

"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 **Benin**

Background

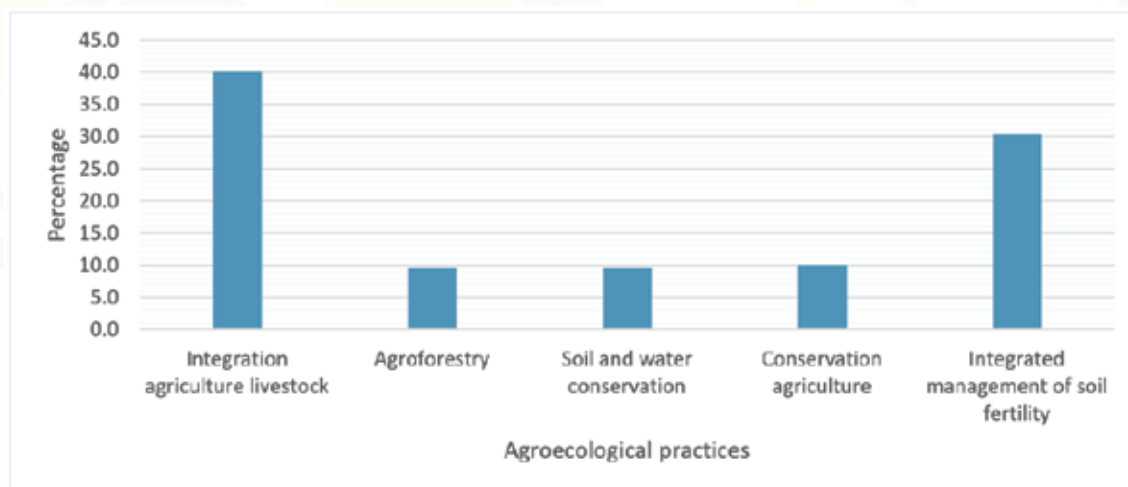
The efforts of Benin government to transform agricultural extension services and promotion of organic and ecological agriculture, can be enhanced through the upscaling of agroecology to bridge the gap of the responsiveness of extension approaches to agroecology principles, reflecting a disconnect between the strategies outlined in the national framework and the actual implementation at the grassroots level (Idrissou, 2022).

Furthermore, knowledge co-creation by extension approaches faces hurdles (Dosso et al., 2023), hindering the integration of sustainable practices into farming systems. Data was collected from farmers, extension workers, government officials, input dealers, community leaders and researchers engaged in agroecology activities from Alibori and Borgou regions, covering Banikoara, Bembéréké, Nikki, Segbana, Sienende, Kandi, Gogounou districts and 357 respondents subjected to focused group discussion and interview schedule based on structured questionnaire. These locations were selected based on the interventions of the Global Programme "Soil Protection and Rehabilitation for Food Security (ProSoil)" implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in BeninGIZ Prosoil.

This policy brief provides evidence-based information on Agroecological Transition, Responsive Extension Approaches (ATREA) project 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)GIZ, and implemented by the African Forum for Agricultural Advisory Services (AFAAS) and Benin Country Forum.

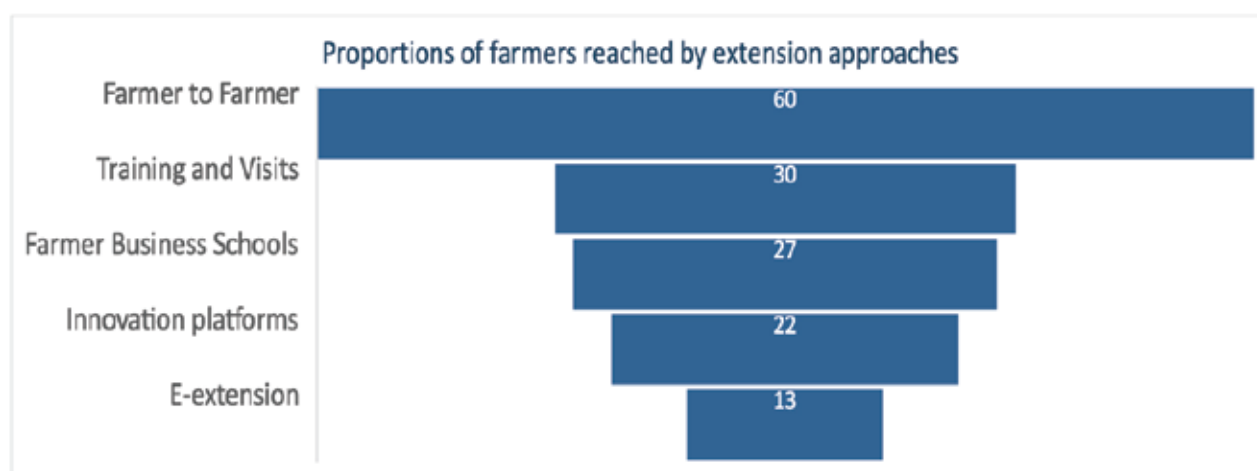
Agroecological practices applied by farmers

In Benin, majority of farmers use crop-livestock integration, soil fertility management based on intercropping mucuna, pigeon peas with cereals; as well as water and soil conservation agriculture and agroforestry.



