CROP DEMO GUIDELINES
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CROP DEMO GUIDELINES

The following guidelines have been developed to assist extension staff and farmers to better plan, design and manage crop demonstrations that respond to farmers’ extension gaps. The following are some of the frequently asked questions to be addressed by the crop demo guidelines:

- What is a demo?
- What can we demonstrate on?
- How do we come up with a demo theme?
- Which factors do you consider in determining demo host and field?
- How many treatments should be applied in a demo?
- How do we design demo layout? What is the optimal size for demo plots?
- What should be in a demo record sheet?
- What are the roles and responsibilities of farmers and other stakeholders in the demo cycle?
- How do you interpret demo results?
- What constitutes a comprehensive demo kit?

What is a crop demonstration plot?
A demonstration plot is a field that is used for teaching, sharing ideas and showcasing a proven agricultural practice.

What can we demonstrate on?
- Varietal demos
- Management – e.g. weeding/herbicide application, pests, etc.
- New technologies – CA, herbicides, slow release fertilizer application (foliar & tablets)
- Fertilizer application rates and timing
- Time of planting
- Irrigation methods
- Crop rotation (long term)
- Various climate smart agriculture (CSA) technologies such as in-field water harvesting through the use of e.g. zai pits, infiltration pits etc.
- Improved crop storage technologies.

How do we come up with a demo theme?
- Identify the problem in a particular area. Participatory approaches need to be employed in problem identification. (Farmer-Extension- Research collaboration). Various participatory methods such as focus group discussions, pair-wise ranking, problem tree analysis, among other, can be used to identify problems and farmer priorities.
- Problems can be initially identified by farmers.
- It can also be technology that needs to be transferred to farmers for adoption.
What do we consider to decide on demo host?
- Someone socially acceptable by the community
- Accessible to demonstration stakeholders i.e. physical access
- Literacy level of farmer
- Labour availability
- Farmer should have a passion for farming/technology naturally, with good previous records of good farming

What do we consider when choosing a demo field?
- Have a basic understanding of the history of the field
- Even field (slope etc.)
- Uniform inherent fertility
- Soil should be representative of the area

Do we do treatments in a demo?
- Treatments not, but comparisons
- These comparisons can be repeated on different sites such as traditional vs improved method e.g. fertilizer demo
- Best practices can be used to drive the point home
- Two rates can be compared- the recommended rate vs farmer’s practice
- For example variety demo – Landrace (variety being used by farmers) vs Improved varieties

What size and layout?
- Size 0.1 - 0.5ha
- No designs in demos because it’s not a trial
- Parameters for consideration in positioning a demo include the following: Slope of the land, soil structure, labour availability etc.

What should be in a demo record sheet?
- Location (Ward, village, host farmer, GPS coordinates)
- The theme of the demo
- Plot size
- Plant spacing
- Practices carried out (land preparation, liming, fertilizer/manure application, planting, weeding, thinning, etc.), dates and time taken (labour days) and input quantities,
- Dates for specific physiological stages (germination- 80%, flowering, pegging, silking etc.)
- Incidences like hail and animal damage
- Crop growth stages
- Pests and disease prevalence and control measures
- Rainfall data
- Area, Production and Yield data
- General remarks,
Who are the stakeholders in crop demos?

- Host farmer/community
- Farmer organisations, e.g. ZFU, Commodity Associations
- AGRITEX & other government extension departments.
- Private sector e.g. fertilizer, seed and chemical companies.
- Researchers
- Donors/NGOs/UN agencies
- Universities, colleges and research stations
- Local leadership

Roles and Responsibilities

Farmers/Community

- Assist in developing the theme of the demo.
- Provide the labour & other physical inputs
- Provide land
- Management
- Recording
- Security
- Evaluation

AGRITEX

- Mobilization
- Organizing
- Facilitating host farmer/site identification
- Training & Technical support
- Monitoring and Evaluation
- Documentation & interpretation
- Feedback to research
- NB: Maximum 3 demos per field extension officer including those from other stakeholders (for proper monitoring)

Donors/NGOs

- Financial/Material support
- Technical support

Universities, colleges and research stations

- Development of appropriate technologies
- Provision of information
- Hosting demos
- Training of trainers
- Conducting outreach
- Development of instruction manuals
Interpretation of results

- Consider plot size, attention to detail, effort level, labour, soil type compared to surrounding, level of other inputs etc. when comparing with actual farmer conditions.
- Visual interpretation – community
- Quantitative/qualitative interpretation – Farmer and AGRITEX officer
- Agriculture working group feedbacks
- Review workshops
- Field days (discussion days)
- Documentations
- Generation of extension messages

What should be in a demo kit?

- Tape measures – 50m
- Marking chain (wire – 0.9m, 0.3m, 0.5m, 0.6m, 0.75m)
- Rain gauge
- Soil test- pH meters
- Augers
- Record sheets (capturing all parameters above)
- Harvesting and sampling bags
- Protective clothing (work suit, safety shoes, raincoat, respirator, gloves, gumboots)
- Scale up to 20kgs
- Spraying equipment
- Demo guidelines

The production of these guidelines was made possible through the contributions from the following Organizations, Institutions and Government departments:

- The Department of Agriculture Technical and Extension Services (AGRITEX),
- Food and Agriculture Organization of the United Nations (FAO),
- The Department of Research and Specialist Services (DR&SS)
- Africa University
- Gwebi Agriculture College
- Bindura University
- Rio Tinto Agriculture College