. However, they may become involved in data collection monitoring, provision of infrastructure (IT services) or transport of questionnaires to central base if traditional data entry methods using hard-copy questionnaires are applied.

☞ **BOX 6. Remote mobile data collection**

WFP VAM is now piloting remote data collection using the mobile phones that people have, including through SMS, automated and live phone calls. Remote mobile data collection involves substantial methodological know how, it will be the object of a separate guidance note. Contact VAM HQ for more information.

4.4. Database management and processing

In most cases, FSMS household level data are analysed using the statistical software programme SPSS.[5] To ease repeated data analysis for trend analysis, it is strongly recommended to create and maintain one "master" database which contains the data of all data collection rounds. This database should have the following characteristics:

- The "variable view" in SPSS should include the same variables from round to round. This has the advantage that both data processing and data analysis will be much faster and the syntax to create key food security indicators will remain the same from round to round. In case additional information was collected for a specific round, these data could be analysed separately.
- The variable view should contain information on name, type, width, decimals, values, missing values, width of column, alignment and level of measurement.

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5. IBM SPSS Statistics 20 Brief Guide:
   ftp://public.dhe.ibm.com/software/analytics/spss/documentation/statistics/20.0/en/client/Manuals/IBM_SPSS_Statistics_Brief_Guide.pdf

BOX 7. Variable view in SPSS

- **Name:** short name, input variables usually refers to section in questionnaire (e.g. s2_3a, s2_3b).
- **Type:** number="numeric", text="string", date="date".
- **Width:** Maximum number of characters allowed.
- **Decimals:** Number of decimals (e.g. 2=0.23).
- **Values:** Codes for categorical (nominal) variables need to be defined.
- **Missing values:** Values that should be excluded during the analysis (e.g. 99= not applicable, 88=not known, etc.).
- **Width of column:** Width how column should appear on the screen
- **Alignment:** If text = "left", if number = "right".
- **Level of measurement:** if number that can be divided = "scale", if categorical number or string = "nominal" (e.g. 1=yes, 0=no), if rank = "ordinal" (e.g. 1=poor, 2=medium, 3= better-off).

FIGURE 3. Variable view in SPSS

	Name	Type	Width	Decimals	Label	Values	Missing	Colu...	Align	Measure	Role
1	Month_Year	Numeric	8	0	Month and year	{1, Nov 200...	None	8	Right	Nominal	Input
2	Round	Numeric	8	0	Round number	None	None	6	Right	Nominal	Input
3	HH_ID	Numeric	7	0	Household code	None	None	7	Right	Scale	Input
4	FSMS_ID	Numeric	8	0	FSMS code (unique)	None	None	8	Right	Scale	Input
5	s0_2	Numeric	2	0	Interviewer team code	None	None	4	Right	Scale	Input
6	s0_3	Date	11	0	Date of interview	None	None	11	Right	Nominal	Input
7	Fewsnet_livelihood	Numeric	8	0	FEWSNET livelihood zones	{2, Western...	None	23	Right	Nominal	Input
8	zones	Numeric	2	0	Zone code	{1, Qumsan...	None	8	Right	Nominal	Input
9	jameats	String	20	0	Jamoat name	None	None	9	Left	Nominal	Input
10	s0_6	Numeric	2	0	Jamoat code	None	None	3	Right	Scale	Input
11	village	String	20	0	Village name	None	None	12	Left	Nominal	Input
12	s0_8	Numeric	2	0	Village code	None	None	4	Right	Scale	Input
13	s0_9	Numeric	1	0	Household number	None	None	4	Right	Scale	Input
14	Adm1_name	Numeric	8	0	Admn1_name	{2847, Bada...	None	17	Right	Nominal	Input
15	s0_11	Numeric	1	0	Sex of hh head	{1, Female}...	None	5	Right	Nominal	Input

- In the **"data view"**, each row should represent one household in a given round and each column should represent a variable.
  > The **first column** should indicate months and year of data collection. This variable will be used to analyse the data by round).
  > The **second column** should refer to the round number of data collection (numeric number: first round=1, second round=2, etc.).
  > The **third column** should indicate the **household code** (unique for each data collection round). If every sentinel site has a unique code from 01 to "xx" and every household within each sentinel site has a unique code from 01 to 20, the unique code would consist of 4 digits: _ _(sentinel site) _ _(HH-code).
  > The **fourth column** should indicate the unique **FSMS household code**. This should be comprised of the round number followed by unique household code. For example a six digit number: _ _(round)_ _(sentinel site) _ _(HH-code).

FIGURE 4. Data view in SPSS

The following steps are required when a new round of data is available:

1. Clean carefully new dataset (check for consistency, outliers and missing values).
2. Compute key indicators using the standard syntax. The syntaxes can be found in the 2014-2017 SRF Indicator Compendium[6] and at the VAM resource centre.[7]
3. Ensure consistency of the variable view with the "master" dataset that contains all previous rounds (sequence and content of the variables have to be fully consistent).
4. If questionnaire of the new round was modified (e.g. response options were changed), adjust the original master database accordingly.
5. If consistency is confirmed, the new dataset can be merged into the master dataset by using the "add cases function" under merging files.

While using the syntax function in SPSS will save a lot of time, it will also require a lot of care by the food security analyst. If the data is not well cleaned and checked for missing values, the findings can easily be wrong. Therefore, it is highly recommended to consult an experienced data analyst for the creation of the syntax during the first data collection rounds. During all follow-up rounds, it is absolutely critical to **clean the data and check for consistency and missing values**. This step can unfortunately not be automated.

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6. http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp266620.pdf
7. https://resources.vam.wfp.org/Assessment-Tools/Syntax.

4.5. How much does it cost

Costs are the main constraint for maintaining a household level food security monitoring system in the longer-term. With every data collection round the following items have to be budgeted. Table 3 lists possible costs items for the first and follow-up rounds that need to be considered.