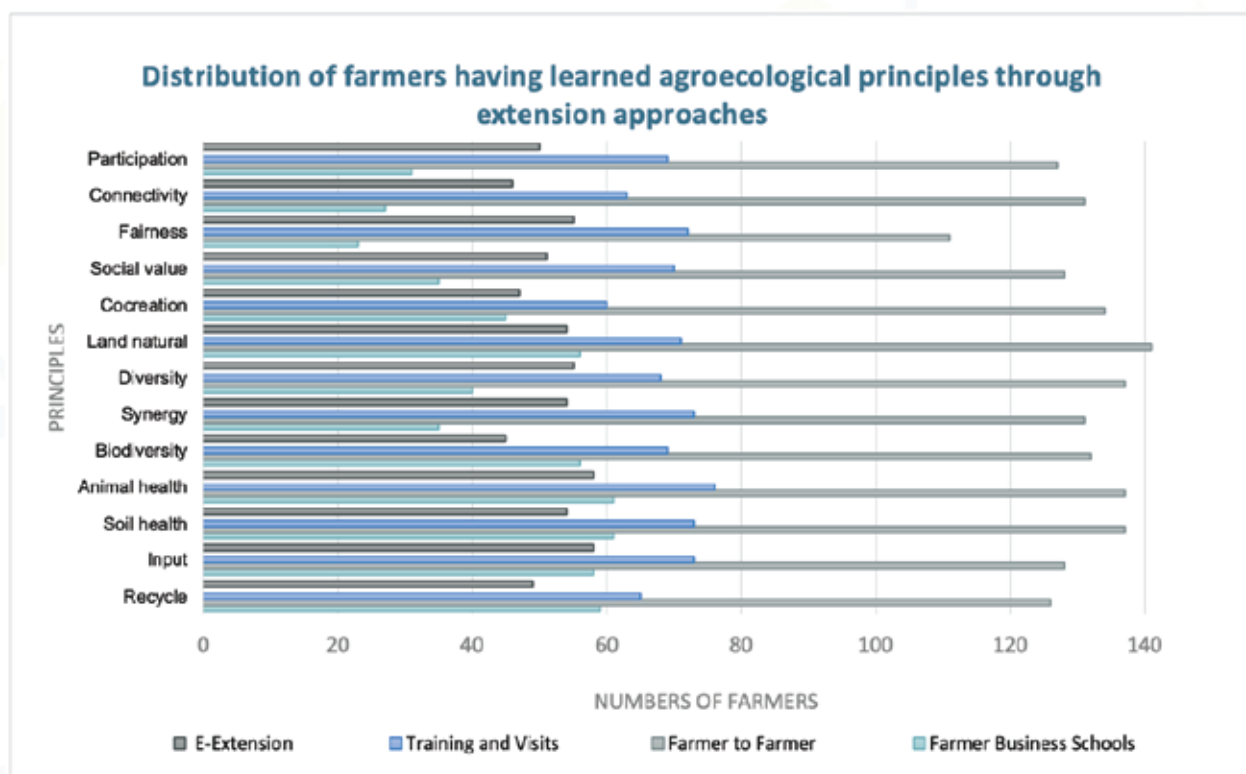
Extension approaches commonly used to reach farmers with agroecology information.

The prominent extension approaches used to reach farmers with agroecology information are: farmer-to-farmer interactions, Training and Visits, farmer business school, Innovation platform and e-extension (including radio and videos).



Responsiveness of extension approaches to agroecology principles

Extension approaches play a pivotal role in fostering the responsiveness of farmers to agroecological principles. Farmer-to-farmer extension emerges as a swift method for addressing challenges associated with agroecological principles, particularly focusing on technical components. While it effectively disseminates technical knowledge, there is a need for a more balanced coverage of social aspects. Farmer business Schools and Training and Visits have the potential to enhance their performance by incorporating sessions that specifically target agroecological principles. Training and visits, along with e-extension, can contribute significantly by disseminating information and technology, further supporting the integration of agroecological principles. Therefore, a more nuanced and comprehensive approach across all extension methods can enhance their responsiveness to the multifaceted aspects of agroecology, fostering a more sustainable and holistic agricultural system.



