

Food and Agriculture Organization of the United Nations

Results on the use of the Tool for Agroecology Performance Evaluation (TAPE) in drylands in Sub-Saharan Africa

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TAPE: a tool for sustainability assessment in agriculture based on agroecology

- Created in the context of FAO's work on agroecology
- Mandate from COAG to produce evidence on the multidimensional performance of agroecology
- Developed through a large consultative process led by FAO
- Based on existing frameworks for assessing sustainability in agriculture.
- As simple as possible, flexible, adaptable.
- Collects data at farm level, and also provides results at territorial level.
- Used for assessing agroecological transitions, comparing farm types, establishing baselines for projects, monitoring and evaluation etc.



frontiers in Sustainable Food Systems

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Assessing Transitions to Sustainable Agricultural and Food Systems: A Tool for Agroecology Performance Evaluation (TAPE)

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TAPE – GLOBAL PORTFOLIO





Food and Agriculture Organization Multidimensional assessment in TAPE

TAPE's Step 1 (CAET):



36 descriptive indices to assess CAET level

TAPE's Step 2:



Main dimension	#	Core criteria of performance	SDG	SDG indicators
Governance	1	Secure land tenure (mobility for pastoralists)	1 2 5	1.4.2 2.4.1 5.a.1
	2	Productivity	2	2.3.1 2.4.1
Economy	3	Income	1 2 10	1.1.1, 1.2.1 and 1.2.2 2.3.2, 2.4.1 10.2.1
	4	Added value	10	10.1.1 10.2.1
Health & nutrition	5	Exposure to pesticides	3	3.9.1 3.9.2 3.9.3
	6	Dietary diversity	2	2.1.1, 2.1.2, 2.2.1, 2.2.2, 2.4.1
Society & Culture	7	Women's empowerment	2 5	2.4.1 5.a.1 5.a.2
	8	Youth employment	8	8.6.1
Environment	9	Agricultural biodiversity	2 15	2.4.1 2.5.1
	10	Soil health	2 15	2.4.1 15.3.1



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Food and Agriculture Organization Types of producers in Mali (Kayes region): large farms vs smallholders



Use of TAPE in Sub-Saharan Africa

2794 observations from 8 countries

In support of GEF/IFAD project formulation:

- Burkina Faso: 386 (+128 TAPE Pastoralists)
- Mali: 233 (+196 TAPE Pastoralists)
- Sénégal: 449
- <u>Lesotho: 200</u>

GEF project evaluation: Moçambique: 516

FAO project on nutrition (baseline): Ethiopia: 619

With partners NGO or academia:

- Tanzania: 259
- Uganda: 132



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Preliminary results from cross country analysis in Africa: level of agroecological transition Advanced in

A small percentage of surveyed farms (4,5%) is well advanced in their process of transition to agroecology measured through the 10 Elements (score >70)

About one third can be considered in a process of transition to agroecology (score on the 10 Elements >50)



Correlations between the 10 elements and the overall level of AE transition (CAET score)

10 Elements of Agroecology	Correlation with the overall score of agroecological transition	
Diversity	0,56	
Synergies	0,68	
Efficiency	0,65	
Recycling	0,70	
Resilience	0,79	
Culture & food trad.	0,68	
Co-creation & sh. of knowledge	0,77	
Human & social values	0,67	
Circular & Solidarity Economy	0,74	
Responsible Gov.	0,75	

Most resilient farms in the sample tend to coincide with the most advanced in agroecological terms

Co-creation and sharing of knowledge among producers is crucial to support agroecological transition

More advanced agroecological farms are strictly correlated to sustainable marketing practices linked to local and territorial markets (Circular & solidarity Economy) and empowered producers (Responsible Governance)

Matrix of correlations between the 10 elements and the criteria of performance



Results on the economic dimension



Farms having a higher aggregated score on the 10 **Flements of** Agroecology have on average better economic performance and better perception of the evolution of their revenue

Less a groecological

More agroecological

Results on the environmental dimension



More advanced agroecological farms are linked to more integrated local food systems and trade



Which can explain in part the higher nutritional diversity



More advanced agroecological households have more diversified diets.

Also AE transition is linked to the consumption of more food of animal origin (meat, eggs, dairy) and more vitamin-rich fruit and vegetables

Results on the social dimension

Agroecological farms maintain more people in rural area and employ a higher % of the family on farm.

Results on youth empowement are highly conext-dependent, as well as on women's empowerment in agriculture.

No consistent resuls on the score of secure land tenure



Use of TAPE in Sub-Saharan Africa and beyond

- Supporting projects and programmes to include agroecological approach;
- Providing harmonized evidence on the performance of agroecology;
- Providing recommendations for public policies to support agroecological transitions based on specific local contexts and results of the TAPE studies;
- Contributing to the co-creation and sharing of knowledge among producers, extensionists, and local governments;
- A version of TAPE adapted for pastoralists.



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Thank you for your attention!

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