

The effects of Agroecology. Why are metrics needed?

THE EXPERIENCE OF GTAE AND PARTNERS ABOUT AGROECOLOGY EVALUATION AND LESSONS LEARNED

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GROUPE DE TRAVAIL SUR LES TRANSITIONS AGROECOLOGIQUES



Virtual event, European Commission, Friday 2nd July 2021

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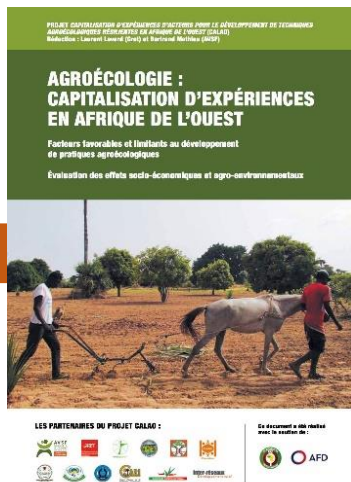
1. GTAE and GTAE activities



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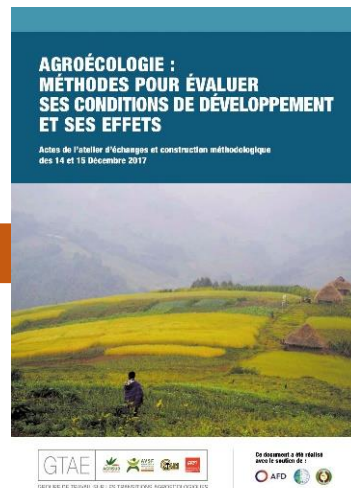
Sharing experiences and cooperations between members

Since 2015, activities on agroecology evaluation : combining evaluations, methodological development and publications

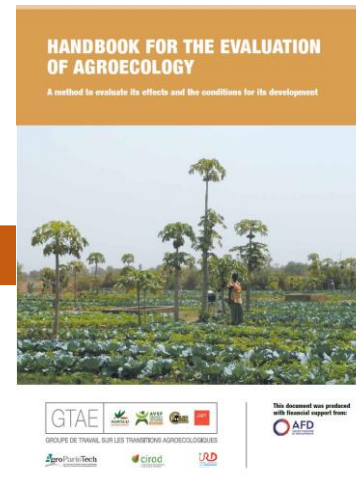


2016

2017



2018



2019

A manual for Agro-ecology evaluation (2023)

Sharing experiences, cooperations, training activities

2. Agroecology evaluation: for who? For what?

Meeting the needs of development stakeholders, advocacy actors and policy makers

Evaluation of the effects of agroecology

Evaluation of the conditions for the development of agroecology

3. Need of rigorous and reliable methodologies

Complexity of agriculture:

- **Diversity of inputs and outputs, throughout a year**
- **Interannual variability**
- **Decision-making process**

Willingness of the farmer to cooperate, ability to remember

=> Need of some measurements

=> Need of in-depth interviews

AE practices and systems may be marginal

=> Need of a purposive sampling of farms

4. The methodology implemented by GTAE and partners (1/4)

Largely based on already existing methodologies!

1rst approach: The diagnostic analysis of agrarian systems...

...with a **specific attention** to AE practices and systems

Litterature review / Stakeholders' expectations

Zonification/Agrarian history/Pretypology/Purposive farms sampling

In-depth case-studies of farms, complementary measurements at plot level

Calculation of evaluation criteria/Comparison** according to the types of farms and to the degree of agroecologization of the production systems/Identification of the conditions for AE development**

4. The methodology implemented by GTAE and partners (2/4)

2nd approach : Monitoring-Evaluation Mechanism...

...with a **specific attention to Agroecological practices and systems**

A baseline

Yearly evaluation with participative approach

4. The methodology implemented by GTAE and partners (3/4)

Socioeconomic criteria: yield (estimate according to stakeholders), economic performance, attractiveness of agriculture for young people, value chain and commercial organisation, farmer's autonomy, empowerment of women, employment and welfare, food security and nutrition

Agroenvironmental criteria: yield measurement, GHG mitigation, Soil Health, Efficiency in water resources and nutriment use, effectiveness in pest regulation

4. The methodology implemented by GTAE and partners (4/4)

Conditions for development of AE: consistency with farmers interests and objectives, labour force requirements, knowledge and know-how, agroenvironmental and socioeconomic conditions, access to land and natural resources, risks, material / financial resources, organic matter, public policies, methods and approach to AE promotion

Characterisation of the degree of agroecologisation of farms: inspired by TAPE methodology, but with adaptations and simplifications ; calculation of an agroecology score

5. Differences and complementarities with FAO-TAPE approach

Interactions, influences

Differences :

Assessing the conditions for agroecology development

An approach to monitor the development of agroecology

A general typology, not only based on agroecological criteria

The choice of in-depth case studies and complementaries measurements

Characterization of AE: Focus on practices and systems ; Adaptation of the grid to each territory

Complementarities:

Conditions of AE development, more in-depth evaluation

6. Lessons learned

A lot of lessons!

1) Where degraded agrosystems: strong potential of AE for increasing yields, added-value and incomes, but limitations shall be solved

2) Where non (too) much degraded agrosystems : development of AE is challenging without market/price-driver

3) A potential strong impact of AE on Food and Nutritional Security

1) Necessary good articulation between socioeconomic and agroenvironmental evaluations

2) Limiting and adapting the number of criteria to priorities

3) Training of Research officers

7. Challenges and difficulties

**Focusing on AE practices and systems may create a bias.
But needs to also identify and evaluate marginal practices and systems**

Human Ressources for Evaluation

=> Curricula and pedagogical methods in higher education

HANDBOOK FOR THE EVALUATION OF AGROECOLOGY

A method to evaluate its effects and the conditions for its development



Thanks for your attention!

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This document was produced with financial support from:



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