

# **Agriculture Food Authority**

## **Shows and Exhibitions Innovations**

### **Innovation 3**

#### **Introduction**

#### **JUICE PULPER (MINIATURE JUICER)**

This is a domestic agricultural machine used to process fruits and vegetables such as; Tomatoes, Mangoes, Quavers, Pineapples, Pawpaw, Passion Fruits, Palms, Oranges, Lemons, Waterlemons, Carrots. It is show cased at the Jomo Kenyatta University of Agriculture and Technology (JKUAT) within the Food Technology Centre (FOTEC).

FOTEC operates as an innovation center that produces several products for sale at the JKUAT and the main clients are students and staff who work at the University. FOTEC processes Yoghurt, Jam, Juice, Wheat products, sauces and juice concentrates. FOTEC would like to expand and be able to provide training facilities for students and also to be able to supply products to the surrounding community and also to the larger Kenyan market.



#### **How it works**

Before the processing begins the fruits are peeled before being sliced into smaller pieces. They are then put into the pulping machine for pulping after which the pulp is pasteurized. It is then cooled to the required temperature then packaged for sale as unprocessed pulp or processed further to other products.

To make the juice, the pulp is mixed with other ingredients such as sugar, water and preservatives in the right ratios depending on the type of product then, packaged. The machine can process about 300kg of a value added product per day.

### **Need**

Experts estimate that approximately one-third of all food produced for human consumption is lost or wasted, hence post-harvest crop loss emerges as a leading cause of food insecurity for millions of farming families worldwide. Value addition and food processing are key aspects that can be employed in alleviating this phenomenon as they boost produce's shelf stability such that whenever there is glut, these perishables such as vegetables and fruits are processed and preserved and can be used later

Value addition and produce processing are key aspects in reducing postharvest losses in the country and hence boosting food security

Reduce exploitation of brokers who buy raw fruits and vegetables at low prices.

### **Cost**

The Juice Pulper costs Sh. 150,000 and is robust, portable, works a single phase motor of 1.5 horse power and the spare parts are locally available. The payment for the machines can be done in installments through the Food Technology Centre.

### **Contact**

Manager of Food Technology Centre (FOTEC), Jomo Kenyatta University of Agriculture and Technology

### **AFA Potential Areas of collaboration**

Market linkages: Linking farmers with Food Technology Centre in a bid to be trained and buy the juice pulper in order to reducing postharvest losses as well as exploitation of brokers who buy raw fruits and vegetables at low prices