USAID
FROM THE AMERICAN PEOPLE

seed system
Strengthening smallholder farmer seed systems

SCALE
Strengthening Capacity in Agriculture Livelihoods and Environment

SCALE Seeds Learning Group for USAID/BHA-funded Programming

Session Three

August 24, 2022

This Seeds Learning Group is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the SCALE Award and do not necessarily reflect the views of USAID or the United States Government.

Recap of Sessions 1 & 2

- **Session 1: Seed System Basics**
  - What is Seed
  - Seed Security Framework
  - Seed Systems Farmers Use
  - Goals of Seed System Work

- **Session 2: The Seed System Assessment (SSA)**
  - Introduction to SSA
  - Websites
  - SSA Content- Demand
  - SSA Content- Supply
  - Responses

Google doc recap: Questions & Recommendations

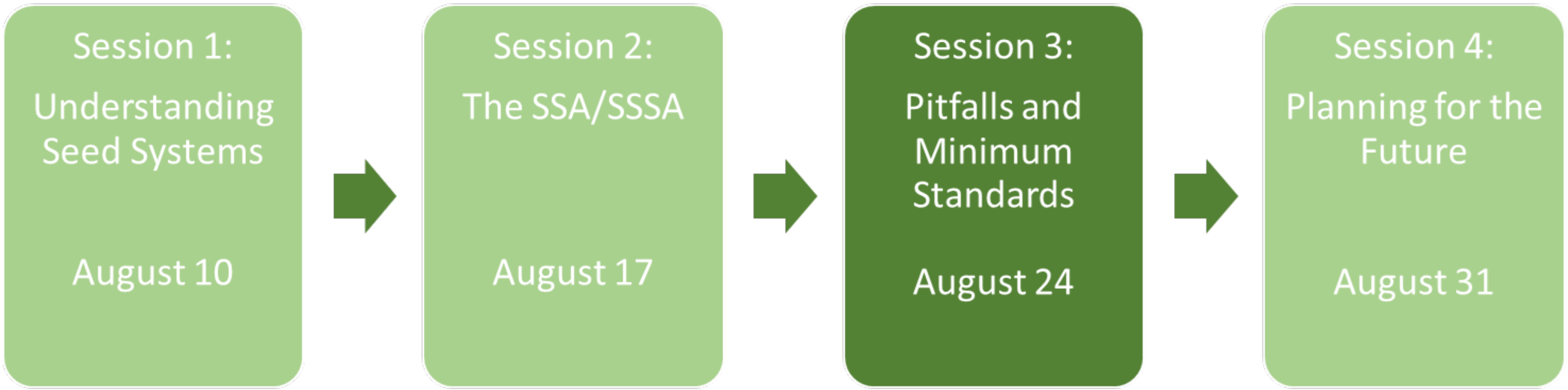
Questions/Comments

Q: Could the resources list come with a bit of an assessment on the specific components that are most useful or can be pulled to supplement related inquiries and information gathering?
The sessions feel a bit too rushed, we don't have a lot of time to share experiences and discuss much which is frustrating because there are so many interesting things we only get to brush

Recommendations

Minimum standards should be just the essentials- what are the very basics (we are all so busy)

Today: Pitfalls & Minimum Standards



Session 3: Pitfalls & Minimum Standards

Today's Agenda

1. Common pitfalls
2. SSA tools and questions
3. Exploration of minimum standards
4. SSA process: what can and should be done
5. Post-session task

Common pitfalls on assessment and response

Examples of common pitfalls

1. **Assuming farmers have no seed at all**, in all channels
2. **Inferior crop choice for DSD**
3. **Overestimating seed needs:** calculating them at 100%, resulting in applicants requesting too much seed
4. **Assuming that all seed must be certified** and that all farmer seed is poor quality
5. **Always doing DSD**, no matter what the problem.
6. **Responding late with seed**, often after farmers have planted
7. **Addressing low access to new varieties almost exclusively via DSD or vouchers** as opposed to small packs / small quantities
8. **Low recognition that farmers are also good seed managers** and building on their skills

Pitfall Activity Instructions: Part 1

- Go to Google doc **Activity 1: Common Pitfalls**
- Read through all 8 pitfalls.
- Think about your own work and put an "X" in the column that represents your experience.
  - Have you **rarely or often** seen this in your work?

