

Minimum Technical Standards for Seed System Assessment (SSA) in Emergencies

USAID/OFDA, SeedSystem and UN/FAO consultations

Seed system assessment minimum technical standards/critical elements

INTRODUCTION

This brief focuses on the minimum standards needed in a Seed System Assessment (SSA)¹ for the work to be considered technically sound, including the key data and essential processes.

Such minimum technical standards will enable the humanitarian community, governments, funders and other stakeholders to have greater confidence in assessments performed by a wide range of actors. These standards should also guide program quality leads to ensure that key ‘minimum standard’ aspects are included during the planning, data collection, data analysis, or roll out phase.

The intent of this set of Minimum Standards is to identify the critical elements needed for a seed system assessment to be considered valid, that is:

- to have sufficient technical rigor to produce quality data through use of accepted methodologies and seed system analysis;
- to have sufficient evidence (versus assumptions or bias) to represent a neutral and informed analysis of the situation on the ground;
- to be sufficiently context-aware (socio-political, agroecological, farmer profile, crop profile) to guide specific seed security-related response(s).

Seed system assessments may be conducted in suboptimal circumstances. There may be security concerns, language barriers, challenging working conditions (i.e. difficult roads), and very short time frames—in order to plan sufficiently for an upcoming season. For these reasons, the identified list of minimum standards contains *just* the essentials - it is a practical list - not an academic one.²

¹ Other terms in usage are: Seed System Security Assessment (SSSA) and Seed Security Assessment (SSA)

² When time and resources allow for a more comprehensive SSA, users may wish to consult more detailed guides to methods (<https://seedssystem.org/assessments-and-e-learning-course/>
<http://www.fao.org/resilience/resources/resources-detail/en/c/282218/>)

1. **Brief description of disaster/stress.**

There are a series of basic framing elements to include.

- a. Overview of salient broad features that could affect agricultural intervention;
- b. Timing in the agricultural season when the disaster hit - and with it the possible effects on crop production;
- c. Initial appraisal showing agricultural recovery is contextually possible and appropriate (i.e. farmers are ready to plant and engage in agriculture; there is sufficient access to land, stability and security to suggest that what is planted can be harvested; and agricultural support will do no harm);
- d. Indication that this is an acute stress, chronic stress or both.

2. **Rationale for specific seed security-linked assessment:** the transparent trigger (or triggers). The rationale for conducting an assessment needs to be explained in multiple ways.

- a. Documentation of how the stress/disaster could affect seed security and lead to a negative impact on (variously): production, nutrition, resilience, income, or other key outcomes. (Refer to available evidence related to these concerns).
- b. Elaboration of other questions (immediate, medium and longer-term) that stakeholders want this assessment to answer.

3. **Place**

The general and specific locations help interpret the findings.

- a. Detail of exactly where the assessment was done and how applicable the findings are to other geographic or agro ecological zones.
- b. Clear description of sites chosen – (e.g. farming’s place in livelihoods and land-use, main cropping systems, any particular groups or locations that are especially vulnerable).

4. **When/timing of assessment**

Indication that timing of assessment will allow for a response tailored to a particular season/seasons. The recommendations must account for the specific logistics to plan and implement such responses (e.g. never deliver seed late).

5. **Background work** : critical elements

No matter how quick—realtime preparatory work and complementary useful studies need to provide background information on critical features. Information may be published or may have to be garnered by speaking with those working in the area. Critical background elements include:

- a. Knowledge of agricultural seasons, crop calendar, major crops for each main season;
- b. Knowledge of seeding rates for each crop - realistic farmer seeding rates (not formal sector recommended rates);
- c. Knowledge of how formal seed sector operates in area (and for which key crops);

- d. Knowledge of how informal seed sector operates in area (and for which key crops);
- e. Knowledge of integrated seed sector in area, e.g. community-based seed producers
- f. List of crops/varieties particularly adapted to area and to stress;
- g. Understanding of farmer preferences for crop/ variety for market crops and for home consumption;
- h. Insights into changing crop or variety use through time (5 years? 10 years?) (market driven? climate stress-driven?);
- i. Special social issues related to crops, seed security, and smallholders in the area: gender-linked; vulnerable groups; salient ethnic differences.

BROAD CONTENT - WHAT THE FIELD ASSESSMENT SHOULD EXAMINE

6. Broad content of assessment (The big 5)

The broad domains to include (just below) are as important as the specific field questions to be addressed (points 7-11). For broad domains, all those directly below are essential.

- a. All seed systems that farmers may use; formal, informal and integrated;
- b. Focus on seed or planting material plus other essential accompanying inputs that are routinely used (e.g. fertilizer, pesticides) as well as post-harvest and storage practices that affect seed;
- c. Focus on the range of major annual crops which are key for food security, nutrition, resilience to climate stress, and income;
- d. Focus on the farmer expressed need/demand side and on the supply side;
- e. Differentiation among farmers (by gender of household head or land size cultivated);
Special highlighting on who might be most vulnerable.

METHODS / PROCESSES – HOW THE ASSESSMENT SHOULD BE DONE

Description of methods and process help all stakeholders determine the rigor of the work. Elements below are divided between methods and process.

