Commercialisation of quality gadam sorghum for increased food security and household income in semi-arid eastern Kenya

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Enhancing production of high quality gadam sorghum grain for beer brewing: application of appropriate pre- and postharvest handling techniques at farm level

This is achievable if all stakeholders embrace teamwork at all levels
Production and sales of high quality gadam sorghum grain can bring—
- Increased food security
- Increased household income
- Better family nutrition
- Improved family health status
- Improved living standards

For this to happen, ensure that—
- As gadam sorghum plants grow and mature, rogue all diseased and off-type plants from the plots
- Gadam grains do not produce milk when pressed between fingers (readiness for harvesting)
- Do NOT feed diseased plants to livestock

Readiness for grain harvesting should be checked at the top, in the middle and at the bottom of the grain head
A gadam sorghum head infested with long smut (*Sphacelotheca reiliana*)

A farmer points the head of an off-type sorghum plant

- Dry and burn all diseased sorghum plants or throw them in pit latrine
• If one cannot access fresh seed, before harvesting, select well filled disease-free heads from the middle part of a gadam field for the following season

• Sun-dry and thresh the heads, then the seed. Treat the seed with recommended fungicide (seed dressant) such as Murtano. Keep dressed seed safely, away from the rest of harvested gadam sorghum grain

• Do NOT select heads with black glumes for seed. Seed from such heads are likely to segregate if grown the following season.

• Aggregated grain must be stored in jute bags on raised racks. There should be no direct contact with cemented floor
- After harvest, the heads should be dried in the sun for at least 2-3 days and stored in a clean store ready for threshing
- Thresh the sun-dried heads on a plastic sheet/ canvas or locally sewed jute bags
- Winnowing must be done to remove all inert materials including broken grains, storage pests, soil and dust
- Threshed gadam grain should be sun-dried for at least 2-3 days before to attain the required moisture content of 10-12% before packaging in 90-kg jute bags
- Packaged gadam grain should NOT be treated (dusted with Actellic Super). It will be the responsibility of the buyer (Smart Logistics) to treat any aggregated grains if need be
- Do not use sisal gunny bags to avoid possible grain contamination through soil
- Farm gate prices is KES 17 per kilogramme
- Demand for gadam is ever increasing
- East African Malting Company (for EABL) requires more than 10 million tonnes of gadam

A heap of harvested gadam sorghum heads being sun-dried on a canvas sheet