Feed the Future Innovation Lab for Collaborative Research on Grain Legumes

Enhancing Pulse Value Chain Performance through Improved Understanding of Consumer Behavior and Decision-Making

Vincent Amanor-Boadu – KSU
Gelson Tembo – UNZA
Fredy Kilima – SUA
Lawrence Mapemba - LUANR

The BIG Question

Who drives what we do?

Feed the Future Innovation Lab for Collaborative Research on Grain Legumes

---

The Central Role of Choice

Whenever choices exist, decisions arise

"In the absence of choice, there is NO decision"... GLS Shackle

Feed the Future Innovation Lab for Collaborative Research on Grain Legumes

---

The Central Role of Choice

Understanding consumer choice is primary to the overall success of our productivity, health and nutrition objectives

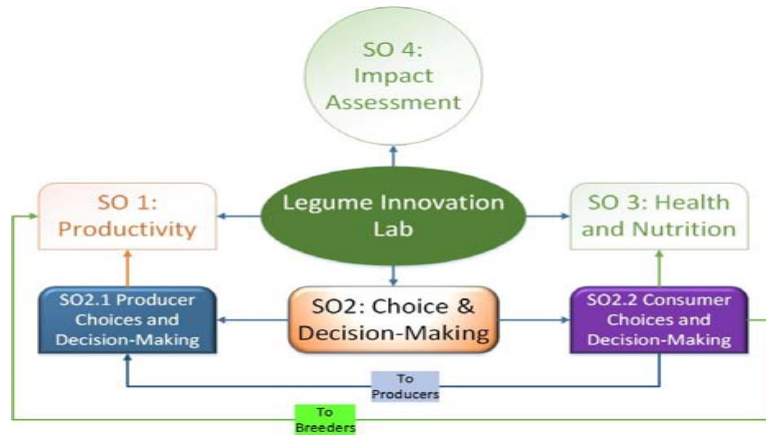– As opposed to assuming that we know!

Two possibilities:

– What we find is congruent with our assumptions ➔ then we are clairvoyant

– What we find is NOT consistent with our assumptions ➔ rethink our entire strategy

Feed the Future Innovation Lab for Collaborative Research on Grain Legumes

Consumers Drive Innovation . . . And If Not, They Should

BUT...

- People (consumers) often do not know WHY they do what they do
- People are more likely to know why they do not do what they do not do
- This calls for careful methods of enquiry
  - If we ask, we will always get answers
    - BUT these may be just that... answers

Our Job / Strategy

- Help the consumers to tell us why they do what they do by
  - Presenting them with alternatives to what they do, and
  - Altering them to trade
- ==> Discrete Choice Experiments

Discrete Choice Experiments (DCEs)

- Discrete Choice Experiments (DCEs) provide a way to elicit tradeoffs among alternatives
  - With roots in Game Theory
- Three major goals
  - State of the situation
  - Food hierarchies
  - Revealed / stated preferences

Situation Analysis

Production and consumption of beans

Using secondary data
- LSMS, LCMS

Feed the Future Innovation Lab for Collaborative Research on Grain Legumes

Food Hierarchies & Revealed/Stated Preferences

Attributes

Attribute levels

Ranking

Feed the Future Innovation Lab for Collaborative Research on Grain Legumes

Three Countries

Malawi (LUANR)

Tanzania (SUA)

Zambia (UNZA) – used as a pilot to streamline and optimize the instrument
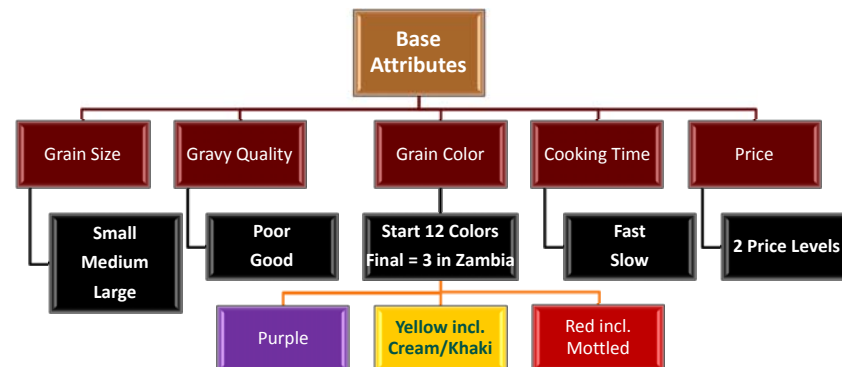
Feed the Future Innovation Lab for Collaborative Research on Grain Legumes

Identifying the Attributes

Feed the Future Innovation Lab for Collaborative Research on Grain Legumes

3

Identifying the Attributes

Attributes & Levels

Base Attributes

Grain Size	Gravy Quality	Grain Color	Cooking Time	Price
Small Medium Large	Poor Good	Start 12 Colors Final = 3 in Zambia	Fast Slow	2 Price Levels

