



How to bring more fruit into people's diets

Insights from
Atsimo-Atsinanana

KEY MESSAGES

- Low awareness among rural population for nutritional benefits of fruit
- Fruit consumed only during short periods right after harvest
- Training women in papaya and pineapple farming can increase availability of fruit
- Drying lychee is common, but can be up-scaled with collective solar driers
- Promoting the practice of drying mango can help to extend fruit availability





Low levels of fruit consumption

Daily consumption of fruit is recommended to everybody. Insufficient intake is associated with higher risk of stroke, obesity, and certain types of cancer. Generally, fruit include many nutrients, vitamins and bioactive compounds that are crucial for human health, growth, and a strong immune system.

Smallholder farmers in Atsimo Atsinanana enjoy a favorable climate for cultivating many types of fruit. However, many farming households too rarely consume fruit throughout the year. In February 2020, for example, 9 % of women and 45 % of young children did not eat any fruit rich in pro-vitamin A, such as mango and papaya. This vitamin is important for developing and maintaining good eyesight.

Mango and lychee production is common among smallholder farming households, and many farmers also grow pineapple, orange and collect guava. But these fruits are consumed only during short periods of time, right after harvest. Because fresh fruit cannot be stored for long and farmers lack cash to buy fruit at the market, many households do not consume any fruit during large parts of the year.

Challenges

The agro-climatic potential for fruit production in Atsimo Atsinanana is underexploited. Farmers could produce larger quantities, higher quality, and greater diversity of fruit. This deficit has multiple reasons, relating to dietary habits, market dynamics, cultural norms, and farmers' agronomic skills.

- The local population has limited interest in consuming fruit. Many people consider fruit a snack for children, rather than an important element of a healthy diet.

- There is only weak awareness for the health benefits of eating fruit. Many people are aware of the importance of eating 'rainbow food', but only think of vegetables, not fruit.
- There is little opportunity to generate income from selling fruit. After harvest, many producers compete on markets by selling the same types of fruit, leading to low prices.
- In most farming families, the land is owned by men. Growing perennial fruit trees is culturally seen as a men's activity, but women are responsible for the family diet.
- Existing fruit trees, including many mango and lychee trees, are not well managed. Productivity remains below potential because farmers see little incentive to invest into pruning, fertilization, and renewal of plantations.

Opportunities

Diversifying the diets in Atsimo Atsinanana permanently will need a cultural change in the appreciation of fruit. This is important, but will also take much time. In the short run, three strategies can help to increase the integration of fruit in local people's diets:

- 1. Short-cycle fruit cultivation at the homestead.** Women often spend large portions of their day at the homestead busy with household chores, such as preparing meals and caring for chickens. Many women have already expressed interest in better access to fruit. Non-woody, short-cycle fruit species, especially papaya and pineapple, can be managed by women and men in close proximity to the homestead. These fruit species do not require large investments, yield quickly, are at low risk of theft, and do not compete with field crops.





2. Improved lychee drying. Many lychee-growing households are familiar with the technique of conserving lychee fruit through open sun drying. But this is usually only done at very small scale, to gift dried lychee to friends and family. Drying lychee fruit in large quantities is risky, as rainfalls can disturb the open-air drying process. As a result, a large share of the lychee production remains unused, and the population hardly uses dried lychee as an ingredient in family meals. Solar dryers can be established and operated at village level, where farmers can safely dry and conserve large amounts of lychee for up to one year.

3. Mango drying. After harvest time, large amounts of ripe mango go to waste because they cannot all be consumed in fresh state. Drying mangos for longer-term preservation is uncommon in Atsimo Atsinanana, but is a simple process that is already successfully practiced in other regions. The dried mango can be stored for multiple months without losing taste, and can be an important source of vitamins during the lean period.

RECOMMENDATIONS

- Farmers may need new skills to successfully cultivate papaya and pineapple at the homestead. Targeting women with **technical trainings** can help to build these skills. But also, locally suitable planting material should be made widely available.
- Farmers may need to receive technical trainings to increase the quality and productivity of their mango and lychee trees. In addition, **promoting greater varietal diversity** in local fruit trees (for example, diverse types of mango) can help to increase produce diversity on local markets. This may mitigate the competition between producers, which currently pushes down market prices.
- Establishing **collective solar driers**, for example together with women's groups, can help increase the availability of dried lychee and mango for family diets. These groups need clear rules for the operation and maintenance of the solar drier.
- Drying mango is simple, but farmers may need **demonstrations and technical trainings** to learn the process.
- Both men and women should be sensitized about the benefits of frequent fruit consumption for the health and wellbeing of all family members. Greater use of dried lychee and mango in household diets can be promoted by **developing locally acceptable recipes** together with local people.

Accord-M project:

Accompanying research for nutrition-sensitive development in Madagascar

Authors:

Sarah Tojo Mandaharisoa, Alexandra Konzack, Denis Randriamampionona, Irmgard Jordan, Stefan Sieber, Jonathan Steinke

Contact: jonathan.steinke@hu-berlin.de

This research was supported by
Deutsche Gesellschaft für Internationale
Zusammenarbeit (GIZ)



Supported by

