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Grain or Seed? Sorghum Seed Management Practices by Farmers in *Striga* Affected Area of Western Kenya

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Abstract

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. The parasitic weed *Striga hermonthica* is a major constraint to sorghum production in semi-arid SSA. Yield losses due to *Striga* can be up to 100%. *Striga*-resistant Sorghum would be an important component of integrated *Striga* control if resistance was bred into locally adapted Farmers Preferred Sorghum Varieties (FPSVs).

The study was conducted in Kenya in April 2006. The study analyses the existing situation in the sorghum seed sector and the stakeholders' perception on seed and seed management in western Kenya, one of the worst *Striga* stricken regions. Participatory methods were used throughout the study with the aim to obtain information from the participants on indigenous knowledge, cropping systems, seed management and Sorghum seed supply system.

Local sources of seed varied with farmers receiving new varieties of Sorghum through inheritance from their families, gifts and by exchange with relatives and neighbouring farmers as well as from the neighbouring villages. It was established that most farmers have a clear distinction between seed and grain and they carry out specific and deliberate activities to select and preserve seed for sowing. More than 85% farmers saved their own seed where as 15% obtained seed from the relatives, neighbours, local markets and sometimes from the government extension services. They select healthy looking panicles before harvest, thresh, dry, treat and store them in a prescribed manner. For various reasons more than 5% farmers have experienced inability to keep their Sorghum seeds time to time before the sowing season and have had to purchase from traders in the local markets. This factor has contributed a lot to the fluctuation in prices of both sorghum seed and grain throughout the year and sorghum is most expensive during the sowing period.

The study recommends how the *Striga* resistant FPSVs can be integrated into the existing seed supply system either formal or informal.

Keywords: plant breeding, seed management, seed supply system, Sorghum, *Striga*, Western Kenya