## Abstract

Smallholder agriculture is the mainstay of Tanzania’s agricultural production, but the lack of storage facilities and marketing channels has caused huge waste of agricultural products after receipt, and informal marketing arrangements have also disadvantaged farmers. We proposed a plan of integrated model of warehousing and processing to help local people increase their income by developing storage and sorghum processing industries in Singida area, and radiate this benefit to the surrounding areas.

## Problem Statement:

Agriculture is the lifeblood of Tanzania's national economy, and smallholder agriculture is the mainstay of agricultural production, accounting for more than 80% of the cultivated land used [1]. In the Singida area, due to climatic conditions, sorghum is grown on a large scale. However, for a long time, Tanzania's agricultural production has been an extensive business model with low input and low output, the added value of the product is very low. Most agricultural products processing activities are almost entirely carried out manually by women. The product is also in lack of sales channels.

Moreover, the shortage and unreasonable use of storage facilities resulted in huge post-harvest losses, which accounted for approximately 15%-20% of the total post-harvest losses. For farmers with excess grain, the existing household level storage of grain for commercial purposes has a high unit cost and is susceptible to the influence of buyers, middlemen and agro-processors. Although community warehousing has been greatly promoted in the past decade, most of these warehouses are underutilized. This can be blamed on informal marketing [2]. At the same time, the damage caused by storage pests, including rice borers and rice weevils, is also serious. About 16% of farmers believe that this is the most important factor causing food losses. The survey results show that the lack of knowledge and skills of farmers in post-harvest management is also an important cause of food waste [3].

## ~~Background?~~

## Solution

We hope to take advantage of the geographical advantages of the Singida area to develop storage and food processing industries and radiate to the surrounding areas. Establishing granaries (or transforming existing granaries) can alleviate waste. Establishing sorghum processing plants that are closely linked to these storage facilities to process sorghum into beer and other products can increase the purchase of sorghum and provide stable sales channels, increase added value, create more employment positions, and make the products easier to sell, thereby boosting the income of farmers and workers. Our plan seeks to attract investment by establishing cooperative relations with business partners, and strive to achieve a virtuous circle with all parties.

Reference:

[1] <http://www.agri.cn/V20/ZX/sjny/201811/t20181113_6283410.htm>

[2] <https://www.canr.msu.edu/fsp/news/Paper_2.1._FAO_Cephas_Taruvinga.pdf>

[3] <https://core.ac.uk/download/pdf/82311085.pdf>