TABLE 3. Cost items for household surveillance

Cost item	First round	Follow-up round
✔ Design/set-up	Possibly external support required (RB, HQ, consultant)	After 5-10 rounds review recommended, possibly with external support
✔ Venue for numerators' training	4 days (including field test)	2 days refresher
✔ Trainers	Possibly external support: Honorarium/DSA for number of training and preparation days	External support should not be required
✔ Enumerators honorarium	Number of enumerator/days in the field	Number of enumerator/days in the field
✔ DSA for data collection monitors	Number of monitor/days in the field	Number of monitor/days in the field
✔ Transport during data collection	Vehicle rentals, fuel, drivers, etc.	Vehicle rentals, fuel, divers, etc.
✔ If hard copy questionnaires	Printing costs, preparation of data entry mask	Printing costs, adjustment of data entry mask if tools has been modified
✔ If use of PDAs/mobile phones	First-time purchase of equipment and software development	Software update if tools has been adjusted, after several rounds maintenance
✔ If hard copy questionnaire, data entry training	Venue with IT equipment, trainer	Training for new data entry operators (if required)
✔ If hard copy questionnaire, data entry	Venue with IT equipment, data entry operators and supervisor	Venue with IT equipment, data entry operators and supervisor
✔ Data processing, analysis, reporting	Possibly external support required (RB, HQ, consultant)	After 5-10 rounds review recommended, possibly with external support

Though there are some savings in the follow-up rounds, the main costs drivers which are associated with the actual data collection (enumerators and transport) will remain. To calculate the **number of days required in the field,** the sample size, the number of sentinel sites and distances between sentinel sites have to be taken into consideration. Generally, it can be estimated that one enumerator is able to complete 7 questionnaires per day and that one team should cover one sentinel site per day. Data collection should not exceed 2 weeks. Example 8 shows how the human source requirements can be planned. If data collection needs to be completed within fewer days, adjustments have to be made on the number of enumerators per team or the number of teams.

EXAMPLE 8. Calculating human resource requirements and field days (Tajikistan FSMS)

a	# of livelihood zones	13
b	# of sentinel site per zone	5
c	Total # of sentinel sites	65
d	# of HH interviews per site	20
	Total sample size	**1300**
e	# of enumerators per team	3
f	# of teams	5
g	Total # of enumerators (=e*f)	15
h	# of sentinel sites to be covered by one team (=c/f)	13
i	# of data collection days (assumption: one team can cover one site per day)	13
j	# of questionnaires to be completed by enumerator per day	7
	Potential capacity (number of HH interviews) (=g*i*j)	**1365**
k	# of travel days per team	2
	Total # of days spend in the field (=i+k)	15

The use of mobile devices and outsourcing FSMS data collection to other organizations or companies can reduce the costs for continuous monitoring. These options should be considered as the telecommunication sector is evolving rapidly and the use of mobile phones increasing. Also the base of potential partners in the government, NGO and private sector could be widening over time.

5. Bringing it altogether. How to present and report trend data?

The key output of any food security monitoring system is to inform decision-makers on a regular basis on the evolving food security situation and to trigger action if required. Technical Guidance Sheet 1 provides a detailed overview and tips for reporting. Below some key recommendations:

- **Key messages:** The most important part of the bulletin are the upfront key messages (highlights) as many key-decision-makers will often not have the time to go through the entire document. It is recommended to give some extra attention on this section which is usually presented in the bullet format with key words in bold. If possible, this section should also be supported by a map or graph presenting the main message.
- **Trends:** The main objective of the bulletin is to show trends, therefore it is important to make relevant comparisons; for example, the current situation can be compared with the previous season, it can also be compared with the situation one year ago or a 3-5 year average. The latter have the advantage that there is no seasonal bias. Generally, it is recommended to emphasize unusual trends, for example: delayed start of the rainy season, reduced number of people migrating, etc.
- **Timeliness:** The information should be available on a timely basis. In a very dynamic situation, food security monitoring information can be outdated in weeks. In a more stable situation, information may be relevant for the current/upcoming season (3 to maximum 6 months).
- **Frequency:** There are different options and the choice will depend on the context and data availability and sources. For a secondary data review and price monitoring, a monthly bulletin or "Watch" proves to be a good choice. If primary data is being collected, the choice is usually a quarterly or bi-annual food security bulletin. In a very dynamic situation, a weekly food security "Watch" may be considered – at least for a period of time to monitor the impacts of a specific event (e.g. refugee crisis, skyrocketing fuel prices, etc.). Different reporting formats can also be combined for certain editions (e.g. light monthly bulletin which is expanded every 6 month to contain additional information).
- **Audience:** When writing the bulletin, it is critical to keep in mind the audience – usually non-technical decision-makers, such as managers in Country Offices, Regional Bureaus, Headquarters, donors, etc. Therefore, the language should not be technical. Methodological issues can be explained in a separate note.

- **Length:** This will depend on the type of bulletin. A weekly food security "watch" should not be longer than 1 page, a monthly bulletin between 2 to 4 pages and a quarterly/bi-annual bulletin 6 to 8 pages.
- **Outlook:** It is useful to finish the bulletin with an outlook. In most cases, this will be based on a qualitative judgement by the food security analyst taking the following information into account: current food security situation and coping capacities, usual/expected seasonal trends in the next 3 to 6 months, weather forecasts, etc.
- **New communication channels:** While traditional communication tools, such as bulletins and emails, remain relevant, social media messages, twitter, radio report and television are increasingly gaining relevance. Options could be explored to ensure FSMS messages will reach a wide range of audience. It is recommended to work closely with Public Information Officers for an appropriate use of these new tools in the WFP context.

TABLE 4. Contents of a bulletin

Monthly food security bulletin (WATCH!) *(Data sources: secondary data, price monitoring)*	Quarterly/bi-annual food security bulletin *(Data sources: secondary, price monitoring, HH-surveillance)*
- Highlights - Major shocks/events - Macro-economic update - Displacement and migration patterns - Weather conditions and seasonal forecasts - Seasonal crop monitoring - Market situation > Food availability and prices > Terms of trade (wage/livestock/cash crops vs. food) > Fuel, transport and mobility - Outlook - References and contacts	**First page** - Highlights *(summary of main trends and issues)* - Summary table, map and/or graph illustrating food security trend over time **Key driving factors** - Context *(socio-political, macro economic, major shocks/events, displacements, etc.)* - Food prices and market developments - Income and expenditure - Migration and remittances - Agriculture and livestock - Food consumption and dietary diversity - Food sources and food stocks - Coping strategies **Last page** - Outlook (future risks) - Action points - Note on methodology, limitations, references, contacts

The content will differ from country to country. For more detailed guidelines on reporting, please refer to Technical Guidance Sheet 1 *Reporting Structure and Content*.

