

“This project Agroecological Transition, Responsive Extension Approaches (ATREA) is funded by the Federal Ministry for Economic Cooperation and Development (BMZ), co-funded by the European Union (EU) and supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).”

Policy brief

Responsive Extension Approaches for Agroecological Transition in Madagascar

Background

According to the FAO¹, agroecology is the science of applying ecological concepts and principles to manage interactions between plants, animals, humans, and the environment for food security and nutrition. All over the world farmers already apply this approach, which has a fundamental pillar in traditional and local knowledge.

In the case of Madagascar, since its introduction in the 1990s, agroecology has experienced steady growth. Today, Madagascar has enacted a law on organic agriculture, which represents a significant step for agroecology at the institutional level. This will indeed integrate agroecology into value chain considerations. This is demonstrated notably by its inclusion in the national strategy for promoting agribusiness, as well as through the ongoing development of the national strategy for organic agriculture.

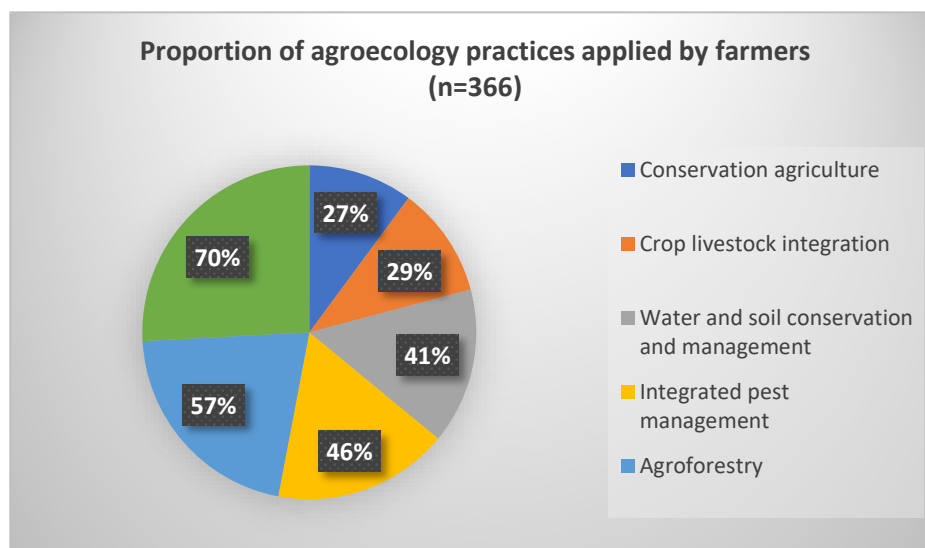
However, it should be noted that since the 2000s, this evolution of agroecology has been primarily driven by non-public actors, especially in terms of agricultural advisory services and extension. Indeed, the withdrawal of the state from the agricultural advisory and extension system has left a gap. The dissemination of agroecology, even in a general sense, has therefore been largely supported by projects, NGOs, farmers' umbrella organizations, and the private sector for the past two decades. However, in response to the observed shortcomings, Madagascar has relaunched its Directorate responsible for agricultural extension and advisory services since 2023. This has also involved the ongoing development and updating of the national strategy for agricultural extension and advisory services in Madagascar. At this stage, Madagascar is bringing together favorable factors to strengthen the dissemination of agroecology, hence the development of this policy brief to contribute to the discourse.

This policy brief provides evidence-based information on the Agroecological Transition, Responsive Extension Approaches (ATREA) project is funded by the Federal Ministry for Economic Cooperation and Development (BMZ), co-funded by the European Union (EU) and supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), and implemented by the African Forum for Agricultural Advisory Services (AFAAS) and Madagascar Country Forum.

