Background
The Food Security and Nutrition Analysis (FSNAU) has been providing valuable information and analysis to users on the current and emerging food security and nutrition situation in Somalia since its inception in 1995. In order to do this, FSNAU has been using a variety of assessment and monitoring tools as well as information management and disseminations strategies, enabling it to reach a broad range of stakeholders, including government, donors, and UN agencies, local and international non-governmental organizations. Continuous review and improvement of tools and methods used by FSNAU is an integral part of its technical and analytical activities. Accordingly, the technical tools and methods as well as communication strategies used by FSNAU have evolved over the years through periodic review and adoption of new and improved ones.

Objective
The purpose of this note is to highlight the outcome of the internal review of FSNAU’s analysis and communication approaches as well as technical, methodological and communication improvements that are necessary in order to further enhance the quality, relevance and timeliness of FSNAU products. The review process involved critical reflection on past and current FSNAU information products and analysis and has benefitted from feedback provided by FSNAU technical staff both at Nairobi and at field level. This note is also intended to serve as a background document for further consultation with external technical partners.

Issues
Several issues related to existing FSNAU methodologies and communication strategies were identified and described below. These issues have been grouped into two categories: (i) Methodological issues; and (ii) Communication-related issues. For each category, action points already taken and additional recommendations for further improvement have also been highlighted.

I. Methodological Issues
1. FSNAU uses a sector-based approach for early warning and food security analysis. The analysis of such sectors as climate, market, civil insecurity, agriculture, livestock and nutrition help to produce current and projected food security situation analysis. Climate represents one of the major factors contributing to food security in Somalia as it affects food production, household livelihood strategies, and assets etc. However, a long-range forecasts of climate, including those produced by the Inter-Governmental Authority on Development’s Climate Prediction and Application Centre (ICPAC), which has been the major source of information for FSNAU, are less reliable by nature due to limited number of meteorological stations present in Somalia for calibration of the forecast. For example, although the climate forecast from ICPAC Climate Outlook Forum issued in February 2011 indicated increased likelihood of near normal to below normal rainfall across almost all parts of Somalia, there was no indication that there was going to be a severe drought and famine, precipitated by failure of the March-May 2011 rainy season.

2. Humanitarian assistance is an important contributing factor for food security situation in Somalia. In the lead up to the 2011 famine (2010/2011) FSNAU has been using IPC Version 1.0, which did not explicitly recognize the role of humanitarian assistance. This was a particularly important factor in the context of Somalia. At that time, the scale of humanitarian needs was high and lack of adequate humanitarian assistance (both due to limited donor response and lack of humanitarian access as a result of insecurity) was recognized as one of the major causes (along with the prolonged and severe drought) of the 2011 famine in Somalia. The most prominent demonstration of this problem in IPC version 1.0 analysis was post-Gu 2009 seasonal analysis (for the August-December 2009 projection period) conducted by FSNAU and partners during which an IPC category was not assigned to the northern part of Gedo region as it was not possible to exclude on-going intense humanitarian food assistance in the area from normal livelihood activities. Thus, this part of the region was left blank on the Post-Gu 2009 IPC Projection Map. Another example is the nutrition survey conducted in Lower Shabelle region during Deyr 2010 season (several months before famine declaration) by FSNAU. The survey results showed very high malnutrition rates. However, the results were rejected by the FSNAU technical team as these trends could not be attributed to food insecurity due to very good Gu 2010 cereal harvest in the region collected a few months before the survey (one of the major drivers of food security situation in Lower Shabelle). The
decision to reject the nutrition survey result did not consider reduced access to humanitarian assistance as an important causal factor despite the good Deyr 2010 harvest.

3. Quantitative data (cereal harvest, cereal stocks, livestock holding, etc) produced by FSNAU is based on field data collection through rapid assessments with the use of Participatory Rapid Assessment (PRA) techniques. In agropastoral areas of the Northwest, FSNAU has been using the Pictorial Evaluation Tool (PET) methodology for crop production estimation since 2010. The PET approach has earned more confidence among the users of FSNAU’s information. PET (for crops) provides assessors with a set of photographs showing all common crops grown in the area at different stages of growth and development. Comparing the fields in view with the annotated photographs enables assessors to choose the photograph that matches the field under observation and read-off the probable yield from the table. PET has consistently shown much higher production levels compared to previous crop assessment results obtained from rapid assessments. However, the PET methodology has not yet been introduced in the major crop-producing regions of Southern Somalia due to the prevailing insecurity as the PET protocol involves extensive field observations, beginning with observations from a vehicle, then walking through cropped fields and finally holding discussions with farmers within fields. Even with the use of PET, accurate estimation of area planted, area cultivated and area harvested remains a major challenge throughout Somalia. Moreover, crop production data is collected during harvest time, while early action requires advance notice about food production outlook. In this regard, crop yield forecasting and assessment with the use of a more advanced method for crop forecast could improve early warning information and analysis.