6. Use of IPC to communicate FSMS findings

FSMS data can feed into the Integrated Food Security Phase Classification (IPC) analysis processes at national and sub-national levels. The IPC "is a set of tools and procedures to classify the severity of food insecurity and provide actionable knowledge for decision making based on secondary information".[8] The IPC makes best use of the available evidence from different sources and standardized procedures are applied to support consensus-building among a wide range of stakeholders at national and sub-national level, including governments and humanitarian and development partners.

IPC Version 2.0 issued in 2012 contains two reference tables: the first one is used for classifying acute food insecurity situations, while the second one classifies chronic food insecurity. Generally, FSMS is more relevant for the acute classification as it monitors food security trends over time. Table 5 provides an overview of the 5 acute food insecurity phases:

TABLE 5. Summary of IPC phase in the Acute Food Insecurity Reference Table for Area Classification

Phase		Description
1	Minimal	More than four in five households (HHs) are able to meet essential food and non-food needs without engaging in atypical, unsustainable strategies to access food and income, including any reliance on humanitarian assistance
2	Stressed	Even with any humanitarian assistance at least one in five HHs in the area have the following or worse: Minimally adequate food consumption but are unable to afford some essential non-food expenditures without engaging in irreversible coping strategies.
3	Crisis	Even with any humanitarian assistance at least one in five HHs in the area have the following or worse: Food consumption gaps with high or above usual acute malnutrition OR Are marginally able to meet minimum food needs only with accelerated depletion of livelihood assets that will lead to food consumption gaps.
4	Emergency	Even with any humanitarian assistance at least one in five HHs in the area have the following or worse: Large food consumption gaps resulting in very high acute malnutrition and excess mortality OR Extreme loss of livelihood assets that will lead to food consumption gaps in the short term.
5	Famine	Even with any humanitarian assistance at least one in five HHs in the area have an extreme lack of food and other basic needs where starvation, death, and destitution are evident. (Evidence for all three criteria of food consumption, wasting, and CDR is required to classify Famine.)

Source: *IPC Technical Manual Version 2.0*[9]

8. The IPC has been developed by a global partnership comprising CARE, FAO, FEWSNET, the Global Food Security Cluster, the Joint Research Centre of the European Commission, Oxfam, Save the Children and WFP.

9. For more information on the generic tools and procedures: http://www.ipcinfo.org/ipcinfo-detail-forms/ipcinfo-resource-detail0/en/c/162270/.

Conducting an IPC analysis depends on the availability of regular and reliable food security data from various information sources. Often IPC analysis at food security outcome level relies on ad-hoc assessments or surveys which are not systematically repeated over time. FSMS would overcome this constraint, in countries where IPC and FSMS co-exist. **To maximize synergies, the timing of FSMS data collection and IPC consultations should be coordinated.** Ideally, also the level of analysis should be harmonized, e.g. by livelihood zones that are agreed upon by national stakeholders.

In short, FSMS and IPC are complementary and build on each other: FSMS provides key data reflecting the recent food security impacts at household level and allows for trend analysis to compare the situation at household level with the previous seasons and years. The IPC facilitates consensus-building on the interpretation and consolidation of food security information from a range of sources, including FSMS, and involving a larger number of stakeholders at sub-national and national level. Final outputs will be therefore more relevant for a larger group of decision-makers in the food security sector.

The general process of using the IPC involves six main steps from the set-up to communication of findings. Figure 6 shows how FSMS and other secondary data feed into the typical cycle of an IPC process.

FIGURE 5. FSMS feeding into the IPC standard process
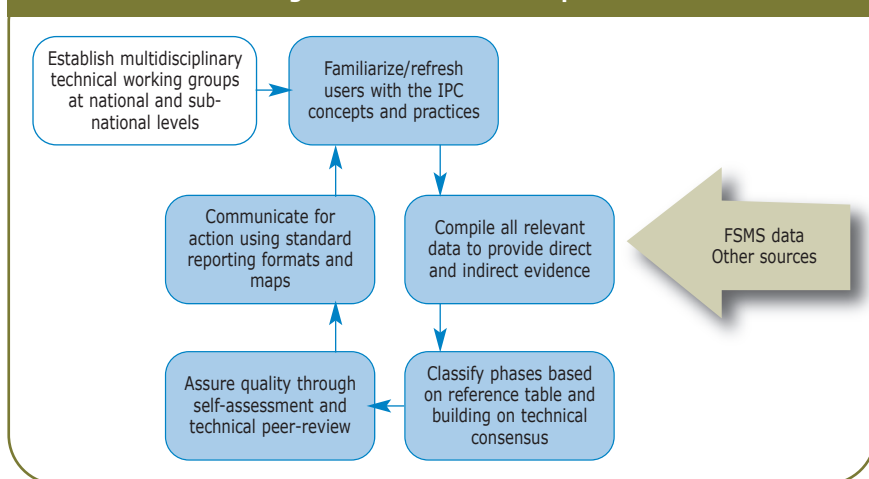
Integrating VAM and M&E systems can enhance the relevance, efficiency and effectiveness of WFP's knowledge and information management while reducing costs for annual monitoring activities. In Southern Africa, WFP has established the Community-Household-Surveillance (CHS) system in 2003 covering seven countries; Lesotho, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe. Its special feature is the collection of key food security indicators from beneficiary and non-beneficiary households twice a year to assess impacts of food assistance and appraise programme performance while at the same time providing information on food security trends and early warning.