Pitfall Activity Instructions: Part 2

- 3 breakout groups. 15 minutes!
- Go to Google doc **Activity 2: Pitfalls Discussion.**
- Find your breakout group's table. Each group will discuss 1 pitfall.
- Assign 1 notetaker to take notes in the table.
- Discuss the pitfall assigned to you:
  - Why does this pitfall happen?
  - Moving forward, what can be done differently to overcome this pitfall?

Feedback from groups

Pitfall # 1: Assuming farmers have no seed at all, in all channels

Why this happens

- Lack of real seed system assessment (SSA)/rush
- Not considering local seed sources
- Assuming farmers can't go to market to get seed

Moving forward

- Conduct SSA
  - Consider all seed sources
  - Consider if farmers can access seed
    - How far is the market?
    - Can farmers afford seed (buy, barter)?
    - Focus on the crops and varieties that farmers need

Pitfall # 2: Inferior crop choice for DSD

Why this happens

- Crops are often chosen if they are linked to easy procurement (i.e., "get what's easy")

Moving forward

- Do crop profiling
  - Determine major crops for upcoming season
  - Determine crop use (community's prime focus—not 'yours')
- Determine seed availability and map seed sources
  - Assess all seed channels: local market, formal sources, social networks, etc.
- If seed is not available, calculate seed needs according to preferred crops

Pitfall # 3: Overestimating seed needs: calculating them at 100%, resulting in applicants requesting too much seed

Why this happens

- No proper assessment and limited knowledge of seed rate calculation

Moving forward

- Recognize that different types of seeds have different calculations
  - Large-seeded crops have higher seeding rates (8-10kg per acre for maize)
  - Small-seeded crops have lower seeding rates (2-3kg per acre for pearl millet)
- Learn about plot size for crops
  - Be sure to know what land sizes you are dealing with (e.g. M^2, acres, hectares)
- Get realistic seeding rate
  - Confirm from literature or key informants in the area of intervention
  - Ask farmers farmers what they normally plant, in local units and convert those to g, kg or tonnes.
- Get number of people/beneficiaries
  - This is normally determined at the proposal development stage
- Figure out % of seed needed (usually not 100%)

Pitfall # 4: Assuming that all seed must be certified and that all farmer seed is poor quality

Why this happens

- Assumption that all seed must be certified and that all farmer seed is poor quality

Moving forward

- Describe processes by which quality is assessed
- Do quick germination tests
- For certified seed
  - Do germination test
  - Check expiration dates
  - Sometimes mobile code texts
  - Ask about storage history and transport
- For informal seed
  - Sample seed/germination tests
  - Visual inspections
  - Consult local leaders (ask about best sources)
  - Have discussion with source participants about how to verify seed in the informal sector

Pitfall # 5: Always doing DSD, no matter what the problem.

Why this happens

- Logistically DSD is easy.
- Often, an organization would only need to procure, distribute and leave

Problem: Repeated DSD can be harmful!!

- It creates farmer dependency on seed aid
- It undermines local seed markets and systems
  - There is high risk of price distortion, particularly if seed is not purchased locally. NGOs may supply seeds at highly subsidized prices that may crowd out local seed traders.
  - Introduction of new crops/varieties may undermine diversity and resilience of the local seed system.

Pitfall # 5: Always doing DSD - no matter what the problem.

Moving forward

- Do SSA
  - For emergency programs, BHA expects an SSA for seed intervention implemented for three consecutive years in the same geography for the same beneficiaries/participants (refer to BHA Emergency Application Guidelines - Annex A)
- There should be deliberate use of local markets for seed procurement
- There should be more effort to promote market pluralism
- Make sure NGOs have knowledge and competence in diverse approaches (use SERT)
  - (Direct distribution/ support to clients: demand/ support to markets: supply)

Pitfall # 6: Responding late with seed, often after farmers have planted

Why this happens

- It is not possible to have a typical DSD timeline as this depends on considerations such as:
  - whether seed is available locally or being outsourced,
  - the quality desired by the organization and
  - volume to be procured etc.