Agroecological practices applied by farmers

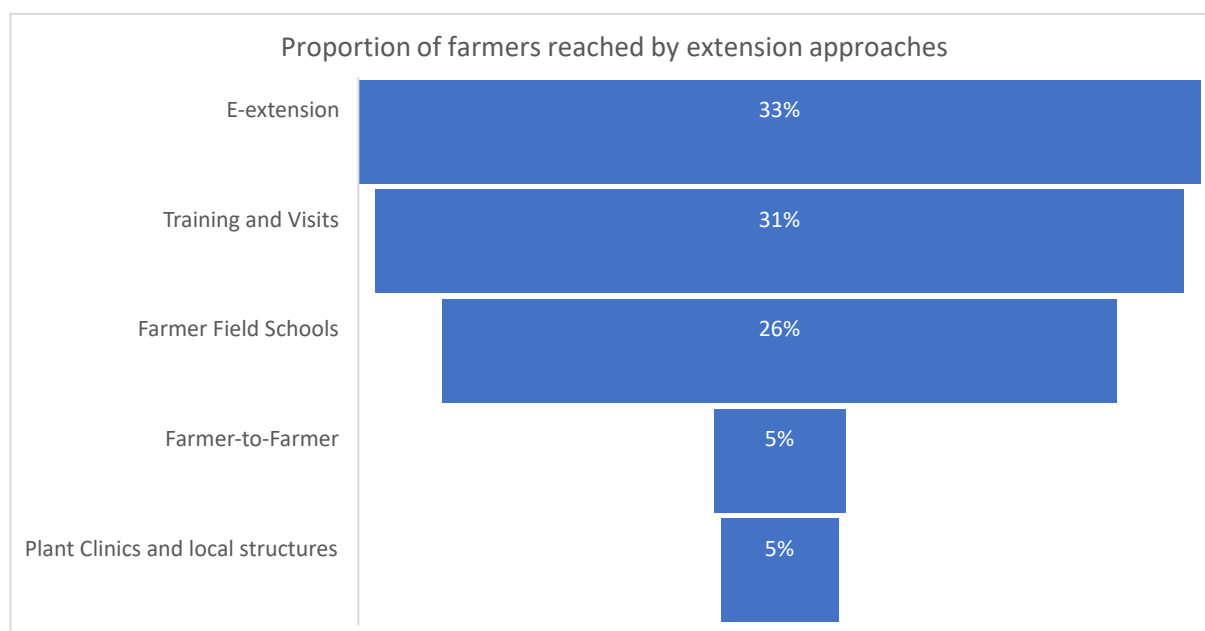
¹ <https://www.fao.org/agroecology/knowledge/practices/en/>

In Madagascar, a variety of agroecological practices are observed. Crops rotation and intercropping (70%), Agroforestry (57%), and Integrated pest management (46%) practices are the most prevalent, while Crop and livestock integration (29%) and Conservation agriculture (27%) practices are less common.