4. Causal factors of malnutrition and mortality are not easily identifiable due to multiple non-food security related drivers of malnutrition (WASH, child care practices, presence/absence of emergency nutrition interventions), which are very relevant in Somalia context. It is likely that malnutrition and limited access to clean water contribute to high diarrhea incidence which in turn contributes to malnutrition.

5. Household Dietary Diversity Score (HDDS) reflects a snapshot situation of the economic ability of households to access variety of foods. However, the indicator is not sensitive enough as in most nutrition surveys HDDS would be normal even in the areas with high GAM rates. Besides, HDDS shows no association with child dietary diversity in young children/IYCF practices/prevalence of malnutrition.

6. FSNAU relies on a Household Economy Approach (HEA) for food security analysis in rural areas, which involves analysis of deviations from the baseline livelihood/food security situation. However, due to prevailing insecurity, which does not permit undertaking in-depth studies, in most southern regions baseline livelihood studies are outdated, carried out in late 1990s or early 2000s. Accurate analysis of changes from the baseline indicators (e.g. cereal stock duration among farming population, livestock asset levels among the poor, other sources of incomes, etc) requires up-to-date baseline livelihood studies.

7. HEA approach is not effectively and frequently used for outcome analysis to measure food consumption gaps, which is partly attributable to outdated baselines in the South as well as to time-consuming procedure of HEA outcome analysis given the large number of livelihood zones in Somalia and a limited time available for the analysis. As an alternative, household food access is assessed during seasonal analysis workshops using proxy indicators (labor wages, food prices, livestock prices, debt levels, terms of trade, etc) in combination with contextual information about household strategies.

8. FSNAU nutrition surveys are regularly conducted towards the end of the two rainy seasons: Gu (April-June) and Deyr (October-December). Adhering to this regular schedule in the past has sometimes meant that early or mid-season nutrition deteriorations cannot be detected in a timely manner. In 2011, despite the forecast of a drastic deterioration of food security conditions for January-June 2011 period (based on assessments conducted in November/December 2010), nutrition surveys for the subsequent season (Gu 2011) were only undertaken in June-July, following the routine schedule. By the time surveys were completed, the deteriorating humanitarian crisis has already evolved into famine in Lower Shabelle. Timely nutrition surveys would have allowed early detection of the deepening humanitarian crisis in 2011. The food security early warning bulletin “Early Warning for post-Gu 2011” (Food Security & Nutrition Brief) released in June 2011 clearly indicated a deteriorating food security situation. However, in the absence of nutrition and mortality related data which only became available in July, it did not indicate that a famine condition was developing/imminent.

9. The 2011 famine was declared at Nairobi level when FSNAU food security teams were still in the field for Gu 2011 assessment. Thus, famine declaration in July 2011 was mostly based on mortality and malnutrition seasonal assessment and no adequate consideration was given to household-level information such as labor opportunities, livestock asset holding, cereal stock duration, coping mechanisms of the affected population, food consumption gaps, etc. For
example, while food security indicators did not indicate famine situation in Bakool Agropastoral, famine was nevertheless declared based on mortality data. However, later experts from the United States Centers for Disease Control and Prevention (CDC) detected a mistake in FSNAU’s calculation of death rates in Bakool Agropastoral, which was in fact below the famine threshold. Some of the FSNAU field staff have also expressed reservations about the reported high population deaths in their respective regions based on their first hand knowledge of, presence in and/or interaction with populations in the area. However, it was later established that the reported high death rate was attributed to a large population migration (mostly on foot) triggered by 2011 drought, which weakened the people and resulted in death of the displaced people en-route to IDP camps in Mogadishu, Dolo-Ado and Dadaab.

10. Prior to the 2011 famine period, FSNAU was has been using analysis and mapping protocols as stated in the Acute Integrated Food Security Phase Classification (IPC) version 1.0 manual, which lacked a distinct early warning function to accommodate forward-looking food security indicators to indicate the most likely scenario for the trajectory of these indicators.

11. Consultations/consensus building during acute food security (IPC) analyses tend to be dominated by FSNAU and FEWS NET technical staff because of limited participation by other agencies and technical partners due to: (a) a lengthy analysis process, which required more time (up to two weeks) and commensurate financial resource commitments from participating agencies; (b) lack of awareness/ skill in IPC analytical approach and limited technical capacity could have affected active participation by some partners, particularly government institutions; and (c) partners considering the analysis less of a priority when the overall food security situation in Somalia improves, especially in the post-famine period.