- The length of time is also dependent on the type of distribution planned
  - Cash & voucher based,
  - Restricted voucher,
  - Accommodative vouchers,
  - seed fair etc.

Pitfall # 6: Responding late with seed, often after farmers have planted

Moving forward

- If a program selects to implement DSD, it must consider the approximate DSD timeline of 8-10 weeks to complete the seed procurement process and ensure seed is distributed to farmers at the start of the planting season.

Some clear steps to guide programming include:

- Market survey & identification of venders (2 weeks)
- Setting up agreement with vendors (1 week)
- Signing agreements on supply modalities (1 week)
- Receiving seed supply (2 weeks)
- Dissemination to participants (2 weeks)

Pitfall # 7: Addressing low access to new varieties almost exclusively via DSD or vouchers as opposed to small packs / small quantities

Why this happens

- The rush to get new varieties out fast/ easily without thinking how to do it.
  - A dev failure (availing new varieties of minor crops).
- Lack of understanding of seed systems

Moving forward

- New varieties should only be introduced in dev programs along with technical assistance.
- If you do new varieties in emergencies only do in small quantities & then figure out a sustainable approach (eg through agro dealers or community-based programs where farmers can buy them and get technical advice.)

****New varieties should only been done in emergency with caution****

Pitfall # 8: Low recognition that farmers are also good seed managers and building on their skills

Why this happens

- Assumption that all farmer (informal) seed is of poor quality

Moving forward

- Learn about all the farmer seed quality control practices
  - Most of the seed farmers plant is selected from their own stocks, so it is important to appreciate their traditional seed management practices. If needed, reinforce and enhance their skills own seed selection, management and storage practices

Questions & Discussion

Tools for SSA (SSSA)

Tool Development

- SeedSystem – 2006-ongoing

https://seedsystem.org/

- FAO – 2016

https://www.fao.org/resilience/resources/resources-detail/en/c/282218/

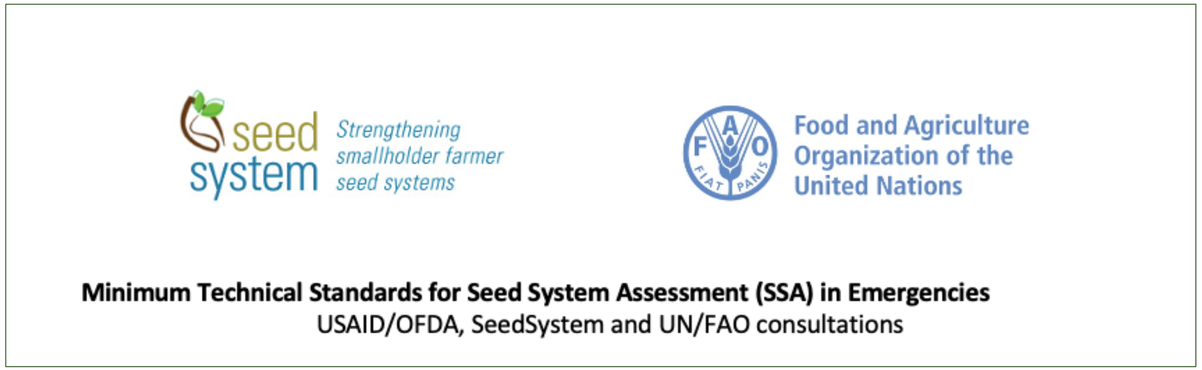
- S34D – 2021-ongoing

https://drive.google.com/open?id=1kwyfzWjsbzFU9vIR2kYckcY1XM-oSmaP&authuser=alove%40mercycorps.org&usp=drive_fs

Tool Comparison (broad brush)

	SeedSystem	FAO	S34D
Actor-Based	X	X	X
	Community (women's group) Household Interview Markets: Formal, Informal, Seed producers Key Informants • Govt and ag officers Gender and vulnerability experts		
Process	All conducted in teams (no current individual expert format)		
Languages	English French (Limited) Arabic	English French Spanish	English
Tool availability	Online E-course	Printed, CD and online	Google drive
Sample sizes	60-80	60-80	12
Formats	Paper Tablet (test)	Paper	Paper Tablet (test)
Country reports in public domain	Routine (SeedSystem)	A few (FAO)	Future? (UN Food Security Cluster)

Your Tool Choice?



