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# Farmers' Strategies and the Constraints of Organic Fruit Drying in Uganda

## INTRODUCTION

Fruit drying in Uganda is a recent activity and in 2005, Uganda exported only 30 mt of dried organic fruits (mainly pineapple, mango, apple banana and papaya) while the total world demand for dried organic fruit was estimated at 164,000 mt. There are more than 185,000 ha of land under organic system and with the current market demand there is a huge room for growth. It is necessary to assess the strategies of fruit driers and the constraints associated with drying in order to realise the potentials of this sector in Uganda. The study was carried out in Kangulumira sub county of the Kayunga district of Uganda.

## METHODS AND METHODOLOGIES

A total of 36 questionnaires, 14 semi-structured interviews and participatory rural appraisals (PRA) exercises with a heterogeneous group of farmers were carried out in order to understand the strategies behind fruit drying in this region.

## CONCLUSIONS

- Farmers have developed a variety of strategies which rely mostly upon market and labour availability.
- Fruit drying is a value addition and a key to economic empowerment of women and a strategy for utilising cheap fruits during harvesting season.
- Un-affordability and lack of proper and better driers; low price of organic dry fruits are major bottlenecks for fruit drying.

## RESULTS AND DISCUSSION

Figure 1. Strategies of fruit drying farmers

**Family**

Median age farmers around 50 years old with several children

**Farm historical evolution**

The parents migrated and have shifted from coffee to pineapple and live close to a dry fruit exporter.

**Family Project**

Grow and dry fruits organically (or buys from others) for selling to dry fruit export company or sell as fresh. Women mostly do the drying while staying at home

**Assets**

- Dried fruits have a fixed price all year round.
- Can dry small size pineapples which have no value in local market
- More return during peak pineapple season
- Can store dry fruits for selling later
- Women and old age male farmers are involved

**Strategy**

**Objectives:** To get more income by drying pineapples and papaya during peak season and sell as fresh during off season.

Drying fruit is an off-farm activity that supplements the income from the farm and allows avoiding renting more land

**Decisions:** Dries fruits when it's cheap and plenty. Also buys from other farmers. Sells as fresh during off season when price of fresh is high in regional markets.

During other times, works in the field-weeding and turning the soil

**Constraints**

**Land:** Insufficient amount of land to produce fruits for drying

**Labour:** Need to hire labour for slicing and cutting

**Capital:** Expensive to buy a drier

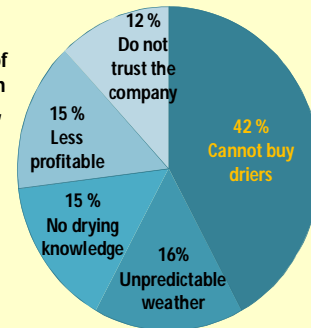
Low price for dried fruits

**Other factors:** Bad weather affects drying, cannot dry whole year round.

Only one company buys the dry fruits, hence monopoly.

Organic farming is expensive and difficult

Figure 2. Constraints of fruit drying in Kangulumira, Uganda



Most farmers are new settlers and hence they do not hold large land areas (between 2-4 acres). These farmers dry organic fruits mainly pineapples, papaya and jack fruits. They either grow the fruits in their plot (80% of farmers) and/or buy from other farmers (20% of farmers). They usually have a small plot of land where they grow food crops for home consumption.

There are many women (53% in the survey) and old age farmers involved in fruit drying as it does not require extra physical strength (Fig 1). Men grow pineapples and other crops in the field while women slice and dry the fruit in the house. This result contradicts the findings of Hine and Preety (2007) in the Iganga district of Uganda who found gender equity was a serious limitation to organic agriculture development in Uganda and affects labour deployment and allocation of resources.



Farmers dry the fruits during peak season when the price of fresh fruit is cheap and difficult to sell. Norman (2003) reported that the lack of assured markets affects production of fruits in Africa and when there is a bumper crop; growers find it difficult to sell their fresh fruits.

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Unpredictable weather patterns and high product losses during drying were two important constraints for dried fruits that Agona et al (2000) also identified in Uganda. Moreover, farmers did not get money instantly from fruits and they cannot take small amount of dried fruits to the company as the transportation is expensive.