

Landscape natural resources management along an agro-ecological gradient in Babati

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The Challenge

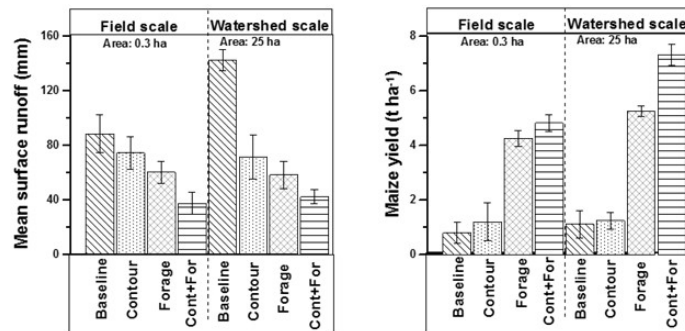
- ✓ Land degradation in Babati District affects food security and livelihoods of smallholder farmers which in turn reduces the resilience and adaptive capacity of farming communities in the face of climate change.
- ✓ Interventions must be designed to target spatially heterogeneous landscapes

Key messages

- ✓ Smallholder farmers can reap the benefits associated with sustainable intensification through landscape interventions with a lower environmental footprint.
- ✓ Cumulative and combined effects of landscape conservation practices are scalable and translate to reduced runoff, lower soil erosion, increased soil moisture capture and storage and higher crop yields.

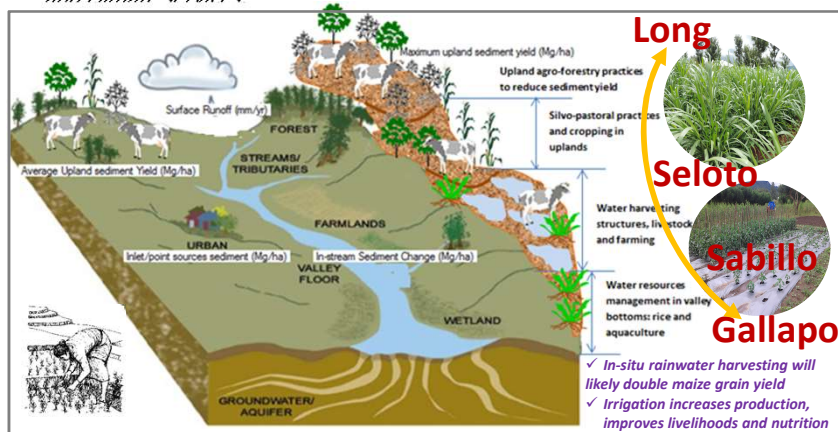


Integrated field conservation practices are scalable; reduce erosion; increase soil moisture capture, storage and crop yields



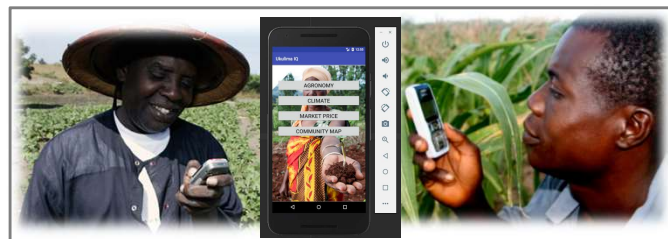
A landscape approach

- ✓ Identify vulnerable areas in the landscape and tailor interventions along an agro-ecological intensification gradient
- ✓ Interventions at both farm level and watershed level range from establishing pasture/forage interventions, soil and water conservation while using an ICT platform to empower farmers with information on land resources, market prices and climate services



Approaches for taking technologies to scale

- ICT platforms as a game-changer (MWANGA)
- Regional district coordination (DAICO)
- National research partners (SARI)
- Development actors



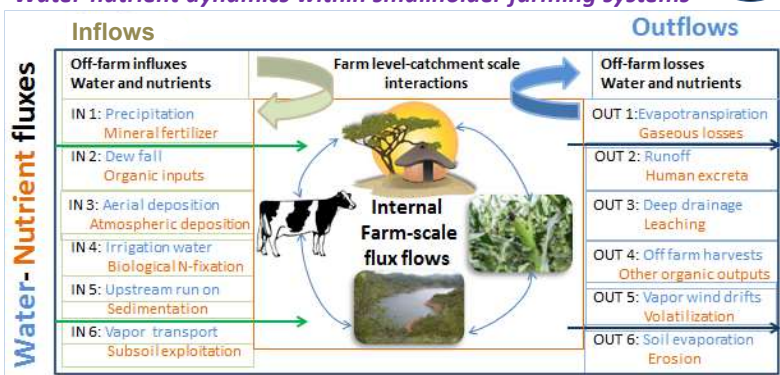
Empowering farmers with actionable information on the state of their land, market prices and climate services

Evidence of Impact

Domain	Productivity	Economics	Environment	Human	Social
Indicator	Yield	Profit	Runoff reduction	Moisture storage	Nutrition
% Change	25%	45%	30%	40%	15%

Introduced interventions:

Integrated soil and water conservation practices: Water-nutrient dynamics within smallholder farming systems



Proposals for the future

- ✓ Strengthen strategic partnerships: development actors, national research partners and extension agents
- ✓ Offer more extensive but cost-effective ICT solutions for farmers on agronomy, market prices and climate services.

Partners

