



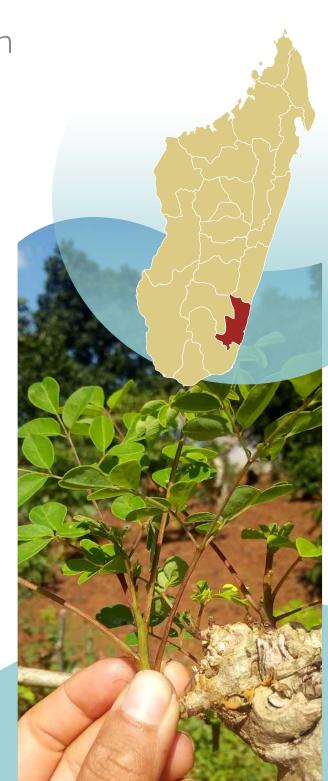


—Promoting moringa consumption and production

An opportunity for the Atsimo Atsinanana region

KEY MESSAGES

- Moringa has potential to improve the nutritional situation of the food-insecure population
- Dried moringa leaf powder can be used to add important nutrients to any dish
- Missing awareness about nutritional benefits currently limits moringa consumption
- Farmers are willing to produce if market demand increases, but need technical trainings
- Availability of a professional powder processing facility expected to stimulate market demand, consumption and production



Moringa could greatly improve the nutrition of food-insecure population

The Atsimo Atsinanana region is among the least food secure regions in Madagascar. More than 80 % of rural households are considered food insecure. The leaves of the *moringa oleifera* tree have the potential to support the rural population in dealing with this nutritional situation. Moringa trees grow well in the regional agro-climate, and the leaves are rich in vitamin C, vitamin E, provitamin A, iron, calcium, potassium, magnesium, and protein.

Currently, the plant is used by the local population mostly for medicinal purposes, and consumption is not widespread. Although the agroclimatic conditions of the region are favorable for moringa cultivation, production remains low, as market demand is weak. Moringa is mainly grown in home gardens where plants benefit from household waste as fertilizer. Some producers also use cattle manure. For pest control, most farmers use ash.

Both production and consumption of moringa leaves are relatively rare activities. But they could be scaled significantly to improve the nutritional situation of the local population. Effective scaling of the moringa value chain will require simultaneously addressing multiple barriers.

— Challenges

In Atsimo Atsinanana, the potential of small-scale moringa production is underexploited. This has multiple reasons, mostly linked to low awareness and weak consumer demand.





- ➤ The rural population has only limited awareness of the nutritional benefits of moringa. As a result, few households use the leaves in their diets, and few farmers are interested in growing moringa.
- ▶ It is difficult to obtain moringa on local markets. Most households that do consume moringa either produce it themselves or receive leaves from their neighbors. The difficulty to access moringa hinders wider adoption by interested consumers.
- ➤ Farmers lack technical knowledge on the management of moringa plants and processing of harvested leaves, leading to low yields and suboptimal quality of products.
- ➤ Fresh moringa leaves are not available throughout the year.

 The leaves fall off during the months of July and August,
 which reduces the opportunity to consume moringa leaves.

 Few farmers have the capacity to process leaves into storable products.
- ➤ Some people do not enjoy the taste of boiled moringa leaves.

 Many households prefer processed moringa powder, which
 can be added as a supplement to dishes. But powder is more
 difficult to access than fresh leaves, as there are no commercial processors offering this service.



- Opportunities

Although there are many challenges, there are also important opportunities for promoting the moringa sector in Atsimo Atsinanana.

- 1. Interest of farmers and willingness to learn. The study showed that there is a general willingness and interest among local farmers to grow moringa. For this to be effective, farmers have suggested that technical support and agricultural inputs need to be more easily available.
- 2. Moringa powder for easy integration with local diets. Dried moringa powder can be easily added to any dish or meal without the need for additional cooking, and it still contains significant nutritional value. Many consumers prefer moringa powder over alternative processed moringa products. With an industrial-style processing facility, powder can be produced and packaged safely and at low cost.
- **3.Awareness campaigns linked to the medical application of moringa**. Some people consider moringa a medicinal product, rather than a regular food item. For example, some consume moringa leaves to regulate blood pressure. This existing awareness about benefits of moringa is a resource that can be harnessed. Campaigns can highlight that moringa can support a long and healthy life in many different ways for everybody.

RECOMMENDATIONS

Effective interventions to promote the use of moringa will likely need to take an integrated value chain approach. Activities need to target different stakeholders to support and promote production, processing, and consumption.

- ➤ Raising awareness among the local population on the nutritional and health benefits of moringa products may increase consumer demand. **Sensitizations about moringa** can be integrated in farmer field schools, at health facilities, over the radio, or through promotional market stands. Growing demand on local markets will possibly stimulate production.
- Providing trainings on moringa production to interested farmers. Supporting the distribution of high quality planting material will likely be useful, for example through lead farmer networks.
- ➤ Supporting the processing of fresh leaves into powder by **establishing small, local processing plants**. Professional processing can create a high-quality product at low unit cost. This product will face consumer demand, and the demand may then encourage production. Processing facilities could be set up in collaboration with local mills, agri-boutiques, or farmers' or women's groups.
- ➤ Development of a **value chain platform** including producers, processors, sellers and consumers. This platform would facilitate communication and information exchange between the different types of stakeholders. Regular meetings help to coordinate the different needs and align investments to ensure a constant supply of moringa to local consumers.

Accord-M project:

Accompanying research for nutritionsensitive development in Madagascar

Authors:

Murielle Florence Randriamaharivo, Alexandra Konzack, Irmgard Jordan, Denis Randriamampionona, Stefan Sieber, Ionathan Steinke

Contact: jonathan.steinke@hu-berlin.de

This research was supported by

Deutsche Gesellschaft für Internationale

Zusammenarbeit (GIZ)



Supported by

