CGIAR Research Program on Water, Land and Ecosystems

Sustaining effective research for development: Lessons from Water, Land and Ecosystems (WLE)

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Program Objectives

- Natural resources and ecosystem services for productivity and resilience
- But there are many interconnected risks: across scales and across sectors

Rural - urban food systems

Integrated water solutions

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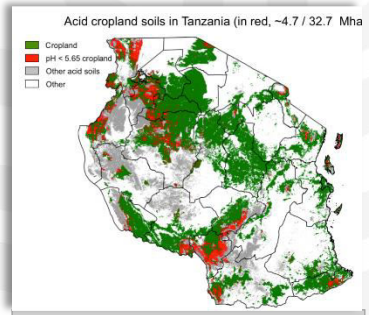
Land and soil restoration



Decision support

IWMI International Water Management Institute | CIAT International Center for Tropical Agriculture | World Agroforestry Centre | IFPRI International Food Policy Research Institute | Bioversity International | ICRISAT International Crops Research Institute for the Semi-Arid Tropics | RUAF Foundation

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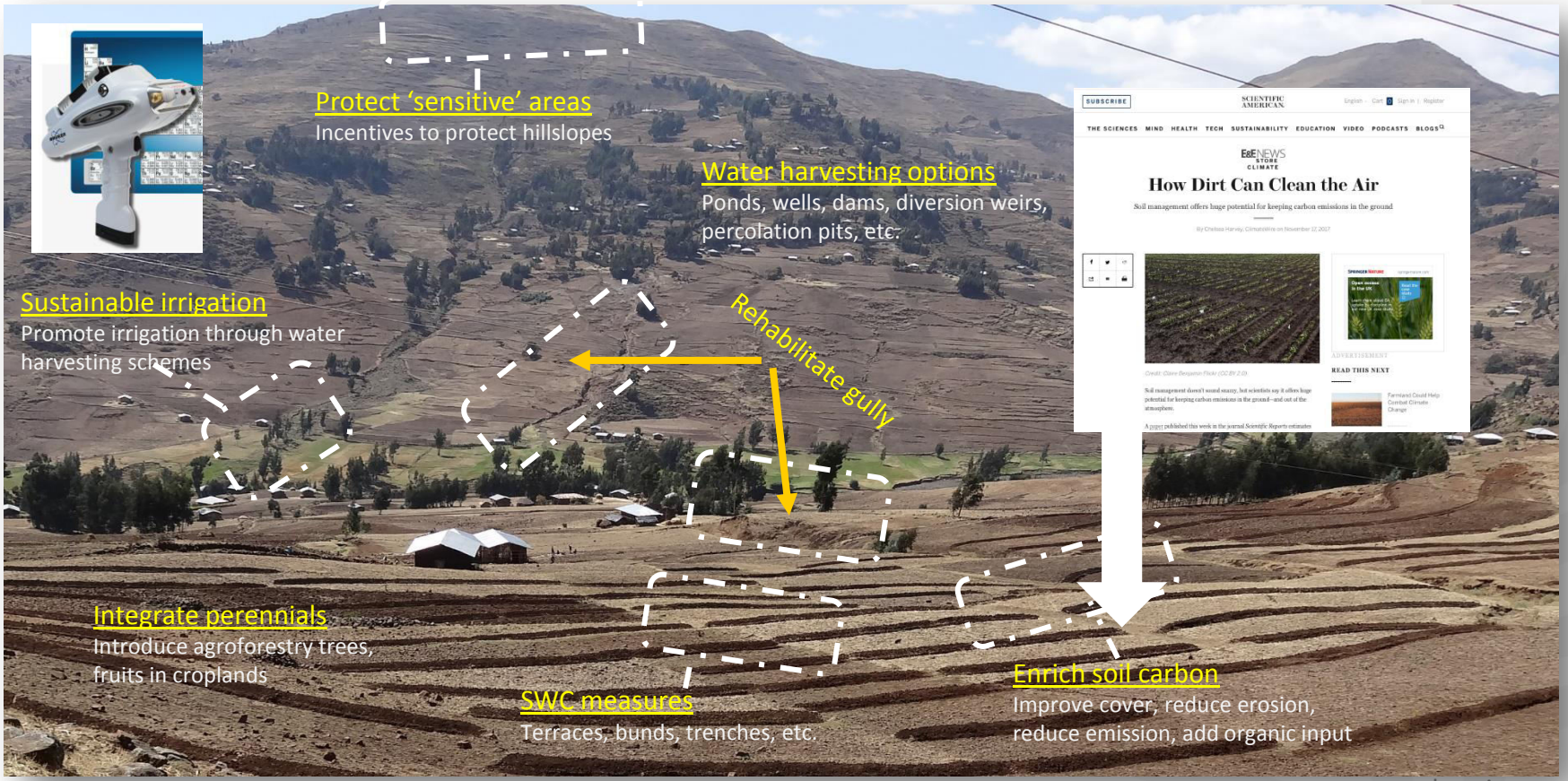
Program Impact