2020 - to be updated in Session 3

→ Any tool set that meets Minimum Standards!!!

Minimum Standards for Seed System Assessment (SSA)

Minimum Standards for SSA

- Rationale - promote legitimate and rigorous assessments: specific guidance
- Dates: 2017-2020
- Process of development (round 1):
  - SeedSystem and UN-FAO
  - USAID-OFDA

→ Individual experts - not public consultation

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

A. FRAMING ELEMENTS

1. Brief description of disaster/stress
2. Rationale for specific seed security-linked assessment (the transparent triggers)
3. Place
4. When/timing of assessment
5. Background work (critical elements)
    a. Agricultural seasons
    b. Seed systems farmers use
    c. Preferences

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

B. BROAD CONTENT - WHAT THE FIELD ASSESSMENT HAS TO INCLUDE

6. Methods/processes
    a. how the assessment was done
    b. how analysis was done
7. Field evidence: farmer need/demand side
8. Field evidence: Supply side - stocks available, trends
9. Critical indicators - if problems/constraints are identified (with explanations)
10. Critical indicators - if there are development opportunities
11. Response choice
12. Report written up and put in the public domain

After Session 2 Task was:

Review minimum standards document

seed system *Strengthening smallholder farmer seed systems*

Food and Agriculture Organization of the United Nations

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

Instructions for Activity 3: Minimum Standards

- 3 breakout groups. 10 minutes!
- Go to Google doc **Activity 3: Minimum Standards**
- Assign **facilitator** and **note taker**.
- Discuss these 3 questions:
  - Do you generally agree to the idea of minimum standards for SSAs?
  - Are there ones you want removed from the current list of minimum standards? Why?
  - Are there ones you want added? Why?

Questions & Discussion

Suggested process for modifying the Minimum Standards?

Planning a Seed System Security Assessment (SSSA)

Tools are rapid (How ‘rapid’)?

SSA---------SSSA (seedsystem.org)

- Training
- Fieldwork– actual data collection
- Full data analysis
- Action Plan

3-5 days by site/region

Timor Leste SSSA - Timing in 2013

- Background work, well-before field assessment

- Fieldwork: 9-20 October

- Site-by-site action plans:
  - 12 Oct: Aileu
  - 19 Oct: Ermera, Baucau, Ainaro

- Public Report back: 25 October

- Formal report: December

SSA - Key features

- Desk-based and field-based
- Best done by ‘teams’
- Has been done by single experts but there is no established methodology (???!!!) (gap area)

Facilitated 'Teams'

- Facilitators: introduce tools
  - train on SSA use
  - help organize desk assessment
  - manage field process
  - ensure public feedback
  - ensure concrete workplans
  - facilitate final report (put in the public domain!)

Facilitated ‘Teams’ cont…

- Teams: implementers (who WILL follow-up)
  - Some farming systems expertise
  - Seed specialists
  - Economists (M&E)
  - Gender and vulnerability specialists
  - Ministry/Policy leaders
  - Translators
  - Data entry people
  - Drivers…
  - …

Programming capacity building in assessment has trade-offs

- Assessments by ‘experts’ are quicker
- Assessments which are extractive are quicker

But…

- Capacity building assessments may have more longer-term benefits…people understand seed systems and think about diverse response options, make ‘smarter’ decisions

