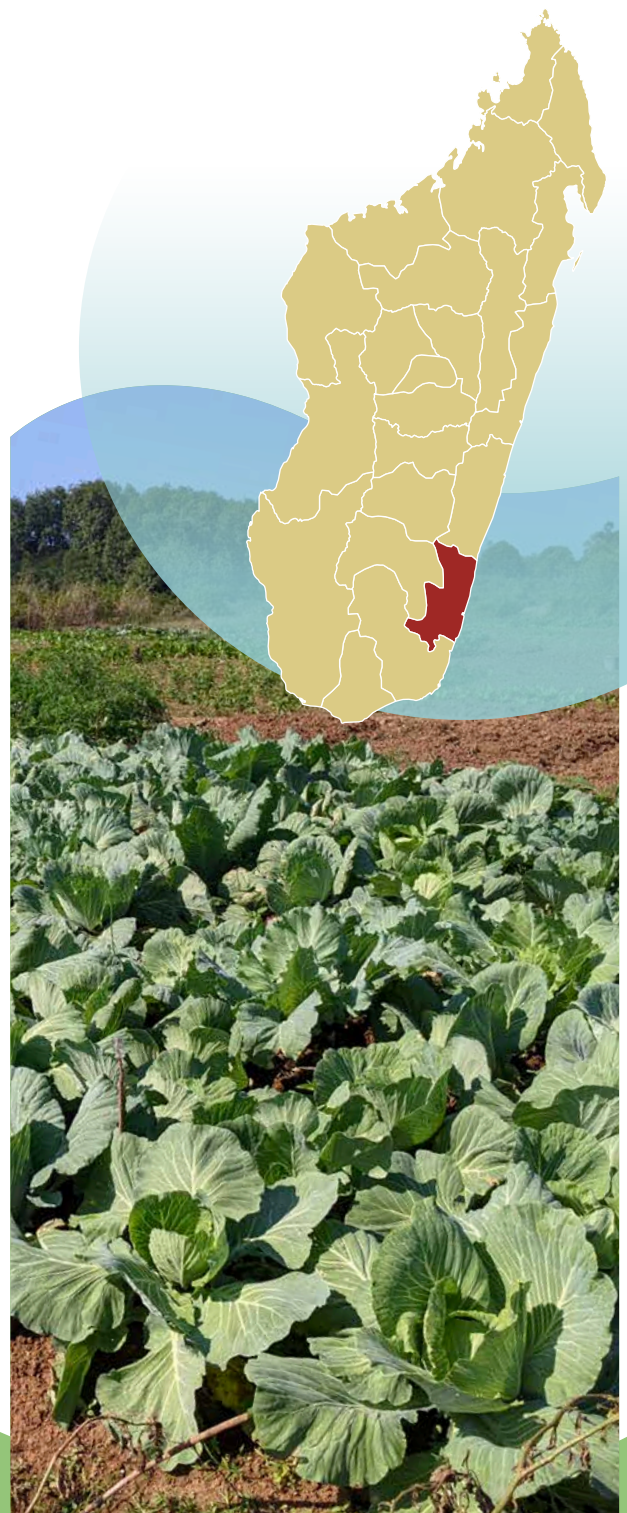




Promoting local vegetable production in Atsimo Atsinanana

KEY MESSAGES

- ▶ Currently, low production and limited diversity of vegetable production in the Region
- ▶ Low level of awareness for the importance of diverse vegetable consumption
- ▶ Interest of farmers to increase the cultivation area and extend the growing period into off-season
- ▶ Vegetables can be grown on cultivation bunds of rice fields
- ▶ Modern, short-cycle varieties increase the number of harvests per year
- ▶ Farmers will welcome improved ability to sell the produce at bigger markets





Low diversity of vegetable production

Farmers in Atsimo Atsinanana typically emphasize staple crops, such as rice and cassava, as well as export crops, such as coffee or vanilla. Vegetable production is considered a secondary activity by many farming households. Vegetables are often managed by women farmers in home gardens or at the *tanety*. These vegetables are typically used to add different tastes to the family diet. Commercial production is limited to villages near urban centers.