→ *Land restoration methods and tools adopted at wider scales*



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Program Impact

→ *Safe and sustainable water productivity improvements*

- Safe and sustainable solar irrigation

- Integrated approaches small scale to watershed

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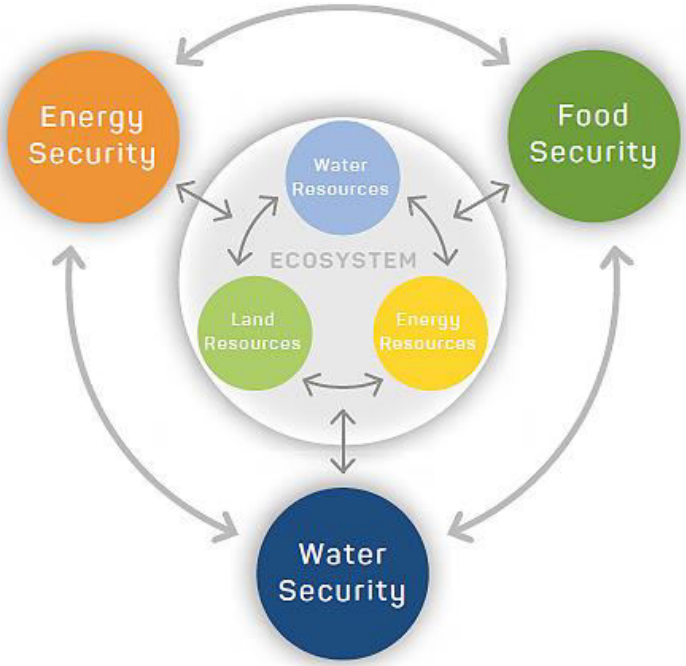
Program Impact

→ *New approaches to reduce water risks and competing uses*



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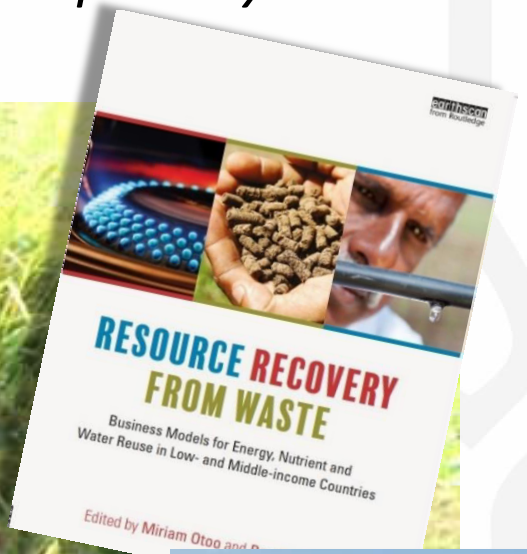
Program Impact

→ *Resource reuse and recovery methods adopted by municipalities and business*

Meet George and guess which of his cabbages has been irrigated with wastewater



Governance and Program Management

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1- Challenges

- Institutional inertia on environment/natural resources
- Balancing demand and supply side research
- Getting us all out of our silos
- Complexity: farmer – field – landscape links
- Insufficient data behind new problems and/or new solutions
- Backing the right portfolio choices
- Building coherence out of duplication