***Question*:** For your routine assessments (any kind) do you prefer **single experts** or **teams**?

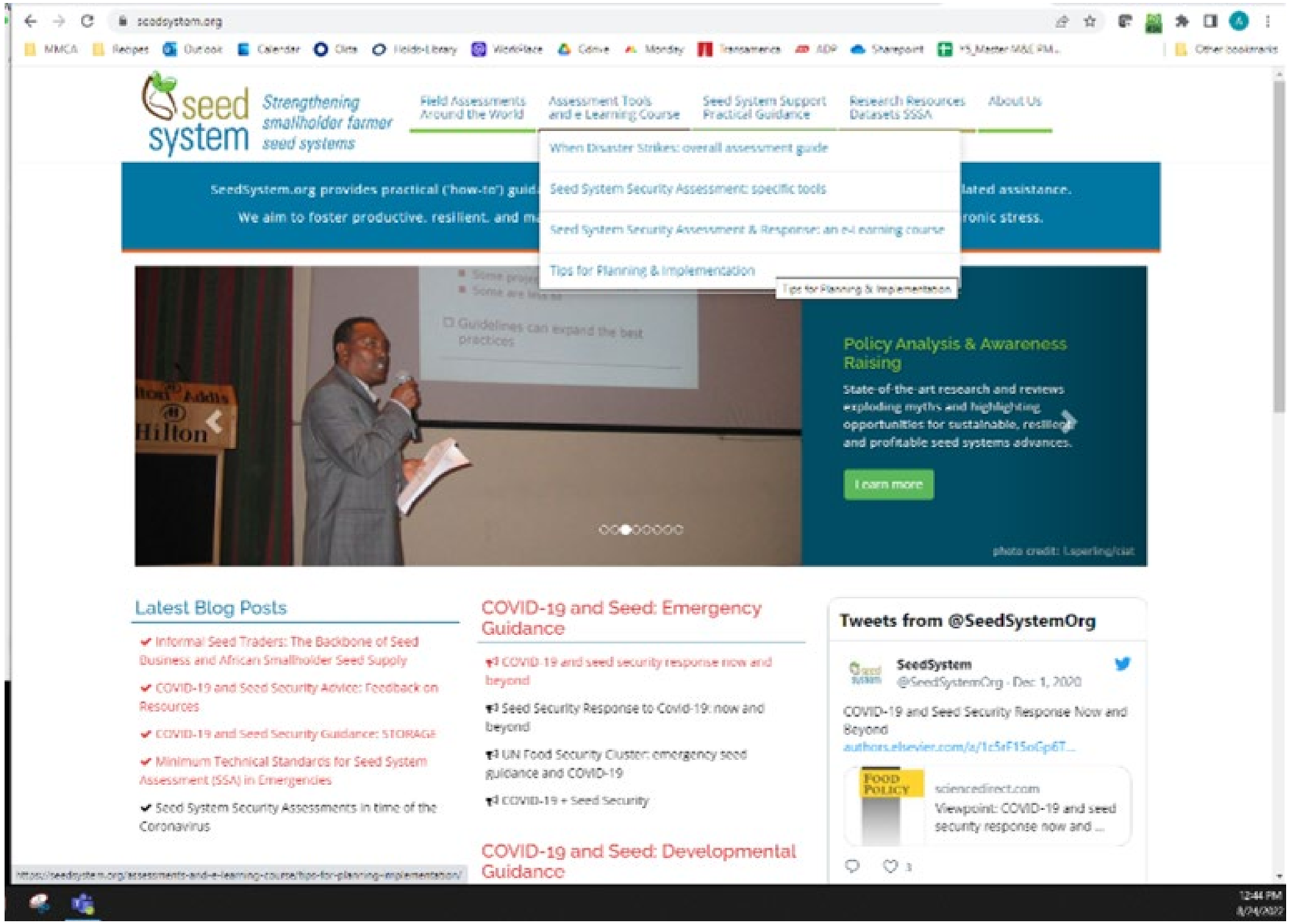
Specific Process Guidance: On seedsystem.org

- Workplans overall (by country/region)
- Workplans day by day (per site)
- Budgets
- Equipment

—----------

- Concept note/introduction
- Launch program
- Background consultancies
- (no overall process guide for any SSA, RSSSA, SSSA, …)