Incentives to sustain extension approaches

To sustain the engagement of farmers in participating in extension approaches and sharing information, various incentives and modes of delivery have proven effective (Table 1):

- High impact of farm inputs:

- Participation: 79.9% of farmers indicated that access to farm inputs significantly encourages their participation in extension programs.
- Sharing: 71.6% are willing to share knowledge related to these inputs, highlighting the importance of tangible resources in fostering collaboration.

- Importance of market access:

- Participation: 79.3% of farmers view market access as a crucial incentive, demonstrating that economic opportunities are vital for sustained engagement.
- Sharing: 67.2% are open to sharing their experiences regarding market access, indicating a willingness to collaborate on improving market strategies.

- Effectiveness of training and certification:

- Training certificates: 75.9% of farmers value training certificates, which not only enhance their skills but also motivate them to engage in extension activities.
- Skills acquisition: 70.9% support certification in skills acquisition, emphasizing the role of formal recognition in encouraging participation.

- Role of financial support:

- Credit and Loans: 80.3% of farmers find financial support attractive, showing that access to credit is a significant motivator for engagement in extension programs.
- Transport Allowance: 51.2% of farmers appreciate cash transport allowances, indicating that financial incentives directly influence participation.

- Peer learning opportunities:

- Sponsored Visits: 64.9% of farmers participate in sponsored visits between farmers, which facilitates knowledge sharing and strengthens community ties.
- Farmer-to-Farmer Approach: This approach is effective in enhancing engagement, as it leverages local knowledge and fosters trust among participants.

Cost of extension approaches.

The analysis of various extension approaches and their financing mechanisms reveals several key insights:

- * **Cost considerations:** The Farmer-to-Farmer approach has the highest average cost at \$1,536.87 per extension worker for 25 farmers per month, highlighting the need for sustainable funding. The Radio approach is the most cost-effective at \$169.01 for local radio broadcasting, making it accessible to a broader audience. The Mobile Soil (Video) approach and Farmer Field School (FBS+) approach are mid-range, costing \$507.87 and \$1,267.61 per session, respectively.
- * **Financing mechanisms:** All approaches require diverse funding sources, including government, NGOs, farmers and agricultural organizations. The Farmer-to-Farmer approach particularly emphasizes contributions from farmers, projects, and farmers' organizations to cover costs. Effective organization of value chains can facilitate fund mobilization for extension services.
- * **Approach Effectiveness:** The Farmer-to-Farmer approach is effective in enhancing engagement by leveraging local knowledge and fostering trust among participants. The Mobile Soil (Video) and Radio approaches are useful for awareness-raising and strategic communication, reaching a broader audience with information on agroecological practices. The Farmer Field School (FBS+) approach focuses on training and capacity building, improving farmers' skills in sustainable practices.
- * **Scalability considerations:** Adapting extension approaches to local contexts and agroecological conditions is crucial for ensuring relevance and effectiveness. Securing long-term funding from diverse sources is essential for supporting training, input provision, and continuous farmer engagement. Fostering collaboration among stakeholders (researchers, extensionists, farmers) can help share knowledge, resources, and best practices. By strategically combining cost-effective extension approaches that build farmers' innovative capacities; while ensuring sustainable financing and multi-stakeholder collaboration, the adoption of sustainable practices can be significantly enhanced across different agroecological zones and food systems.

Knowledge co-creation on agroecology through extension approaches in Benin.

The facilitation of co-creation of agroecological knowledge is integral to the effectiveness of extension approaches, and different methods exhibit varying degrees of success in this regard:

- **Farmer-to-farmer extension:** Enables the joint creation of agroecological knowledge among value chain actors and promotes local innovation in agroecology, for contextually relevant sustainable farming practices.
- **Training and visits, farmer business school, and e-extension:** Have the potential to facilitate knowledge co-creation through deliberate efforts that encourage more intensive interactions among value chain actors.

Recommendations for advancing agroecological transition in Benin.

The following recommendations are proposed; to advance responsive extension approaches for agroecology transition in Benin

- * Diversification of extension approaches for different agroecological practices in Benin.
- * Balancing technical and social components of agroecological principles.
- * Strengthening training and capacity building for value chain actors in agroecology
- * Promoting multi-stakeholder collaboration through knowledge co-creation on agroecology.
- * Creating policies that promote collaboration among researchers, extensionists, and farmers
- * Allocating budgetary resources to support training and collaborative projects.
- * Encouraging partnerships between public and private sectors to enhance resource mobilization.