

Innovate UK

UK Research and Innovation

Department for International Development

# STOVERPACK Creating a new value proposition for maize stover in Uganda

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Agri-Tech Catalyst Round 7- Agriculture and food systems innovation

Innovate UK funded with support from DFID-18 month feasibility study starting in 2019

A UK- Uganda collaboration with five partners, investigating the transfer of expertise in pulping technologies and biobased food packaging

# AGRICULTURE IN UGANDA

2.51

#### **30-40%** POST HARVEST LOSSES

30-40% of fresh produce is wasted through postharvest losses, rising to 60% for tomatoes resulting from the use of sub-optimal packaging materials.

### 80% of CROP STOVER

80% of the dry weight of harvested crop is material used for fuel, livestock feed and mulch, known as "stover". There are currently no higher value outlets for the maize stover.

#### 40% MAIZE CALORIES CONSUMED

Maize is the most important cereal crop, providing over 40% of the calories consumed in rural and urban areas.

## 84% LIVE RURALLY

32.7 million Ugandans live in the rural areas accounting for 84% of the population. 82% of the workforce are employed in agriculture with women accounting for 4/5ths.

EMPLOYED IN

AGRICULTURE

4/5<sup>THS</sup>

WOMEN

HE STOVERPACK VALUE CHAIN





Two million Ugandans counting on maize as their main source of income, with maize making up 40% of all calories consumed.

#### Maize Is harvested and separated from stover

Maize is harvested with 80% being stalks, leaves, husks, and cobs. 89% of this is used as crop mulch with the remainder used as fuel (8%)

#### Portion of stover turned into packaging

A proportion of this material destined for use as crop mulch is diverted to produce efficient, high quality, biodegradable food



# Packaging used to reduce post-harvest loss and generate revenue

- > Income streams developed from maize stover for farmers and female led smallholdings.
- > Post-harvest losses are reduced resulting in increased income for farmers.

and animal feed (3%).

packaging.

> Environmentally friendly packaging can be developed for the retail sector.



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