Governance and Program Management

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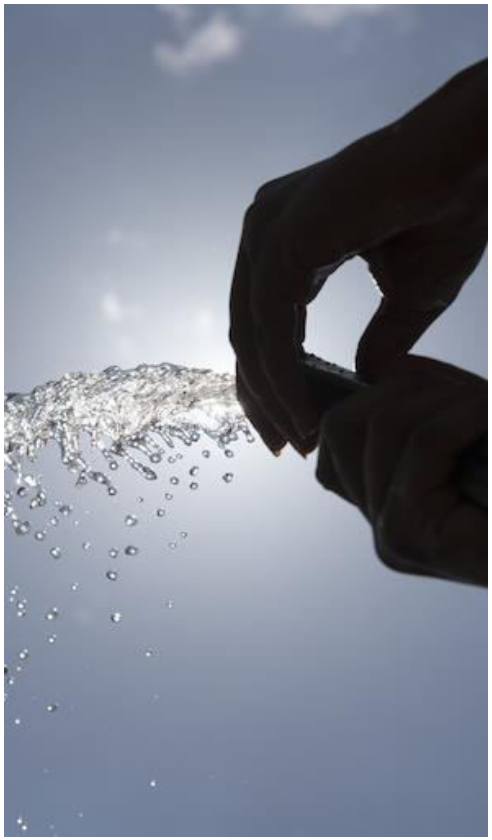

2- Solutions

- Building an enabling/supportive institutional environment for an environmental transformation
- Deploying research funding incentives and performance management to incentivize cross-working
- Build in ‘’systems approach’’: farmer and his/her wider environment (public goods management)
- Governing and management bodies hold a mix of research *and* application skills
- A programmatic approach: which builds on short term successes into larger long term impacts – e.g. RRR 15 years

Governance and Program Management

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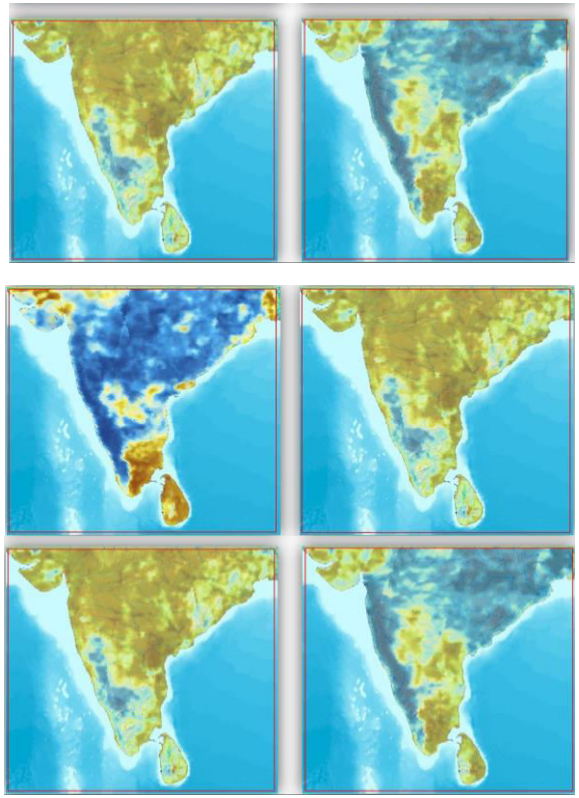

3- Future outlook and innovations

- New researcher-practitioner collaborative models and approaches: research 'in' development
- Further development of interdisciplinary methods and approaches
- Pooling research and evidence: crowd-sourcing skills/projects/knowledge
- New ways to deliver research under uncertainty, and funding constraints: 'decision analysis', mobile phone-based data collection (RSPB UK), remote sensing analysis (e.g. insurance), big data

WLE and China

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Current collaborations

1/ Sustainable urban development

2/ Resilient landscapes & farms

中华人民共和国科学技术部
Ministry of Science and Technology of the People's Republic of China

3/ Decision support for agricultural interventions & investments

Potential for the future

- Water productivity: rain-fed farming, small scale irrigation, small – medium scale irrigation systems
- Land restoration: soil health and agricultural land restoration
- Urban–rural linkages
- Decision support: decision analysis, cost-benefits, trade-offs, nexus and systems thinking from field to landscape scales

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Science for a food-secure future

Thank you

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Xiè xiè dà jiā de guān zhù