

# Economic and societal benefits through agroecological soil practices

## Evidence by ProSoil\*

Matti Carlsburg<sup>1</sup>, Juliane Kaufmann<sup>1</sup>, Alica Nagel<sup>1</sup>, Andrea Bender<sup>2</sup>, Tim Eckey<sup>2</sup>, Levke Sörensen<sup>2</sup>, Linos Xanthopoulos<sup>2</sup>

<sup>1</sup> HFFA Research GmbH

<sup>2</sup> Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) mbH

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### Objective

To create evidence on the economic viability and broader benefits of agroecological practices for smallholder farmers and society.

### Research questions

1. Are agroecological practices **economically viable** for smallholder farmers?
2. What are the **wider economic and social benefits** of agroecological practices?

### Method

Review of **15 studies** conducted between 2014 and 2024 analysing the **impact of ProSoil interventions** on smallholder farmers, the environment and society in seven countries in Africa and Asia.

### Results (selected)

#### Increased production and nutrition diversity

Soil and water conservation efforts in central Burkina Faso have **boosted productivity and nutritional diversity**, resulting in an **annual food surplus of 11,017 tonnes** of grain in the intervention area.

#### Organic farming proves profitable

The **net benefit of organic cotton** in northern Benin is on average **three times higher** than that of conventional cotton.

#### High returns from soil fertility management

**70 % yield increases** and **85 % increase in gross margins** through the application of compost and lime in the Ethiopian highlands.

#### Biofertilisers offer financial benefits

Manure and biochar **increase yields** and provide valuable **income opportunities** for small holder producers in Madhya Pradesh in India.

#### Organic farming reduces public health costs

Organic cotton farming in northern Benin **saves households an average of EUR 84 per year** in disease-related costs caused by the use of pesticides.

#### Soil and water conservation pays off

Embankments, dams and basins **expand production areas** and **increase yields** by between **50 and 90 %** in western Tunisia

#### Soil and water conservation prevent soil erosion

Terraces, benches, and dams **prevent soil erosion** and **enhance carbon sequestration** by facilitating reforestation efforts in Tunisia.

#### Agroforestry improves climate resilience

Agroforestry increases the yield of the system, **carbon sequestration** and is **effective against drought** and heat in western Kenya.

#### Agroecological practices increase income by > 50 %

Crop association, terraces, mulching, and organic fertilizers are particularly beneficial for **soil health and productivity** in northwestern Madagascar.

**Agroecological practices usually offer economic benefits to farmers and consistently benefit the environment and society.**

### Discussion

1. Differences in data, assumptions and currencies used for monetary valuation make it **difficult to compare agroecological practices** in monetary terms.
2. **Labour costs** in agroecology are **often underestimated**, posing challenges for smallholder farmers.
3. **Externalities** such as the various improvements in living conditions are **often overlooked**, leading to gaps in assessing the true long-term impacts.

### Recommendations

- **Policymakers:** Prioritise long-term soil protection by funding and incentivising agroecological practices among smallholder farmers.
- **Donors:** Combine financial support with ecosystem service payments to encourage adoption of beneficial but initially costly agroecological practices.
- **Practitioners:** Tailor studies to local contexts, ensure clear results, and standardise methods for reliable comparisons.