Purple | Yellow incl. Cream/Khaki | Red incl. Mottled

Attributes and Levels

> We will be able to isolate the **elasticity** of these attributes on choice and **rank** them to help breeders and producers make better choices

> With the hope of maximizing commercial sustainability of varietal lines

Human and Institutional Capital Development

- Degree
- Outreach

Human and Institutional Capital Development

```
                 ┌─────────────────────┐
                 │     Human &         │
                 │  Institutional      │
                 │ Capacity Devt.      │
                 └─────────┬───────────┘
            ┌──────────────┴──────────────┐
    ┌───────────────┐              ┌───────────────┐
    │ Degree Training│              │   Outreach    │
    └───────┬───────┘              └───────┬───────┘
       ┌────┴─────┐         ┌──────────────┼──────────────┐
 ┌───────────┐ ┌──────────┐ ┌──────────┐ ┌───────────┐ ┌──────────┐
 │MS in HC   │ │MAB at KSU│ │ Industry │ │Government │ │  NGOs    │
 │Inst.      │ │          │ │          │ │and        │ │          │
 │           │ │          │ │          │ │Parastatals│ │          │
 └───────────┘ └──────────┘ └──────────┘ └───────────┘ └──────────┘
```
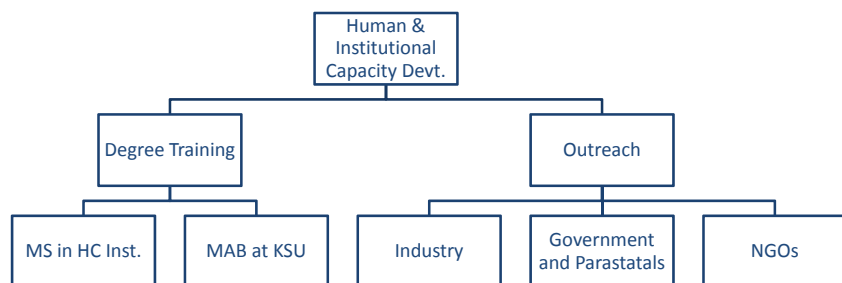
Feed the Future Innovation Lab for Collaborative Research on Grain Legumes

Degree Programs

M.Sc. / MA in host-country institution

MAB at Kansas State University

- Industry focus

Feed the Future Innovation Lab for Collaborative Research on Grain Legumes

Six Students in 3 Institutions in 3 Countries

Country	Name of Student	Sex	Degree Program	University
Malawi	Mazunda, Marynia	Female	M.Sc. Ag. Econ	LUANR
	Moyo, Nyumbani	Male	M.Sc. Ag. Econ	LUANR
Tanzania	Mfikwa, Adelina	Female	M.Sc. Ag. Econ	SUA
	Chenguda, Ocran	Male	M.Sc. Ag. Econ	SUA
Zambia	Pele, Winnie Kasoma	Female	MAB	KSU
	Sichilima, Timothy	Male	M.Sc. Ag. Econ	LUANR

Feed the Future Innovation Lab for Collaborative Research on Grain Legumes

Some Successes from Phase I - Undergraduate

Name	Sex	Degree	Current Status
Chilundika, Natasha	F	B.Sc. Agric.	Rhodes Scholar, UO, UK
Zulu, Esther	F	B.Sc. Agric.	Fullbright Scholar, CMSU, USA
Mzyece, Agness	F	B.Sc. Agric.	Fullbright Scholar, KSU, USA
Samboko, Paul Chimuka	M	B.Sc. Agric.	CMAAE Scholar, UP, RSA
Sunga, Chalwe	F	B.Sc. Agric.	MA Economics, UCT, RSA
Ngoma, Ednah	F	B.Sc. Agric.	Research Associate, Musika
Chishimba, Elizabeth	F	B.Sc. Agric.	Finalizing research papers
Sambo, Jairos	M	B.Sc. Agric.	Finalizing research papers
Nhlane	M	B.Sc. Agric.	Finalizing research papers

Feed the Future Innovation Lab for Collaborative Research on Grain Legumes

Some Successes from Phase I - Graduate

Name	M	Degree	Current Status
Chilala, Conard	M	MA Economics, UNZA	Zambia Revenue Authority
Chiona, Susan	F	M.Sc. Agric. Economics, UNZA	M&E Officer, WFP
Mtchotsa, Lydia	F	MAB, KSU	Design, Monitoring & Evaluation Manager, WVI
Mwansa, Martin	M	MAB, KSU	Regional Manager, Food Reserve Agency
Mwansa, Sosthenes	M	MAB, KSU	M&E Officer, CIP-SSA

Feed the Future Innovation Lab for Collaborative Research on Grain Legumes

Outreach

In-Person

Technology-Mediated Learning

Feed the Future Innovation Lab for Collaborative Research on Grain Legumes