### Developing understanding of the different factors influencing farmers' PH decision-making:

An enquiry tool

**'Small-scale farmer utilisation of diatomaceous earths during storage'** 

### **Background issues:**

- Research has identified many technologies which were anticipated would benefit small-scale farmers, but:
- Too often specific technologies, proven to 'work' by researchers, have not been

widely adopted by farmers.

 Research products have failed to increase productivity or food security for many small-scale farmers in sub-Saharan Africa

# What are some of the problems?

- Poor implementation strategies or capacity (irrespective of quality of extension policy).
- Lack of understanding and/or commitment to donor induced poverty agenda.
- Interface with farmers, or farmers' groups, often skewed (contact/progressive farmers, technology skews)
- Lack of knowledge about farmer diversity and the factors influencing different farmers' (or HHs') decision-making

### Challenges to developing understanding of farmer decision-making:

- Need to develop a **methodology** (or overall 'strategy') to steer the research.
- Specific **tools** needed to undertake designated activities ('tactical' tools).
- Need a plan to link tools, resources & people to methodology within given time framework.
- Who will develop the methodology and carry out research?

### The 'enquiry' approach

Figure 1. Framework for characterising individuation farmers' views on crop production-storage phases, past, present and future Date of fictional visit

 Feb - Mar
 Apr - Jun
 Jun – Jul

 Sowing
 Growing seasor
 Harvest
 Stor

 Storage
 Storage
 Period

 Theme P1: Farmer's description of past/recent
 Theme F1: activities/period

 Sowed S
 Dougname

Theme P2: Farmer's views on crop & storage activity outcomes, compared to 'normal':

times

weddina.

Patchy Maize: 'y' bags germination Planted 'x' hectares harvested

Theme P3: Farmer's unprompted views as to 'factors' behind crop & storage outcomes (e.g. livelihood constraints. PIPs, vulnerability)

Area under cultivation Unpredictab le rains this year. Stores depleted due to 

 Aug – Feb

 Storage season

 Theme F1: Farmer's crop/storage activities/practices in next phase:

 Will store in vinenge (12 pags capacity)

F2 Farmer's assessment and/or plans for the coming phase:

Fears that ASD not working.

Farmer wondering about trying Stocal Super Dust

See 'Livelihoods framework'. Perceptions of 'vulnerability' factors could be contrasted with secondary data (e.g. market prices, weather data and predictive models for dumuzi)



### Storage decision-making will be influenced by:

#### 'Post-harvest' factors

- storage practices (e.g. cultural & technical)
- quantity and quality of grain
- timing & levels of infestation etc.

#### **Farming system factors**

mixture of crops grown
 cash cf food cf fodder crops etc.

### 'Livelihoods' factors

- HH size
- social events (e.g. visits, funerals)
- interventions (e.g. food aid, DE project)
- market prices
- seasonality

# Storage decision-making will be influenced by:

#### Household livelihood systems

#### **Farming systems**

Postharvest Storage system practices Multiple factors associated with household livelihood, farming and storage systems

# Farmer participatory approaches (FPAs)

- Accept that farmers will have or show: > Expectations - team will be seen as people with access to knowledge, techniques, resources etc.
  - Suspicions does the team have ulterior motives?
- Deference farmers may perceive team members as 'superiors'; team member behaviour might reinforce this.
- Courtesy farmers will not wish to offend.

# Farmer participatory approaches (FPAs):

- require trust to be built between researchers and farmers
- recognise farmers as experts in their own knowledge and experience
- acknowledge that both farmers' and team members' knowledge systems merit mutual respect
- respect and esteem farmers' agricultural practices and their way of life
- recognise that the success of the research depends on its relevance and usefulness to farmers, and
- > acknowledge that farmers are therefore entitled to explanations and justification for the research

## An organising principle

- Sustainable Livelihood approach(es)
  takes account of the wider context & complex options confronting rural households
  provides a checklist of important issues and sketches out the way these link to each other
  centre-stages capabilities and resourcefulness of rural people
  - recognises diversity between and within farming households
  - Provides an organising framework within which to structure our enquiry and analysis

### Sustainable livelihood

### framework



### The methodology

To help us develop understand of the factors that determine farmer or household decision-making has been based on:

- Farmer participatory approaches (FPA) - to enable us to learn from farmers
- A sustainable livelihood approach (SLA) - to provide us with an organising framework to facilitate analysis and understanding

# Tools to undertake designated activities

- Wealth ranking to develop profiles of communities
- Exercise to determine relevance of farmer identity 'types' to project outputs, implications of identification & selection methods, and ease of application
- Farmer managed trials
- Enquiry framework and protocol

### **Enquiry framework**

- **Basic interview details**
- FMT details & developments (if FMT farmer)
- Farmer's description of PH (or/and crop production) activities
- Farmer's estimation of PH (or/and crop production outcomes
- Farmer's view on factors influencing PH (or/and crop production) activity outcomes
- Farmer's future plans
- Farmers information network
- HH livelihood strategies
- HH livelihood assets

### **Enquiry protocol**

#### Introduce ourselves

- Refer to earlier activities & project purpose
- Explain specific objective of this enquiry
  - To hear from the farmer how the FMT is going
     To learn from the farmer about factors that influence
  - her/his decision-making
- Explain interviewer and recorder roles
- Focus of enquiry visit covers
  - Post-harvest & storage aspects
  - FMT grains and/or legumes
  - Farmer diversity, including gender & age aspects

### **Emerging Lessons:**

- Despite the limited progress interviews with farmers based on the enquiry framework have thrown up interesting insights
  - Interviewers have been impressed with the information secured from farmers, which for the main body of the enquiry allows the farmer to speak freely
- Merit: can incorporate gender, age & other social stratification
- Merit: applicable to any household, any village
- Merit: adds value methodology relevant even were DEs not to become available, affordable etc.

### **Partially or unanswered**

- Needs 'dedicated' officer (Iz) to ensure timely interviews, standardisation, gaps identified ...
- Identifying suitable MAFS personnel & issues of training.
- Analysis still underway but looking good.
  Divide between public sector research and MAFS Confusion persists - witness remarks about 'intransigent' FMT farmers - about objective of FMTs. It's no longer about having farmers 'ape' research, but a tool to facilitate explanation of farmer decision-making



## **Post-harvest/storage diversity**

