

Why Mango Flour?

Malnutrition is mainly a result of lack of enough proteins, carbohydrates, vitamins. Vitamins have the least options of storage. Vitamins mainly come from fruits and vegetable which are perishable. Most of Fruits are seasonal. Mango is a highly perishable and seasonal fruit. The Mango fortification flour therefore makes vitamins available through-out the seasons especially for the local households who lack enhanced means of storage.

Possible Markets for the Mango Fortification Flour

Nutritional Value of the Mango Flour		
Calorific value	(Kcal/g)	6.41
Vitamin C (Ascorbic acid)	(Mg/g)	0.220
Moisture	%(W/w)	9.98
Acidity (Acetic acid)	(gm)	0.068
Sugars	%(W/w)	1.30
Fibre	%(W/w)	2.6

Products



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Mango Flours For Healthy Societies

*Production of Mango Fortification Flour
from Kitui County been done by:*

**Kitui Development Centre (KDC), Mumoni
and Kyuso Organization for Rural Development
and Active Participation (MUKY-ORDAP) and
RISE-Kenya**

Supported By:



Introduction

ORIGIN OF MANGOES

Mango origin can be traced from India in Indo-Burma around 4000 years ago. Introduction of the mango to East and West Africa and subsequently to Brazil is said to have occurred in the sixteenth century. Mangoes productivity holds a great potential to improve farmer's livelihoods. Depending on the variety, the time from flowering to maturity is 100-150 days. Under good management 400-600 fruits per tree per year can be produced. Yield range is 10-16 ton/ha 4 depending on management, variety and age of orchard. In the case of improved varieties, fruits can weigh 0.3 – 2 kg each.

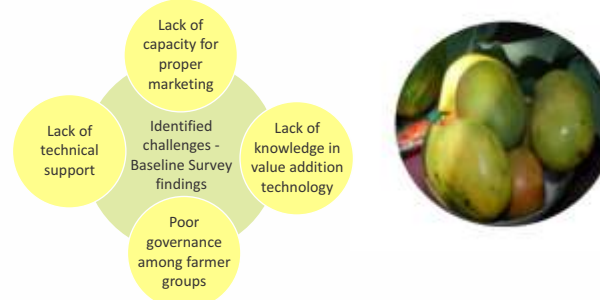
Despite this potential, mango farmers in Kitui County have not been able to exploit it together with various markets that exist for mangoes and its products. This background underscored the necessity of the intervention "Enhancing climate resilience and nutrition uptake through the fortification of corn flour with locally produced high nutrition value crops (mango)" been implemented in Kitui County by Green Africa Foundation in Partnership with NETFUND and funded by IGAD.

The goal of this project is to improve quality of life of the drylands communities in Kitui County through increased income earned from mango fruits and enhanced nutrition for all. The project purposes to improve value addition to mango fruit through mango powder technology while increasing tree cover to mitigate climate change effects.

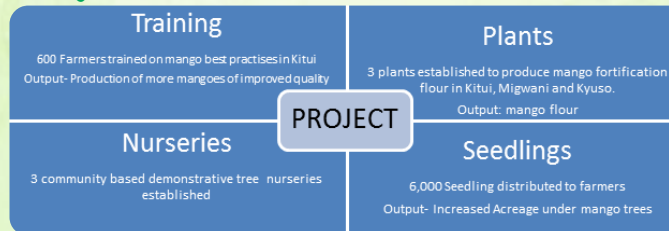


Project Structure

Baseline Findings



Project Milestones



Guiding Facts

- Kenya tree cover stands at 6.2% (World Agroforestry Centre) Climate change effects in Kenya are evident
- Poverty headcount ratio at national poverty lines stands at 45.9% (World bank)
- More than 1m people remain food insecure in Kenya.
- More than 242,046 children are suffering from moderate acute malnutrition (MAM) and severe acute malnutrition (SAM) (UNICEF)

N/B There is an opportunity for agro-industries to improve the above status

ABOUT THE MANGO FLOUR PRODUCERS

Kitui Development Centre (KDC), Mumoni and Kyuso Organization for Rural Development and Active Participation (MUKY-ORDAP) and, RISE-Kenya are both Community led organizations with their aim of implementing initiatives that add value to both the quality of human life and the environment. They were identified and selected for the project through the baseline survey.

Kitui County has both edaphic and climatic factors suitable to Mango farming. Based on the baseline survey done, 71% of households depend on small scale farming for livelihoods.



Why Processing?

The study carried out revealed;

- Poor harvesting techniques of mangoes
- Lack of proper mango storage facilities and poor harvesting techniques leading to high losses by the farmers.
- Only 2% of the farmers processing or selling mangoes for processing
- Lack of application of any preservation techniques
- Most of the mangoes being sold at the local markets.
- Lack of awareness of both nutritional and economical value of Mango