



# Grain or Seed? Sorghum Seed Management Practices by Farmers in Western Kenya



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## Background

Sorghum (*Sorghum bicolor* L. Moench) is the staple food for millions of people in the semi-arid region of the Sub-Saharan Africa and is popular due to its ability to withstand drought. In Western Kenya, striga is devastating problem for sorghum production. Farmers have maintained sorghum seeds through various sources and form of exchanges.

## Objective

Assess the sorghum seed supply system and farmers seed management practices in striga affected areas of Western Kenya

## Methods

A household survey was conducted in 3 districts of Western Kenya, namely Busia, Bondo and Migori using semi-structured questionnaires. Total 181 households of 25 villages in Western Kenya were interviewed. Some participatory exercises were used to construct seasonal calendar and historical timeline.

Interviewing a female farmer



Sorghum specialist observing sorghum seed

## Results

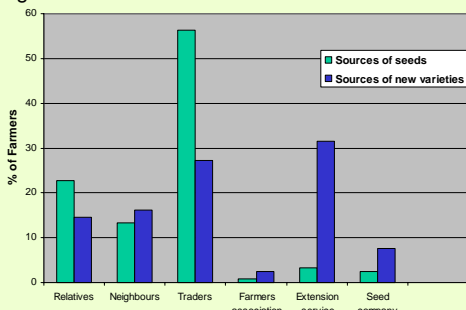
### Farmers' perception on improved variety of Sorghum

More than 85% farmers have heard about improved varieties, while more than 60% of them have planted at least once improved varieties in their field. More than 15% of farmers responded that improved varieties are not superior to the local sorghum varieties. "Improved varieties are not miracles... it needs additional inputs than what we are generally using for our own varieties".

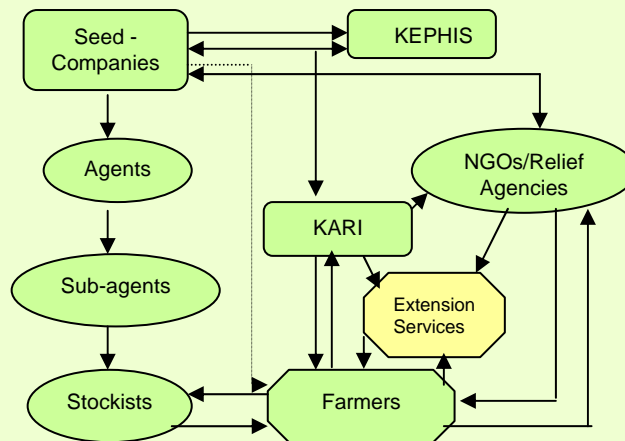
### Sources of seed and new varieties by the household

The majority of the farmers (87%) maintain their own seed. However, one household always has multiple sources of seed. Majority of the households (56%) depend upon local grain market for sorghum seed followed by acquiring it from relatives (22%). Whereas, more than 31% of farmers acquired new varieties of sorghum from government extension services and 27% of farmers obtained from local markets.

Formal seed system in Kenya has complementary role in diffusion of new varieties of sorghum while local seed system has significant role in diffusion of sorghum seed.



Various sources of seed and new varieties of Sorghum



A formal seed supply system in Kenya

### Seed loss is the common phenomenon

The majority (75%) of farmers reported that they have experienced seed loss at least once during last 10 years of time. More than 40% of farmers mentioned that they were unable to keep their sorghum seed for more than two cropping seasons. They obtained the seed from relatives, local markets, relief programs etc. once they could not keep their own seed.

## Conclusion

Majority of farmers maintain sorghum seed from their own retained seed. In addition, they acquire it from local grain markets, relatives, neighbors and relief programs, when it is lost due to drought, striga or once it is eaten up. Whereas formal seed supply system in Kenya complements the new sorghum variety introduction.