Based on a strategic review in several countries, such as Southern Africa and Ethiopia, the CHS:
- Enables the monitoring of household food security trends over time in WFP operational areas.
- Facilitates outcome monitoring for household and community level indicators using a statistically representative sample.
- Allows the linking of outcome indicators with selected process or context indicators to better understand why outcomes are achieved or not achieved (e.g. utilization of assistance, diversion, intra-household decision-making, exposure to shocks, etc.).
- Allows the profiling of beneficiary and non-beneficiary households to validate targeting.
- Allows for enhanced understanding of beneficiary preferences for transfer modalities by season and over time.
- Potentially facilitates comparison of outcomes of different programmes and transfer modalities over time.
- Contributes to programme decision-making related to retargeting and programme revisions.
- Ensures more effective use of human resources in key technical areas and is potentially cost-saving in terms of data collection efforts.
- The system provides more value for money in larger operations. Smaller operations may have face capacity constraints. Also if caseloads are highly unpredictable in terms of geographic coverage, the usefulness of the system for food security trend analysis is more limited.
- Close collaboration between technical and programme units is required. Generally the system functions better when VAM and M&E units are placed under the same line management.
- Long-term commitment and consistency are required. The system loses some of its strength when there are data gaps over time. On the other hand, the longer it exists the more powerful it becomes for longer-term trend analysis over several seasons and years.

An overview of indicators that are part of the IPC acute food insecurity reference table, which can be potentially be collected through an FSMS depending on the scope and topics covered, can be found in the IPC Reference Table, Technical Guidelines, ftp://ftp.fao.org/docrep/fao/010/i0275e/i0275e02.pdf.

EXAMPLE 9. Case study Tajikistan

In Tajikistan the IPC has been conducted in a participatory manner since 2009, involving a wide range of food security stakeholders. Various training and technical consultations were held in November/December 2012 bringing together around 120 specialists from all regions of the country.

The IPC analyses were done in sub-groups representing each livelihood zone using the IPC analysis worksheets. Plenary sessions were held to standardize and harmonize the different data and information sources and other issues. The final phase classification for each zone of the country was then reviewed by food security actors at national level and the IPC Global Support Unit (GSU).

Data from the following agencies and systems were used to classify areas according to their food security phase: Statistics Agency, Ministry of Agriculture, Regional Departments of Health, Committee of Emergency Situation, FEWS Net, UNDP Early Warning System (MEWS), WFP Market Information System and WFP Food Security Monitoring System (FSMS).

Prior to the IPC consultations, FSMS household level data were collected in November 2012 which presented the twelve round of data collection since 2009. Using the draft IPC data matrix provided by the IPC Global Support Unit (GSU) in Rome, FSMS data was disaggregated by livelihood zone and organized by outcomes and contributing factors for the last 6 FSMS rounds to facilitate trend analysis.

Summary of IPC key findings

The food security situation in Tajikistan was analysed in 13 livelihood zones for September–December 2012. About 870,277 people in 12 livelihood zones are classified in Phase 3- Crisis. Another 2,381,754 people are classified in Phase 2- Stressed and 2,055,402 in Phase 1- Minimal, respectively.

Overall the food security status has improved in the reporting months compared to the previous year thanks to increased remittances received, good rainfall and good cereal production reaching 1.2 million tons, by end 2012, representing 12 percent higher increase from the previous season. The availability of water and pasture has also increased in some parts of the country, leading to improvement in livestock productivity and value. Remittances also played a major role and became the main source of income to meet their daily basic needs. The inflow of remittances in 2012 peaked at more than 3.5 billion USD, surpassing the 2011 record of 3.0 billion USD and accounting for almost half of the country's GDP.

Despite overall improving trends, the food insecure are not able to benefit from it due to low purchasing capacity, poor harvest and low livestock asset holding. Several shocks, particularly high food fuel prices, lack of drinking and irrigation water in many areas, unavailability or high cost of fertilizers, and animal diseases, have contributed to acute food insecurity (stressed or crisis) in localized areas. Higher wheat prices fuelled by the 2012 below normal harvest in Kazakhstan and high fuel prices further exacerbated the escalating situation, making access to food difficult to the poorest of households who rely on the market for their larger proportion of food needs during lean period (…).

IPC Food security classification map of Tajikistan
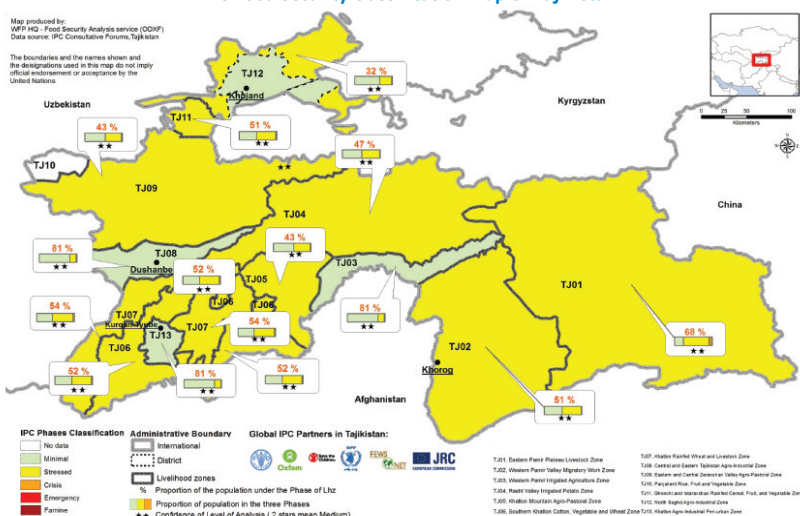
Annex 1.
Generic modules for FSMS household surveillance

Questionnaire code: |___|___||___|___||___|___|
(e.g. FSMS round + sentinel site + household number)

IDENTIFICATION *(core module)*					
		Complete before interview		Complete after data collection	
0.1	Date	|___||___|/|___||___|/2012 Day Month		|___||___|/|___||___|/2012 Day Month	
0.2	Round of FSMS data collection	|___|___|		Data operator name:	
0.2	Interviewer name			REGION CODES:	LIVELIHOOD ZONE CODES:
0.3	Supervisor name				
0.4	Region code	|___|___|		01 = WES 02 = EES 03 = Jonglei	
0.5	Livelihood zone code	|___|___|		04 = Lakes 05 = Upper Nile 06 = WBS 07 = NBS 08 = Warrap 09 = CES 10 = Unity	
0.6a	District code	|___|___|	0.6b	District name	
0.7a	Sentinel site code	|___|___|	0.7b	Name of (main) village	
0.8a	Household number	|___|___|	0.8b	HH code	|___|___||___|___| sentinel HH site number

INTRODUCTION AND DEFINITIONS

First of all, inform and ask for households **consent**:

We are monitoring the food security situation in country/region xxx. I would like to ask you some questions about your family. The interview usually takes 30 minutes to complete. Any information that you provide will be kept strictly confidential and will not be shown to other people. The outcome of this information is NOT IN ANY WAY linked to a food response from WFP; it is used strictly for monitoring of food security. This is voluntary and you can choose not to answer any or all of the questions if you want; however we hope that you will participate since your views are important. Do you have any questions? May I begin now?