Vegetables are sources of vitamins, minerals and other bioactive components that are important to human health. Consuming diverse vegetables every day is recommended to both adults and children. A large diversity of vegetable species gets cultivated in the region already, including petsai, black nightshade, cabbage, eggplant, onion, tomato, as well as various pulses. But the space near the homestead is usually limited. Therefore, most rural households in Atsimo Atsinanana produce and consume only low quantities and low diversity of vegetables. But there are different opportunities for increasing the area, the diversity and productivity of local vegetable production.

Challenges

Multiple technical and social barriers currently challenge the production of diverse vegetables on rice fields.

- By tradition, rice fields are typically dedicated to rice cultivation, only. Many farmers are hesitant to deviate from this tradition.

- Some rice fields are far away from farmers' homesteads (up to three hours travel time). This increases the risk of theft, and means that regular care for the vegetable plot is time-consuming.
- On local markets, demand for vegetables is weak, and bigger markets are too far away for rural farmers. Without good commercial potential, few farmers are willing to invest into diverse vegetable production for subsistence use, only.
- Vegetable cultivation is culturally considered a women's task. But in most communities of Atsimo Atsinanana, women do not inherit land of their own. This means that women need to seek approval from male family members to cultivate vegetables anywhere.

Opportunities

Increasing the diversity of local vegetable production will likely require greater awareness among rural households for the health benefits of consuming more diverse vegetables. This may result in greater market demand for diverse produce, as well as creating greater incentive for diversifying the subsistence production.

Already, many farmers have expressed interest in increasing their vegetable output. Farmers are generally interested in expanding the cultivation areas as well as extending the cultivation period into the off-season. Vegetable plots need to be





at low risk of theft and flooding, and avoid extreme exposure to sunlight. Where land is available, *tanety* plots near the homestead can be used. Three major opportunities emerge:

1. Modern, short-cycle varieties with greater drought and pest tolerance can help to extend the growing period into the off-season. In September, rainfall and irrigation water become increasingly limited. Using short-cycle varieties and thereby increasing the number of harvest cycles per year may contribute to farmers' diets and incomes.

2. Agroforestry systems combine vegetable production with fruit tree cultivation. Agroforestry at the *tanety* can bring multiple benefits. The presence of trees generally creates a cooler, shadier, and more humid micro-climate that expands the growing period of vegetables further into the dry off-season. In addition, the leaves can be used as organic matter to protect the soil from erosion.

3. The top of cultivation bunds within and around rice fields can be used for additional vegetable production at small scale. Especially at rice fields that are close to the homestead, the bunds could serve to grow legumes and small leafy vegetable species. Here, women and men farmers can both care for the crop.

RECOMMENDATIONS

- ▶ Many farmers are not well aware about the importance of consuming diverse vegetables. Increasing both men and women farmers' **awareness and knowledge about the benefits of consuming vegetables** is important to motivate production. At the same time, cooking demonstrations can help to familiarize people with formerly unknown vegetables.
- ▶ Remote vegetable producers can be offered better access to bigger, more lucrative marketplaces (e.g. Vohitromby, Vohilava, Mahandroa intersection) by establishing a collective bus that leaves at dawn at affordable cost.
- ▶ Farmers may need to learn new techniques and knowledge to be able to grow vegetables on the cultivation bunds of rice fields. In **Farmer Field Schools and technical trainings**, farmers can be trained on these innovative ways to increase their vegetable output. These sessions can also be used to introduce a greater diversity of crops, such as potato, radish, or peas.
- ▶ Enabling **access to modern agricultural inputs**, especially seeds and fertilizer, is a priority. The effective distribution of certified inputs at village level can be supported by training local entrepreneurs and supporting the establishment of local agro-vet stores with affordable credits.

Accord-M project:

Accompanying research for nutrition-sensitive development in Madagascar

Authors:

Arielle Sandrine Rafanomezantsoa,
Alexandra Konzack, Irmgard Jordan,
Denis Randriamampionona, Stefan Sieber,
Jonathan Steinke

Contact: jonathan.steinke@hu-berlin.de

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



Supported by