A few unique features of SSSA


seedsystem.org
seed system
Strengthening smallholder farmer seed systems
Field Assessments Around the World
Assessment Tools and e Learning Course
Seed System Support Practical Guidance
Research Resources Datasets SSSA
About Us
When Disaster Strikes: overall assessment guide
Seed System Security Assessment: specific tools
Seed System Security Assessment & Response: an e-learning course
Tips for Planning & Implementation
SeedSystem.org provides practical ('how-to') guid
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COVID-19 and seed security response now and beyond
Seed Security Response to Covid-19: now and beyond
UN Food Security Cluster: emergency seed guidance and COVID-19
COVID-19 + Seed Security
COVID-19 and Seed: Developmental Guidance
Tweets from @SeedSystemOrg
SeedSystem
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COVID-19 and Seed Security Response Now and Beyond
authors.elsevier.com/a/1c5xF15oGp6T...
FOOD POLICY
sciencedirect.com
Viewpoint: COVID-19 and seed security response now and ...
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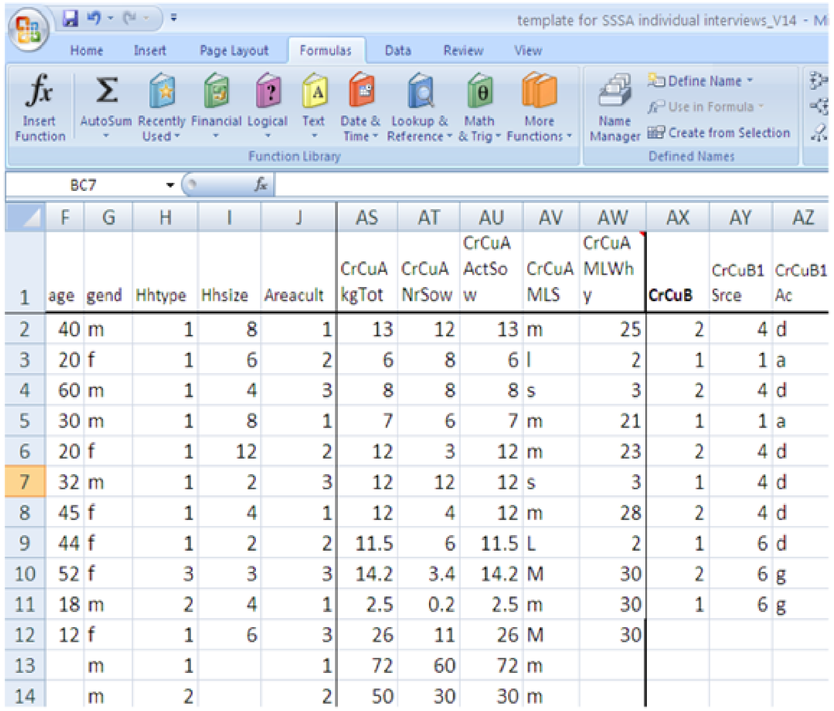
SSSA software automates data analysis, generating instant result tables