Note:
- Before the interview, make sure you walk around the household to put answers into context. Ask for permission first, and look at their assets, food present in granary and kitchen, and general conditions of the household. In this way you will be better able to probe answers that don't seem to make sense.
- Specific terms may need to be adjusted to ensure that interview partners understand the meaning (e.g. remittances)

Definitions:
- A household is defined as a group of people who routinely eat out of same pot and live on the same compound (or physical location). It is possible that they may live in different structures. Sharing the pot is the unifying factor for households.
- Definition of HH head: is member of the family who manages the family resources and decisions (He/she is the final decision maker on most of the decision related to income allocation and major family activities).

1. DEMOGRAPHICS *(core module)*

1.1	What is the sex of the household head?			1= Male 2= Female		|___|
		a. Children under 5years	b. 5 to 14 years	c. 15 to 60 years	d. Above 60 years	**e. Total**
1.21	How many **males** do currently live in your household?	|___|	|___|	|___|	|___|	|___|___|
1.22	How many **females** do currently live in your household?	|___|	|___|	|___|	|___|	|___|___|
1.23	How many people do currently live in your household?					|___|___|
1.3	What is the residence status of the household? *(to be adjusted to context)*		1 = Resident 2 = IDPs in camp 3 = IDPs outside camp 4 = Refugees in camp 5 = Refugees outside camp 6 = Returnee			|___|
1.4	Is an IDP or returnee currently living in your household? *(only ask in a dynamic context, e.g. displacement)*		0 = None 1 = IDP(s) 2 = Returnee(s) 3 = Both			|___|

2. EDUCATION *(optional module)*

School enrolment and attendance (only for children 6-15 years)

	Age groups to be adjusted to context	a) Total number in HH 0= if none	(b) How many of these are enrolled in school?	(c) How many of these have attended school? (at least 2 weeks in the past month)	(d) If not attending, what were the two main reasons? 1 = Sickness 2= School holidays 3 = Teacher not present 3 = Could not afford expenses 4 = Had to work for money 5 = Had to help with domestic chores (including agriculture) 6 = Not possible to reach school (e.g. lack of transport, instability) 7 = Dropped out **9 = Not applicable**
2.1	Girls (6-15)	|__|	|__|	|__|	1. |__| 2. |__|
2.2	Boys (6-15)	|__|	|__|	|__|	1. |__| 2. |__|

3. INCOME SOURCES *(core module)*

	Please complete the table regarding main income sources using the income source codes provided below.	(a) What were your household's main income activities in the LAST 30 DAYS?	(b) Using proportional piling or 'divide the pie' methods, please estimate the relative contribution to total income of each activity.
3.1	Main income source	|_____|	|__|__|__|%
3.2	Second income source	|_____|	|__|__|%
3.3	Third income source	|_____|	|__|__|%
			Total = 100%

INCOME SOURCE CODES *(to be adjusted to context)*:

01 = Sale of cereals (sorghum, maize etc)
02 = Sale of other crops and products
03 = Sale of livestock
04 = Sale of animal products (milk etc)
05 = Sale of alcoholic beverages
06 = Casual labour related to agricultural activities
07 = Casual labour related to construction
08 = Other casual labour
09 = Skilled labour
10 = Salaried work

11 = Sale of firewood
12 = Sales of charcoal
13 = Sales of fish
14 = Other petty trade/small business
15 = Kinship/help/gifts from family/friends
16 = Remittances from labour migration
17 = Begging
18 = Sale of food aid (received from NGOs, WFP, Government)
19 = Borrowing
99 = Other, specify _____

		(a) How many in HHs?	(b) How many of these are currently contributing to HH income?	(c) Have **wages** changed compared to the previous round *(specify month)*? 1 = Increased 2 = Decreased 3 = No change 9 = Not applicable	d) Have **wages** changed compared to one year ago *(specify month)*? 1 = Increased 2 = Decreased 3 = No change 9 = Not applicable
4. WAGE LABOUR AND REMITTANCES *(optional module)*					
4.1	Men (15-60)	|___|	|___|	|___|	|___|
4.2	Women (15-60)	|___|	|___|	|___|	|___|
		(a) How many labour migrants are belonging to this HHs?	(b) How many of these are currently contributing to HH income?	(c) Have **remittances** changed compared to the previous round *(specify month)*? 1 = Increased 2 = Decreased 3 = No change 9 = Not applicable	d) Have **remittances** changed compared to one year ago *(specify month)*? 1 = Increased 2 = Decreased 3 = No change 9 = Not applicable
4.3	Men (15-60)	|___|	|___|	|___|	|___|
4.4	Women (15-60)	|___|	|___|	|___|	|___|

5. AGRICULTURE AND LIVESTOCK *(optional module)*

5.1	Did you cultivate crops this season? If not, go to section 6.	0= No / 1= Yes	|___|
5.2	How is the condition of the crops in the field in the current season?	1= Poor 2= Fair 3= Good 4= Excellent	|___|
5.3	What are two main agricultural constraints in this season? *(adjust to context, focus on constrains that can change from season to season)*	1 = Lack of or late rain 2 = Lack of inputs 3 = ……..	1. |___| 2. |___|

