

CONCEPT NOTE

GRAIN HANDLING AND STORAGE

WHERE: UGANDA / EAST AFRICA

PARTNERING CSO: DANCHURCHAID

In Uganda, an estimated 40 – 50% of the produce harvested is lost due to fungal attack, pests, poor processing methods and contamination. FAO estimates even put the economic losses up to 75%.

This loss is mainly brought about by poor or lack of post-harvest treatment and suitable storage facilities.

Business case

Agricultural production in Africa is still predominantly rain-fed, non-market oriented and based on rudimentary technologies. As a result the produce is often of low volume and poor quality, not the least due to poor post-harvest treatment and lack of proper storage facilities.

Many farmers place their produce on the floors of their houses and in traditional structures called granaries, or they keep it in the open using verandas and shades.

Because many do not dry their produce to the right moisture content (even the few that manage to store it in granaries) it is being infected with fungus and thus becomes unfit for human consumption.

Though the potential market is very big – the total production of maize, millet, sorghum and rice in Uganda alone is more than 3 million tonnes per year – the above problems have not yet been addressed on a bigger scale most likely due to lack of proper infrastructure in rural areas (especially power supply) as well as lack of funding.

But if simple low cost solutions based on renewable energy can be developed, there are many development agencies, financial institutions and NGOs who will be willing to provide funds and introduce the technologies locally.

Expected output

This initiative envisages the development of:

1. A simple and flexible/movable drying system based on renewable energy and with a capacity for handling produce from a typical village.
2. A low cost grain storage facility capable of keeping the produce fresh for 2-4 months by aeration and pest control. It does not necessarily have to be a building or similar infrastructure – if the produce is well dried it could be stored in e.g. big bags.

DanChurchAid's role

Identification of an appropriate project area and mobilization of farmers.

Further linkage to relevant local stakeholders and markets, and training of farmers in post-harvest handling and storage management.