Extension approaches commonly used to reach farmers with agroecology information

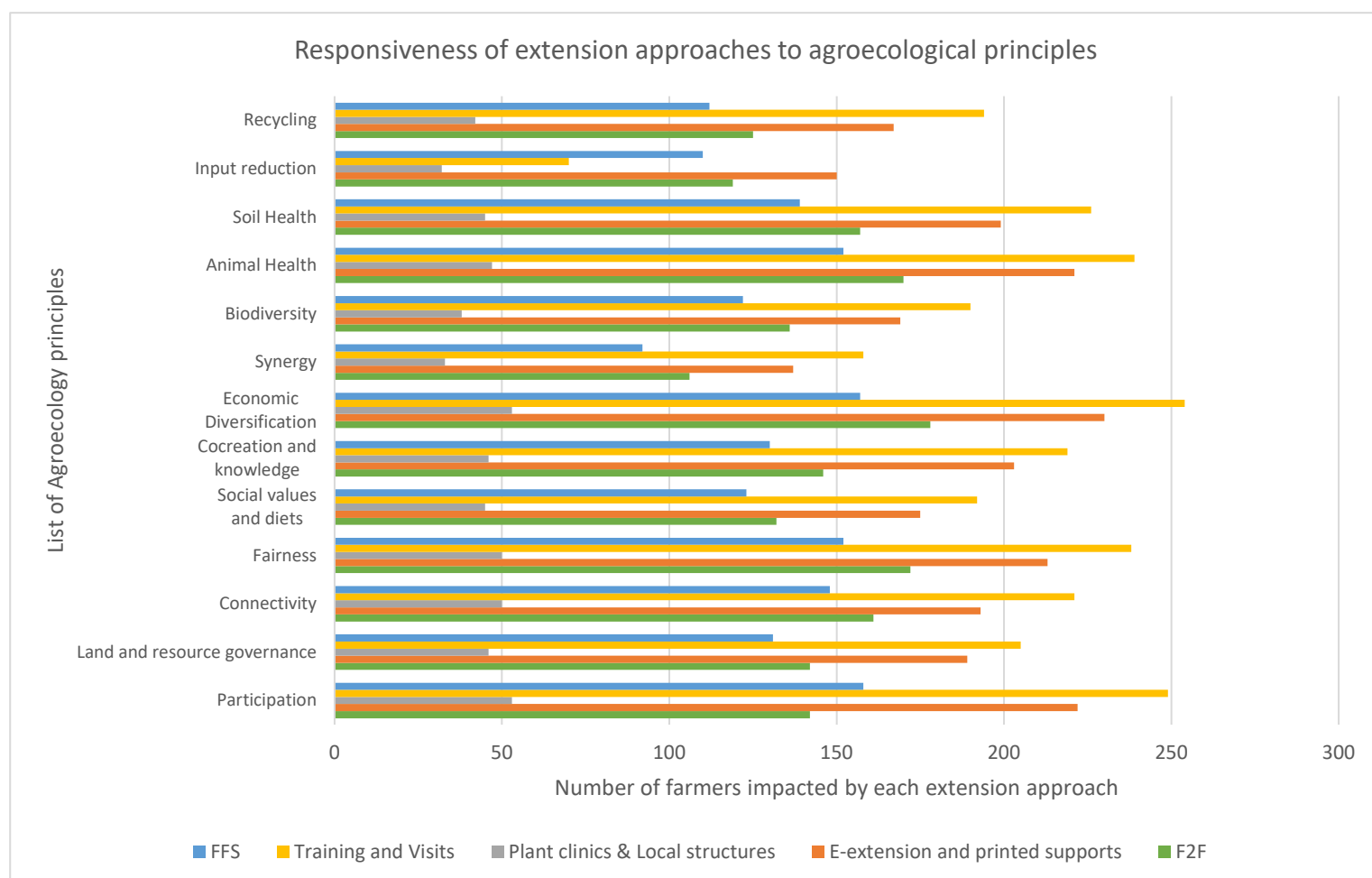
In the framework of the Global Programme "Soil Protection and Rehabilitation for Food Security (ProSoil)" implemented by GIZ in Madagascar the extension strategies focuses on, farmers are reached by a combination of various extension approaches from e-extension (during the community video screening event) to training and visits (can be conducted by



technicians from partner NGOs or by farmer leaders), and including farmer field schools (under the lead of a farmer leader).