Crops *(to be adjusted to context):*		a. Areas cultivated <u>this season</u> in feddans *(specify unit)*	b. Area cultivated <u>last year</u> in feddans *(specify unit)*	c. Expected production this season by number of bags (90kg) *(specify unit)*	d. How many weeks will this last for your family?
5.4	Sorghum	|___|___|___|	|___|___|___|	|___|___|___|	|___|___| weeks
5.5	Maize	|___|___|___|	|___|___|___|	|___|___|___|	|___|___| weeks
5.6	…	|___|___|___|	|___|___|___|	|___|___|___|	|___|___| weeks
5.7	…	|___|___|___|	|___|___|___|	|___|___|___|	|___|___| weeks

6. LIVESTOCK PRODUCTION *(optional module)*

6.1	Does your household own any livestock, herds or farm animals? **If answer is no, skip to section 7**	0= No / 1= Yes				|___|
6.2	How is the **pasture** condition in the current season?	1= Poor 2= Fair 3= Good 4= Excellent				|___|

		a. Cattle	b. Sheep	c. Goats	d. Poultry	e. Other
6.2	How many of the following livestock do you have? **0 = No 1 = Yes**	|__|	|__|	|__|	|__|	|__|
6.3	If yes, how many?	|__|__|__|	|__|__|__|	|__|__|__|	|__|__|__|	|__|__|__|

7. EXPENDITURES *(core module, option 1)*

In the Past **30 days** how much money have you spent to acquire each of the following items for your family **consumption** *(in local currency)*? Write 0 if no expenditure.

Food items *(adjust list to country context)*		(a) Purchased	(b) Value of own production / gifts
7.01	Cereals	|__|__|__|__|	|__|__|__|__|
7.02	Roots and tubers	|__|__|__|__|	|__|__|__|__|
7.03	Fruits and vegetables	|__|__|__|__|	|__|__|__|__|
7.04	Meat and fish	|__|__|__|__|	|__|__|__|__|
7.05	Dairies (milk, yoghurt, cheese…)	|__|__|__|__|	|__|__|__|__|
7.06	Eggs	|__|__|__|__|	|__|__|__|__|
7.07	Pulses and groundnuts	|__|__|__|__|	|__|__|__|__|
7.08	Cooking oil/butter/fat	|__|__|__|__|	|__|__|__|__|
7.09	Sugar, honey, sweets	|__|__|__|__|	|__|__|__|__|
7.10	All other food items (salt, condiments, etc.)	|__|__|__|__|	|__|__|__|__|

Other short-term expenditure *(adjust list to country context)*

7.11	Water	|__|__|__|__|	7.15	Soap	|__|__|__|__|
7.12	Firewood/charcoal/fuel	|__|__|__|__|	7.16	Milling and grinding	|__|__|__|__|
7.13	Tobacco and alcohol	|__|__|__|__|	7.17	Transportation/ communication	|__|__|__|__|
7.14	Coffee/tea/other drinks	|__|__|__|__|			

Medium- to long-term expenditure *(adjust list to country context)*

In the Past **3 months** how much money have you spent to acquire each of the following items for your family **consumption** *(in local currency)*? Write 0 if no expenditure.

7.18	Construction, house repair	|__|__|__|__|	7.23	Health care and drugs	|__|__|__|__|
7.19	House rent	|__|__|__|__|	7.24	Education	|__|__|__|__|
7.20	Agricultural seeds and tools	|__|__|__|__|	7.25	Social events	|__|__|__|__|
7.21	Hiring labor	|__|__|__|__|	7.26	Fines / Taxes	|__|__|__|__|
7.22	Household assets	|__|__|__|__|	7.27	Debt repayment	|__|__|__|__|

ALTERNATIVE OPTION TO ASSESS EXPENDITURE (TO BE TESTED)

7. EXPENDITURES *(core module, option 2)*

Ask the household to identify the **four (4)** most important expenditure **in the last 30 days.** And rank them in order of importance. Then ask Use proportional piling to establish their relative importance in % *(Use 20 beans, 1 bean = 5%).*

		(a) What are your household's main expenses in the past 30 days? (Rank up to 4 expenditures and use expenditure codes below)	**(b)** Using proportional piling method, estimate the relative contribution to total expenditure of each category (%)
7.01	Main	|___|___|	|___|___|___| %
7.02	Second	|___|___|	|___|___| %
7.03	Third	|___|___|	|___|___| %
7.04	Fourth	|___|___|	|___|___| %
			Total = 100%

EXPENSE CODES

01 = Food	06 = Housing/rent	10 = Social events
02 = Tobacco/Alcohol	07 = Household utilities	11 = Debt repayment
03 = Health	08 = Transport/ communication	12 = Other, specify
04 = Education		_____
05 = Clothes/shoes	09 = Farm/business inputs	

8. DEBT *(optional module)*

8.1	Have you **purchased food on credit** during the past one month? If yes, how much of the total <u>food</u> expenditure?		|___|___|___|% *(0% if none, 100% if all)*
8.2	Do you have any **loan/debt** to pay back at the moment?	0 = No / 1 = Yes	|___|
8.3	What was the **main reason** for taking out this loan?	01= Buy food 02= Cover health expenses 03= Pay school, education costs 04= Buy agricultural inputs (seed, tools...) 06= Buy business inputs 07= Buy or rent land 08= Rent/house maintenance 09= Pay for social events 10= Pay for transport/travel 11= Other reason (specify): _____	|___|___|
8.4	When do you expect to **pay back** this credit?	Weeks: |__|__| Months: |__|__| Years: |__|__|	

9. FOOD CONSUMPTION *(core module)*

		(a) Adults	(b) Children below 5 years
9.01	Yesterday, how many meals were eaten by:	|_____|	|_____|
	(to be adjusted to context)	(a) Over the last 7 days, how many days did you consume the following foods?	(b) What was the main source of the food in the past 7 days?
9.02	Sorghum	|____|	|____|
9.03	Maize	|____|	|____|
9.04	Other cereal	|____|	|____|
9.05	Cassava or other tubers	|____|	|____|
9.06	Pulses (groundnuts, legumes, beans, lentils, peas, sesame)	|____|	|____|
9.07	Vegetables including wild vegetables and leaves	|____|	|____|
9.08	Fruits including wild fruits	|____|	|____|
9.09	Meat and poultry (red and white meat)	|____|	|____|
9.10	Eggs	|____|	|____|
9.11	Fish	|____|	|____|
9.12	Milk, cheese, yogurt	|____|	|____|
9.13	Sugar, honey, sweets	|____|	|____|
9.14	Oil, fats	|____|	|____|