Box 2: Data in…



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2	40	m	1	8	1	13	12	13	m	25	2	4	d
3	20	f	1	6	2	6	8	6	l	2	1	1	a
4	60	m	1	4	3	8	8	8	s	3	2	4	d
5	30	m	1	8	1	7	6	7	m	21	1	1	a
6	20	f	1	12	2	12	3	12	m	23	2	4	d
7	32	m	1	2	3	12	12	12	s	3	1	4	d
8	45	f	1	4	1	12	4	12	m	28	2	4	d
9	44	f	1	2	2	11.5	6	11.5	L	2	1	6	d
10	52	f	3	3	3	14.2	3.4	14.2	M	30	2	6	g
11	18	m	2	4	1	2.5	0.2	2.5	m	30	1	6	g
12	12	f	1	6	3	26	11	26	M	30			
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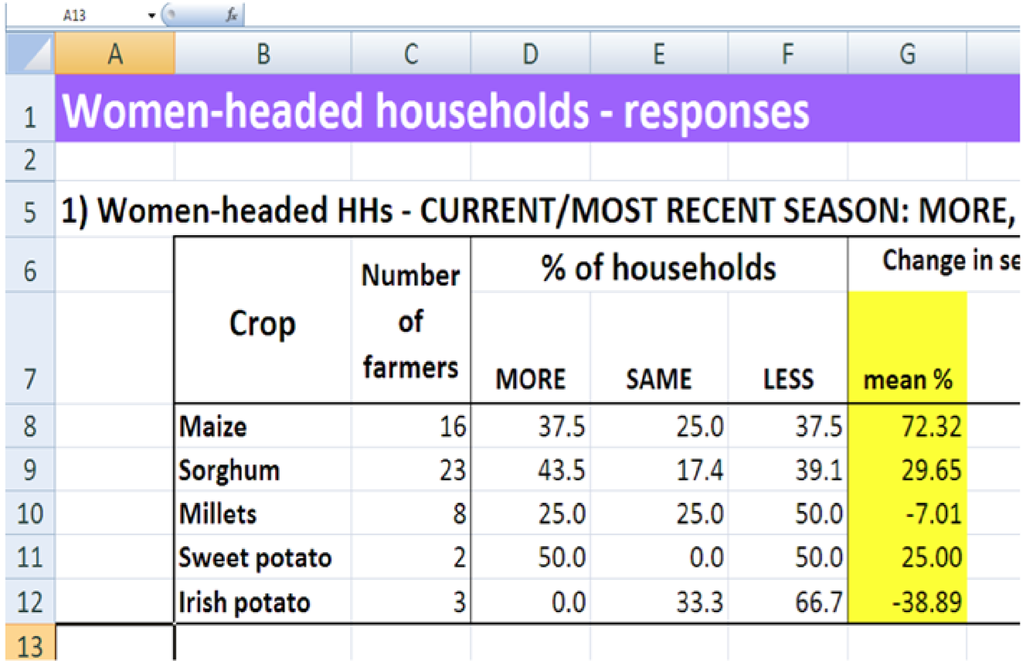
…….Analysis and tables automatically out



Women-headed households - responses

1) Women-headed HHs - CURRENT/MOST RECENT SEASON: MORE,

Crop	Number of farmers	% of households			Change in se
		MORE	SAME	LESS	mean %
Maize	16	37.5	25.0	37.5	72.32
Sorghum	23	43.5	17.4	39.1	29.65
Millets	8	25.0	25.0	50.0	-7.01
Sweet potato	2	50.0	0.0	50.0	25.00
Irish potato	3	0.0	33.3	66.7	-38.89

Ex. from Timor-Leste, 2013 cont…

Average Expenses per farmer, last Season 2013

Key crops	N growing this crop	Spending ($)				
		Local market	Neighbors	Ag-input shops	all purchases	% of total
Maize	58	2.55	0.42	0.00	**2.97**	**32.5%**
Rice	36	1.92	0.73	0.00	**2.65**	**29.0%**
Peanuts	11	3.24	0.28	0.00	**3.52**	**38.5%**
Total		**$ 7.71**	**$ 1.44**	**$ 0.00**	**$ 9.15**	**100.0%**

Ainaro

Next season:
$11.09

Summary: SSA process and tools

1. Evidence-based data
2. Concrete action plans
3. Tools appropriate for diverse scales
4. Tools geared to different informants (on supply & demand)
5. Durable results (assessment linked to action over multiple seasons)
    - Immediate: emergency
    - Short-term planning: 1-2 seasons
    - Medium-term: 3 seasons+

Future work (gaps)

- Adding Seed Security to General Food Security Assessment (like CFSAM)
- One person(s) 'Expert Assessment' (**Surge teams for quickly-developing emergencies**)
- Tablet (android…)-based data collection for all forms
- Remote technical support capacity???

Questions & future recommendations

Summary of the day

- Common Pitfalls
- SSA Tools
- Minimum Standards
- Planning an SSSA

Exercise for next and final session

- If you have an **upcoming SSA, RSSA,** etc., come next week prepared to share when, country, questions/concerns
- Think hard about **needs and gaps you have** and want to share next week related to SSA
- Think about **ideas for next steps for SCALE** in this area (i.e., how can we continue to support you?)

Reminder*: you can always use the shared Google document to add questions, recommendations, etc.*