Responsiveness of extension approaches to agroecology principles

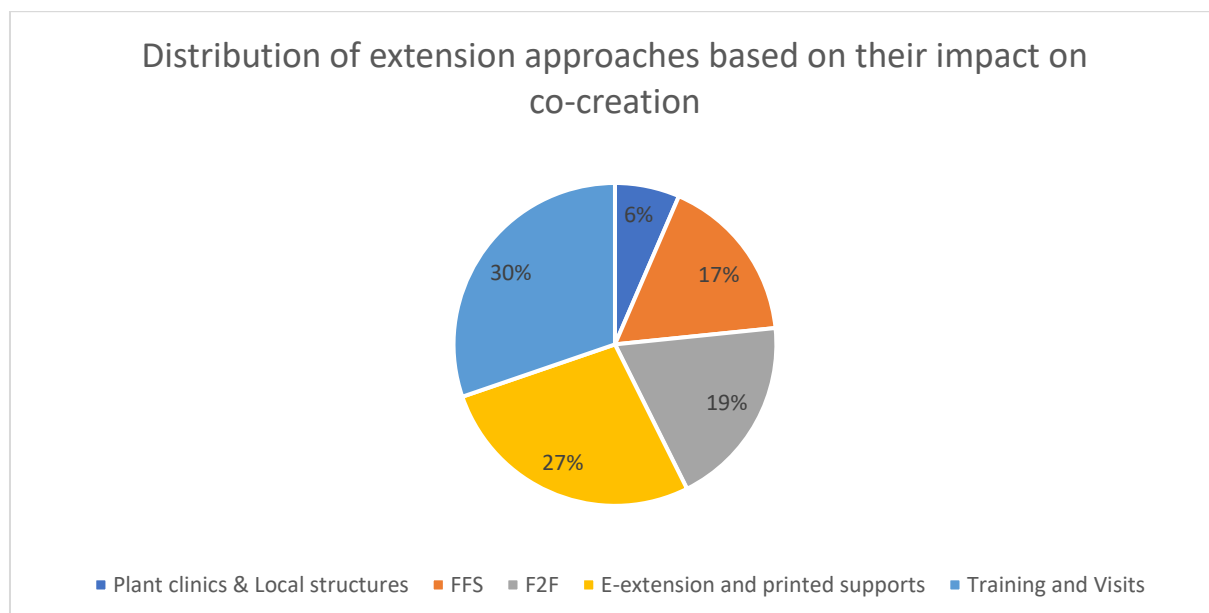
Among extension approaches, "Training and Visits" and "E-extension" stand out for their significant impact on agroecology adoption. Their widespread dissemination among farmers and emphasis on community engagement contribute to increased participation and connectivity. Although "Farmer-to-Farmer" and "Farmer Field Schools" are valued and effective, they require further reinforcement to reach more farmers effectively. Conversely, "Plant clinics and local structures" exhibit lower efficiency, primarily due to limited development at the local level.



Knowledge co-creation on agroecology through extension approaches in Madagascar

In our research, the primary facilitators of agroecological knowledge co-creation are 'Training and visits' and 'E-extension', owing to their widespread adoption. These methods encourage extensive community engagement, promoting interaction among stakeholders. While 'Farmer to Farmer' and 'Farmer Field School' show potential, their community-level development is

still limited, necessitating enhanced farmer leadership and improved management of community demonstration plots. Conversely, 'Plant clinics and local structures' exhibit minimal representation, mainly due to their limited capacity and local-level presence.



Recommendations

The ATREA study allowed us to gather relevant data on the promotion of agroecology in Madagascar. It allowed us to clearly identify the incentives and the constraints in the adoption of agroecology for farmers. Furthermore, through this project, we were able to bring together farmers, extension agents, and researchers for a policy dialogue. This dialogue enabled us to confirm aspects of our study, but it also provided an opportunity to learn from the experiences of other agroecology stakeholders.

According to these various data and exchange, the recommendations will therefore focus on the sustainability of agroecology extension by promoting local solutions:

- Developing and strengthening the skills of extension agents, whether from the public or private sector, on key topics such as agroecology, enhancing the capacity of farmer organizations, training farmer leaders, and e-extension.
- Enhancing local capacities and promoting local and sustainable approaches such as farmer-to-farmer and farmer-field schools.
- Facilitating access to agricultural inputs by ensuring the easy availability of seeds, biofertilizers, and biopesticides to promote agroecological practices and encourage farmer participation in training. This can be achieved through government support mechanisms as well as by establishing community-managed input dealers and promoting the use of local materials and equipment.
- Promoting the support of farmer leaders in becoming rural entrepreneurs, such as input dealers, or by encouraging income-generating activities.
- Establishing community-managed information points in intervention areas to enhance access to information and benefit from digital agricultural services.

- Strengthening public-private partnerships in promoting and disseminating agroecology, particularly in agribusiness for a market-driven approach.
- Facilitate exchange and co-creation between producers, extensionists, and researchers by establishing an effective platform for communication and collaboration. This will help pilot and coordinate the implementation of the national Agricultural Extension and Advisory Services (AEAS) strategy.

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