FOOD SOURCE CODES

1= Own production	4= Borrowing/debts
2= Purchase	5= Food aid
3= Gifts from neighbors/ relatives	6= Hunting/ gathering/ fishing

10. COPING STRATEGIES *(core module)*		
	In the past 7 days, were there times when you did not have enough food or money to buy food, did you have to?	0 = Not applied 1 = 1 day 2 = 2 days 3 = 3 days 4 = 4 days 5 = 5 days 6 = 6 days 7 = Everyday
10.01	Rely on **less preferred** and **less expensive** food	|____|
10.02	**Borrow** food or **rely on help** from relative(s) or friend(s)	|____|
10.03	**Limit portion size** at meals	|____|
10.04	Restrict consumption by adults in order for **small children** to eat	|____|
10.05	**Reduce number of meals** eaten in a day	|____|
	In the past 30 days, has your household applied any of the below strategies to meet basic food needs? *(to be adjusted to context)*	0= No 1 = Yes
10.06	Some household members worked for food only	|____|
10.07	Migration of one or more household members	|____|
10.08	Sell more animals than usual	|____|
10.09	Sell household assets	|____|
10.10	Spend savings	|____|
10.11	Consume seed stocks held for the next season	|____|
10.12	Harvest immature crops (e.g. green maize)	|____|
10.13	Consume unusual amounts wild foods for this season	|____|
10.14	Purchase food on credit or borrow money to buy food	|____|
10.15	Increase selling of firewood	|____|
10.16	Decrease expenditure on farm inputs	|____|
10.17	Sell productive assets	|____|
10.18	Take children out of school	|____|
10.19	Reduce expenses on health and education	|____|
10.20	Send household members to beg	|____|
10.21	Sell female/reproductive animals	|____|
10.22	Sell land	|____|
10.23	Relocate entire household	|____|

10. SHOCKS *(core module)*

What have been your main difficulties or shocks in the past 6 months?
(in case of quarterly monitoring, adjust to 3 months).

Do <u>NOT</u> list, *leave the household answer spontaneously.*
Once done, ask the household to rank the 3 most important ones

		(a) Shocks in the past 6 months? (Rank up to 3 shocks) *(use shock codes)*	(b) Did shock impact on your households' ability to produce and purchase sufficient food to meet your needs? 0 = No / 1 = Yes	c) Were you able to recover from the impact of this shock? 0 = No / 1 = Yes
10.1	Main	|____|	|____|	|____|
10.2	Second	|____|	|____|	|____|
10.3	Third	|____|	|____|	|____|

SHOCK CODES

1 = Insecurity/violence
2 = Food too expensive
3 = Lack of free access/movement
4 = Livestock diseases
5 = Floods
6 = Human sickness
7 = Returnees/IDPs living with household

8 = Late food aid distribution
9 = Social Event
10 = Delay of rains
11= Weeds/pest
99 = Other: _____

11. ASSISTANCE *(optional module)*

		(a) Have you received assistance over the last 3 months 0 = No / 1 = Yes	(b) Is the assistance on-going? 0 = No / 1 = Yes	c) Source 1. Government 2.WFP 3. Other agency 4. Family/friends
11.01	Seeds	|____|	|____|	|____|
11.02	Fertilizer	|____|	|____|	|____|
11.03	Fodder	|____|	|____|	|____|
11.04	Health services	|____|	|____|	|____|
11.05	Education	|____|	|____|	|____|
11.06	Food assistance (in cash)	|____|	|____|	|____|
11.07	Food assistance (voucher)	|____|	|____|	|____|
11.08	Food assistance (In kind)	|____|	|____|	|____|
11.09	Food assistance (subsidy)	|____|	|____|	|____|
11.10	Fuel subsidy	|____|	|____|	|____|
11.11	Other subsidy	|____|	|____|	|____|
11.12	Furniture/clothes	|____|	|____|	|____|

12. WOMEN MUAC *(optional module)*

Continue the interview with women of child-bearing age (15-49).
Take anthropometric measurements for all women.

12.0 ID	12.1 Name of woman	12.2 Age in Years	12.4 Are you currently pregnant? 0 = Not pregnant/ don't know 1 = Pregnant	12.5 Woman's **MUAC** *(in centimeters)*
1		|____|	|____|	|__|__|.|__| cm
2		|____|	|____|	|__|__|.|__| cm
3		|____|	|____|	|__|__|.|__| cm
4		|____|	|____|	|__|__|.|__| cm
5		|____|	|____|	|__|__|.|__| cm
6		|____|	|____|	|__|__|.|__| cm

13. CHILD MUAC AND CHILD FEEDING (optional module)

Now refer to children 6–59 month old. Take MUAC for all children in this age group

13.00 ID	13.01 Name of child	13.02 ID of mother (see table above)	13.03 Date of birth If supported by a document – If no document or not known, skip to 13.04	13.04 Age of child in months To estimate with care-taker if date of birth is uncertain or unknown (use calendar)	13.05 Sex of child 1 = Male 2 = Female	13.06 In the previous week did child have: (1= Yes, 0= No) a. diarrhea	b. cough	c. fever	13.07 Child's MUAC (be precise, make sure you do not round up or down)	13.08 Bilateral oedema 0 = No 1 = Yes
1		|_|	|_|_| / |_|_| month |_|_|_| year	|_|_|	|_|	|_|	|_|	|_|	|_|_|.|_| cm	|_|
2		|_|	|_|_| / |_|_| month |_|_|_| year	|_|_|	|_|	|_|	|_|	|_|	|_|_|.|_| cm	|_|
3		|_|	|_|_| / |_|_| month |_|_|_| year	|_|_|	|_|	|_|	|_|	|_|	|_|_|.|_| cm	|_|
4		|_|	|_|_| / |_|_| month |_|_|_| year	|_|_|	|_|	|_|	|_|	|_|	|_|_|.|_| cm	|_|
5		|_|	|_|_| / |_|_| month |_|_|_| year	|_|_|	|_|	|_|	|_|	|_|	|_|_|.|_| cm	|_|

13.09 Name of child *(same sequence as in 13.01!)*

13.10 Did the child receive breast-milk yesterday during the day or at night? 0 = No 1 = Yes

13.11 How many times did the child eat solid, semi-solid food or other liquids yesterday during the day or at night? *(Exclude breast-milk)*

13.12 Yesterday, during the day or night, did the child eat or drink any of the following food items?

List has to be carefully reviewed and locally consumed food items falling into various categories should be added, those not consumed at all could be removed.

