

Bridging the Gap in Biodiversity Assessment: A Pathway for Smallholder Support

Oliver Bach, Sr. Lead Biodiversity & Nature-Based Solutions

June 19, 2025



Champions of biodiversity-friendly farming





The challenge

- Existing systems are unsuited for smallholder farmers and agricultural landscapes
- Biodiversity assessment tools are crucial for achieving global sustainability goals: UN SDGs; the Kunming–Montreal Global Biodiversity Framework

Analysis of 10 current systems – fitness for farm assessment

Accounting for Nature
Biodiversity Performance Tool Consortium
IBAT
IUCN
Nature-based Solutions Knowledge Hub / Natural England (for DEFRA UK)
Nature-positive initiative
Science-Based Target Network
The Biodiversity Futures Initiative
VERRA / The Biodiversity Consultancy
The Wallacea Trust



What we have learned:



Complexity vs. Practicality: Most tools require expert input, making them inaccessible and impractical to smallholder farmers



Landscape-Scale Focus: Existing frameworks prioritize broad monitoring over farm-specific indicators



Lack of Agroecosystem-Specific Metrics: Limited focus on factors like negative pesticide impacts or severeness of pest attacks



Missed Market Linkages: Few systems provide financial incentives for farmers or link with sustainability programs





Practical & Accessible: Affordable methodology tailored for smallholders.

Farm & Landscape-Scale Indicators: Comprehensive assessment approach.

Scientific Credibility & Impact: Developed with global experts.

Integration with Market Incentives: Linkages with sustainability programs.

Why this
matters
for small
farmers

Core Strategies



Regenerative Agriculture **farm topics**: Soil coverage & soil/water health indicator species; pesticide use reduction; IPM adoption



Landscape level indicators for ecosystem health: Land use diversity, % ecosystems, connectivity; trees (species)



Co-implementation through **Community-based** reporting systems (SAN CMAS) & iHub / ToT of lead farmers



Developed with science-based approaches by **SAN's Biodiversity Action Lab** of multi-disciplinary experts



Market-Driven: Aligned with corporate sustainability programs and certification schemes



Creating a practical tool for smallholder
empowerment and biodiversity
conservation success

SAN is positioned to transform
biodiversity assessment through
participatory approaches, digital tools,
and market-driven solutions