12. For household surveys conducted by FSNAU, the basic unit of analysis is usually the household. In order to facilitate analysis of the data disaggregated by gender, FSNAU used to collect data on the sex of the household head – thus we have groups of male or female-headed households. However, a bias related to this approach has been noted in FSNAU surveys and assessments in the past. Households routinely provide the name of a man when asked for the ‘head of the household’, even in cases where women are de facto breadwinners and decision-makers in the household. In the context of the Somali cultural, even if the husband has migrated and is away from home for months or years, he will still be considered as the ‘head of the household’, often including in instances where he is not contributing to household income or decisions that affect the household. This indicates that any FSNAU analysis based on the differences of male and female-headed households will likely be misleading in the Somalia context, and may not provide meaningful information for programming. Additionally, the information provided is likely to downplay the important role Somali women play in the economy.

**Action Points Taken and Recommendations for Further Improvement:**

**Action Points Taken:**

- For improved early warning a position of the Agro-meteorologist was introduced in FSNAU’s Phase VII to give early forecasts for crop and pasture development based on study and modeling of relevant set of indicators. This is expected to improve FSNAU’s technical capacity and the quality of its early warning information and analysis.
- The IPC Technical Manual Version 2.0, which was officially released in 2012, has addressed the issue of how humanitarian assistance can be considered in acute food security analysis outcomes, including a mapping protocol for explicitly indicating the role of humanitarian assistance.
- FSNAU/FEWSNET developed a dekadal rainfall monitoring questionnaire to allow closer field monitoring (ground-truthing) of rainfall and its impact on livelihoods during rainy seasons. The monitoring is done by FSNAU Field Analysts. The questionnaire has been in use since 2012.
- The study on farming practices was conducted in Lower Shabelle Riverine in 2012, the first region hit by famine (July 2011) despite its high agricultural potential as well as substantial agricultural investments carried out by humanitarian agencies (particularly FAO) in the preceding years.
- Livelihood zones have been reduced from 33 to 19 through a rezoning exercise, consultation and validation process (completed in early 2015). This is expected to make the updating of livelihood baselines more manageable and facilitate a more thorough analysis of the food security situation by livelihoods within a relatively shorter period of time.
- The duration of All Team Analysis workshops has already been reduced from two weeks to about 10 days since 2013. This is expected to help improve participation by partners.
- The IPC Technical Manual Version 2.0 released in 2012 introduced temporal units of analysis allowing the option to classify food insecurity for two time periods, a current (snapshot) situation analysis, and projection for the foreseeable future (based on the most likely scenario). The future projection is based on the most likely
scenario for any time period in the future (as short as a week or as long as a year). This distinction clarifies the early warning function of the IPC.

- To facilitate gender dimensions of household food security and properly identify the different roles of male and female members of households, FSNAU has adopted an improved approach whereby the households is divided based on the sex of household income provider as follows:
  - Household dependent on a woman or women for food or income to buy food (WDHs)
  - Household dependent on a man or men for food or income to buy food (MDHs)
  - Household dependent on both women and men for food or income to buy food.

Gender dimensions of food security and nutrition analyses are currently being done per the above.

