

# Alternative Agricultural Approaches for the South - all the same or clear Distinctions?



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## Background

- ❖ Agroecological practices (AEP) have gained significance amidst ongoing crises
- ❖ Emerging farming approaches (FA), often inspired by AEP, showcase promising potential for contemporary challenges
- ❖ Still, not excluding certain environmentally critical practices and applying AEP only selectively can limit the achievement of desired ecological impacts

## Objectives

- Analysis of various such farming approaches, assessing their unique features in comparison to mainstream agriculture
- Providing recommendations to promote sustainable farming practices among smallholder farmers (SHF)

## Methodology

- Assessment of farming approaches via scientific literature and stakeholder resources
- Evaluation along environmental assets:
  - Biodiversity (BD)
  - Climate change (CC)
  - Greenhouse gas emissions (GHE)
  - Soil fertility (SF)

## Conclusions

- ▶ Farming approach (FA) terminology complicates discussion about AEP rather than providing practical guidance for farmers: **Clear FA definitions are essential**
- ▶ **Organic farming** is the only FA that is widely adopted and precisely governed, controlled, and certified
- ▶ Through **fragmented application of AEP** in various FA, significant obstacles (labour demand, insufficient knowledge, inputs, price premiums or subsidies) are highlighted
- ▶ Further **definitions and specifications of farm inputs** and the **combination of AEPs are necessary** to succeed in soil fertility, crop yield, product quality, and ecosystem services
- ▶ A **modular approach** containing **AEP core practices for SHF**, backed by **subsidies** (or similar incentives), the implementation of educational and research initiatives may be key

## Results and discussion



- Extent of application of AEP often remains open
- Several FA lack information regarding:
  - Relevance of AEP
  - Specified recommendations
  - Controversies
- Differentiation between FA not always achievable
- Subsidies not commonly provided in Africa
- Price premium and genuine certification only in OF



## References (extract)

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**Table 1. Status of agroecological practices in selected farming approaches**

AEP	Impact on ...	Conservation Ag	Evergreen Ag	Traditional Ag	Organic Farming	Regenerative Ag	Syntropic Ag	Mainstream Ag
Forage legumes	BD, CC, SF, GHE	No	No info	Yes	Yes	Not explicit	No info	No
Agroforestry/Alley cropping	BD, CC, SF, GHE	Yes	Yes	Yes	Yes / No	Yes	Yes, layered	No
Crop rotation	BD, CC, SF, GHE	Not explicit	Not explicit	Yes	Yes	Yes	eco-system rotation	No
Composting	BD, CC, SF, GHE	Promoted	Not explicit	Yes	Promoted	Not explicit	No	Not explicit
Soil cover / mulch	SF, GHE	Yes	Yes	Yes	Yes	Yes	Yes	No

**Table 2. Status of farming inputs in selected farming approaches**

Farming inputs	Impact on...	Conservation Ag	Evergreen Ag	Traditional Ag	Organic Farming	Regenerative Ag	Syntropic Ag	Mainstream Ag
Nonchem. pest / disease	BD, SF	No	Yes	Yes	Yes	Not explicit	Yes	No
Urea, DAP	CC, SF, GHE	Yes	Not explicit	No	No	Not explicit	No	Yes
Superphos / DAP	SF	Yes	Yes	No	No	Not explicit	No	Yes
KCl	SF	Yes	Yes	No	No	Not explicit	No	Yes
Selected min. fertilizers*	SF	No	Not explicit	No	Yes	Not explicit	No	No
Herbicides	BD, SF	Yes	Not explicit	No	No	Not explicit	No	Yes
Pesticides	BD, SF	Yes	Not explicit	No	No	Not explicit	No	Yes
Feed input limitation	CC, GHE	No	No	No	Yes	No	Yes	No

**Table 3. Status of socio-cultural practices in selected farming approaches**

Socio-cultural practices	Conservation Ag	Evergreen Ag	Traditional Ag	Organic Farming	Regenerative Ag	Syntropic Ag	Mainstream Ag
Cultural values	No	Yes	Yes	IFOAM principles	Not explicit	Not explicit	Not explicit
Local / traditional knowledge	Not explicit	Yes	Yes	Yes	Not explicit	Yes	Yes
Human-nature perception	No	Yes	Yes	Yes	Not explicit	Yes	Not explicit
Community well-being	No	Yes	Yes	Yes	Not explicit	Yes	Not explicit
Food sovereignty	No	Yes	Yes	Yes	Yes	Yes	Yes