0 = No   1 = Yes

#	13.09 Name of child	13.10	13.11	Food group 1: Grains, roots, tubers		Food group 2: Legumes and nuts	Food group 3: Dairy products	Food group 4: Meat and fish	Food group 5: Eggs	Food group 6: Vitamin A rich foods				Food group 7: Other vegetables and fruits
				Porridge, bread, rice, noodles, or other food made from grains	White potatoes, white, yams, cassava	Any food made from beans, peas, lentils, nuts, or seeds	Fresh milk, tinned milk, milk powder, formula milk yoghurt, cheese, ...)	Meat (lamb, goat, beef, inner organs) Poultry (chicken, duck) Fish (fresh or dried fish, shell fish or sea food)	Eggs	Dark yellow or orange-fleshed tubers, roots, or vegetables: Pumpkin, carrots, sweet red pepper, squash or sweet potatoes that are yellow inside	Dark green leafy vegetables: spinach, kale...	Dark yellow or orange fruits: apricots, peaches, ripe mango, ripe papaya, ...)	Red palm oil or food made with red palm oil	Other vegetables: Tomato, eggplant, cabbage, zucchini/light coloured squash, okra, green peppers, ... Other fruits: banana, grapes, apples, lemons...
1		|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|
2		|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|
3		|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|
4		|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|
5		|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|	|_|

Annex 2.
FSMS – example of IYCF module

10. NUTRITIONAL STATUS OF CHILDREN 6-59 MONTHS

Please let me measure mid-upper arm circumference (MUAC) from your children 6-59 months.

Record the age of the child in months for each child in ascending order and circle the color of the tape for MUAC measurement for each child on the table below. Record first the children who are less than 24 months old.

FIRST CHILD: |_____|_____| months	SECOND CHILD: |_____|_____| months	THIRD CHILD: |_____|_____| months	FOURTH CHILD: |_____|_____| months	FIFTH CHILD: |_____|_____| months
GREEN YELLOW RED	GREEN YELLOW RED	GREEN YELLOW RED	GREEN YELLOW RED	GREEN YELLOW RED

11. CHILD FEEDING (ONLY FOR CHILDREN 6-24 MONTHS)

Please tell me everything that [NAME] ate yesterday during the day or night (whether at home or outside the home). Think about when [NAME] first woke up yesterday.
Did [NAME] eat anything at that time?

Yesterday, during the day or night, did [NAME] drink/eat any (FOOD GROUP ITEMS)?
Write '1' if respondent says YES, '0' if NO in the box below.
Use the same coding for children as in the table above.

Food items	FIRST CHILD: |_____|_____| months	SECOND CHILD: |_____|_____| months	THIRD CHILD: |_____|_____| months
a. Grains, roots and tubers (sorghum, millet, wheat, CSB, potatoes)	Yes= 1 No= 0	Yes= 1 No= 0	Yes= 1 No= 0
b. Legumes and nuts (pulses, beans, lentils, nuts)	Yes= 1 No= 0	Yes= 1 No= 0	Yes= 1 No= 0
c. Dairy products (milk, yoghurt, cheese)	Yes= 1 No= 0	Yes= 1 No= 0	Yes= 1 No= 0
d. Fresh animal flesh (meat, fish, poultry and liver/organ meats)	Yes= 1 No= 0	Yes= 1 No= 0	Yes= 1 No= 0
e. Eggs	Yes= 1 No= 0	Yes= 1 No= 0	Yes= 1 No= 0
f. Vitamin-A rich fruits and vegetables (carrots, sweet potatoes, capsicum pepper (red), mangoes, apricots, spinach, tomato)	Yes= 1 No= 0	Yes= 1 No= 0	Yes= 1 No= 0
g. Other fruits and vegetables (banana, watermelon, lettuce, grapes, lemon/lime, orange, grapefruit)	Yes= 1 No= 0	Yes= 1 No= 0	Yes= 1 No= 0
h. Breast milk	Yes= 1 No= 0	Yes= 1 No= 0	Yes= 1 No= 0
How many times did [NAME] take milk yesterday? (Indicate number of times not including breast milk).	|__|	|__|	|__|
How many meals did [NAME] take yesterday? (Indicate number of times not including breast milk).	|__|	|__|	|__|

12. CHILD HEALTH (ONLY FOR CHILDREN 6-24 MONTHS)

	FIRST CHILD:	SECOND CHILD:	THIRD CHILD:
Has [NAME] had any illness in the last 2 weeks?	|__|	|__|	|__|

Codes: 0=None, 1=Diarrhoea – any episode of more than three (liquid-like) stools per day, 2=ARI – any episode with associated fever and cough at least one of the following signs: sputum, wheezing. 3=Fever, 4=Measles

13. NUTRITIONAL STATUS OF WOMEN

Please let me measure mid-upper arm circumference (MUAC) from the mother of the child or another woman who is 15 to 49 years old.
THE WOMAN SHOULD NOT BE PREGNANT.

Record the age in years and circle the tape color representing the MUAC measurement on the table below.

Age	|_____|_____| years	**MUAC**	GREEN	YELLOW	RED

Notes

Notes

Notes

Monitoring Food Security

Technical Guidance Sheet 3

**Practical method guidelines
for VAM field practitioners**

September 2014

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