**Recommendations:**

- The number of rain gauge stations in Somalia needs to be increased for improved spatial rainfall information/monitoring and timely ground-truthing.
- The use of PET method for crop yield estimation needs to be expanded to southern regions when security conditions permit. More efforts should also be exerted to improve estimation of area cultivated, area planted and area harvested in crop growing areas across Somalia.
- Feasibility of using humanitarian assistance data obtained through the Food Security Cluster needs to be reassessed in order to define ways of including this information into food security projections more explicitly. This requires consultation with multiple response agencies and clusters. Currently, the format and timeliness in which humanitarian data is made available to FSNAU does not allow for estimating caloric contribution of the distributed food to household food consumption or to measure its impact on food prices in the market.
- Malnutrition can be caused by food security related factors and non-food factors or both. A household can be food secure while at the same time children within the same household can be affected by malnutrition perhaps due to poor water and sanitation conditions within the household, lack of access to health services, or due to inappropriate feeding practices.
- For context specific cause–effect analysis of under-nutrition conducting Nutrition Causal Analysis (NCA) studies in targeted areas would be appropriate. Relationship between a range of multiple food security related indicators such as Coping Strategies Index (CSI) and acute malnutrition needs to be explored based on time-series data from nutrition surveys, for testing possible linkages between household food security and child malnutrition.¹
- Considering that nutrition is an outcome of food security and other underlying factors, nutrition surveys in rural areas need to be undertaken systematically during lean seasons (periods of food insecurity), particularly when available early warning information suggests a drastic deterioration of food security conditions. This is in addition to rural nutrition assessments that are currently being conducted during the harvest period (in July and December).
- Although food security and nutrition information is included in all FSNAU publications, explanation of the link between the two remains weak. More rigorous household level analysis is needed in rural areas to improve analysis of the potential linkage between household food access and malnutrition rates. This would require conducting integrated quantitative food security and nutrition assessments that are also survey-based (currently food security and nutrition assessments in rural areas of Somalia are done independently)
- Fresh livelihood baselines need to be carried out in southern Somalia so that HEA outcome analysis (livelihood protection deficit, survival deficit) for rural areas can be included in seasonal food security analysis workshops. In this regard, the use of Livelihood Impact Analysis Spreadsheets (LIAS) could facilitate a more speedy HEA outcome analysis.
- Relevant Government staff and partner agencies need to be trained in IPC analysis in order to meaningfully participate and contribute during seasonal analysis. In order to improve the IPC governance process and participation, national IPC Steering Committees and IPC Technical Working groups involving technical partners and government need to be established in Somaliland, Puntland and the Federal Government of Somalia (FGS). This is important for technical consensus-building, one of the core functions of IPC. The first step in this regard would be to create IPC awareness among government decision makers and train technical government staff in IPC.
- FSNAU should strengthen existing technical partnerships and explore new ones in order to ensure complete coverage of Somalia, especially for nutrition surveys in a manner that ensures that quality standards are maintained.

¹ These could include Infant and Young Child Feeding (IYCF) core indicators such as: early initiation of breastfeeding, exclusive breastfeeding under six months; continued breastfeeding at one year of age; introduction of solid, semi-solid or soft foods; minimum dietary diversity; minimum meal frequency; minimum acceptable diet; and consumption of iron-rich or iron-fortified foods.

Food Security and Nutrition Analysis Unit (FSNAU)
II. Communication-related issues

13. FSNAU uses various communication tools aimed at addressing the needs of various users: senior policy/decision makers, programme managers as well as technical and operational staff of Government, donor, UN agencies, international and national NGOs, civil society and the media. FSNAU communication tools include:
   - Presentations (scheduled after each seasonal food security and nutrition assessment and analysis) during Heads of Humanitarian Agencies meetings; UN Humanitarian Country Team meetings; Food Security Cluster meetings and Nutrition Cluster; Somalia NGO Consortium meetings as well as based on request from partners, donors, etc;
   - Press briefings and media interviews and technical press releases
   - Monthly Climate Updates, Monthly Market Updates, Quarterly Food Security and Nutrition Briefs; Quarterly Nutrition Updates; and bi-annual Food Security and Nutrition Technical Series reports and periodic Baseline Livelihoods Assessment reports.

All of the above communication tools are intended for providing timely, relevant and useful information on the current food security and nutrition situation in Somalia and also provide early warning information about emerging food security and nutrition trends. During 2010/2011 drought a number of new publications/online updates (e.g. on-line Food Price Monitor, Drought Alert, etc) were introduced for close monitoring and reporting of rapidly changing food security conditions in Somalia.

14. Ad-hoc press releases issued before the famine declaration (April 2011 and June 2011) followed scheduled FSNAU publications (e.g. Food Security & Nutrition Briefs or Nutrition Updates), while no press release was issued in May 2011 when the situation deteriorated further to famine conditions.

15. Nutrition and Food Security publications are done separately and they are heavy to read due to large volumes. This problem is partly addressed by diversifying publications that cater to the needs of different audiences (press releases, outlook reports, comprehensive technical reports, presentations, etc) and incorporating executive summaries and highlights as part of FSNAU publications. However, there is a room for further improvement.

16. In the context of Somalia, FSNAU analyses have repeatedly demonstrated that very little or no association exists between child acute malnutrition and household food security in most of the populations surveyed. This makes communication of the results to donors and other stakeholders very challenging as there is a tendency among donors to focus more on the food security situation and discount the risk associated with high levels of acute malnutrition in central and southern Somalia as being ‘nothing new/business as usual’.

Action Points Taken and Recommendations for Further Improvement:

Action Points Taken:
- The size of FSNAU publications has been reduced, particularly for Technical Series reports.

Recommendations:
- Press releases should be issued when there is drastic deterioration of the food security and nutrition situation or when there is an actual or imminent/most likely deterioration of major factors that contribute to food security and nutrition.
- More efforts should be exerted in creating awareness among donors and other stakeholders that food insecurity is only one potential driver of malnutrition.