Methods

- a. Methods consistent across sites (and clearly described);
- b. Information from multiple sources and cross-checked;
- c. Mix of quantitative and qualitative methods (especially to ensure stakeholder perspectives are clear);
- d. Indication of sampling approach and sample sizes (with frankness around bias or gaps to be filled);
- e. Description of processes used for analysis (see point 12).

Process

- a. Description of team composition, itinerary and any logistical challenges or opportunities;
- b. Timing of assessment and how that might affect findings;
- c. Justification for selection of geographic location(s);
- d. Justification for number of household /focus group surveys (and how they are representative) ;
- e. Elaboration of data quality assurance plan (including how feedback was sought and incorporated);

7. **Field evidence needed: Farmer need/demand side** (*big issues that have to be assessed*).

Field evidence has to be collected from the demand side, from farmer client /beneficiaries as one thrust. This can be done from individual surveys or focus groups or both- but has to be done independently from the promise of any aid (so as to avoid bias). Key issues:

- a. Where farmers have obtained seed, by crop, prior to disaster, and where they plan to obtain their seed (is this pattern 'normal'; adaptive, or otherwise);
- b. Amounts sown or to be sown, relative to a 'norm'. Are farmers planting more, less or the same as they 'usually do'? (is land area sown 'normal');
- c. Understanding of the 'why' for planting patterns, including changes in crop choice or sowing patterns: are the constraints related to seed or non-seed factors (e.g. labor, security)?;
- d. Some insight into how much money is/has to be used/necessary to access seed (current + next season);
- e. Understanding of key differences among groups (by gender, HH and land size or residency status or type of household head...);

8. **Field evidence needed: Supply side (formal , informal, integrated seed sectors)** (*big issues that have to be assessed*).

The supply side analysis has to include all types of markets (including the informal which are often overlooked) and has to carefully distinguish supply by crop (especially those for the upcoming season). Key issues:

- a. Broad understanding of the different types of markets supplying seed and planting material to farmers for different key crops in current stress period (formal markets, informal, intermediate community-based seed producers- and others);
- b. Broad understanding/analysis of market functioning in stress period- e.g. can market days even be held?;
- c. Analysis of the current and potential supply:
 - a. crop/variety availability,
 - b. price,
 - c. quality
- d. Insights on any particular crops/variety supply gaps.

9. **Critical indicators- if problems/constraints are identified (with explanations)**

There is a need for transparent and specific indicators of any problems or constraints identified. (Use of a seed security framework is one possible tool for investigating these).

- a. Indicators on farmer/demand side (whether availability, access/price, quality. other);
- b. Indicators on the supply side (whether availability, access/price, quality, other) ;

- c. Problems or indicators of disfunction affecting specific crops or seed channels;
- d. Problems or indicators of special stresses among specific client/beneficiary groups.

10. Critical indicators if there are opportunities

There is a need also to examine opportunities, including existing positive trends or possible sources of innovation.

- a. Indicators of new markets, new services;
- b. Indicators of new crops, new varieties (and that they are adapted and accepted by farmers, consumers or traders);
- c. Other indicators of positive farmer strategies (e.g. changing crop profiles or management practices).

11. Analysis- Process (see 7 8,9, 10, content)

Prior to data collection, there should be a plan for analysis. Critical elements include:

- a. Analysis process to be informed by technical subject matter experts and those with in-depth knowledge of the context;
- b. A feedback session to be programmed with range of stakeholders to allow for open discussion, corrections, and strategy for moving forward.

12. Response choice

Beyond gathering evidence, the goal of the assessment is to identify a response strategy and programming plan. While the need for precise evidence has been described above, there is an equal need to link that evidence to choice of response. Both short-term response and medium response should be routinely considered as the disaster or stress context usually encompasses both acute and chronic elements. Also, even in emergency there may be important recovery and development opportunities (refer to indicators in 9 and 10).

Choice of response also has to be informed by the wider enabling or restricting environment: potential barriers need to be identified and addressed. Note that If key barriers cannot be sufficiently lessened, key interventions may need to be modified or stopped altogether.

Short-term, 1-3 seasons

Short-term generally covers the first few growing seasons after the shock and gives attention to both major and secondary seasons. Important items:

- a. The proposed response(s) linked to the current disaster-related problem(s) identified in the assessment;
- b. The response explained in terms of how it alleviates the constraint;
- c. The overall goal of the response selection indicated (e.g. nutrition? resilience? income?);
- d. The beneficiary/client groups being targeted;
- e. The feasibility assessed and key logistics for implementing responses in the time elaborated;
- f. Clear processes explained of how responses will 'do no harm' ;

Medium-term any actions 3-5 seasons

Follow-up programming is usually needed to help address chronic stress and to strengthen seed systems and seize possibly opportunities.

- a. As above in short-term , a-f;
- b. Any repeat of a short-term response justified (with consideration of negative effects);
- c. Planning in the medium term to be based on an understanding of the effects of interventions at the short-term stage;
- d. Leveraging of opportunities, if possible.

FINAL POINT. Assessments should be professionally written up and disseminated to key decision-makers.