



Agriculture & Food Systems
SDC Thematic Network

SUSTAINABLE LAND MANAGEMENT

1/2



DEEP DIVE
INTO FOOD SYSTEMS



Agriculture & Food Systems
SDC Thematic Network

WELCOME AND INTRODUCTION

HOW-TO SLM :

- Setting the scene for SLM. General outline and overview of the Guide's content. *Nicole Harari, WOCAT*
- SLM and MEAs. Why and how is Land Degradation Neutrality (SDG 15.3) relevant to the three Rio Conventions? *Ingrid Teich, WOCAT*
- Policy framework for SLM implementation in Africa. *Kwame Ababio, AUDA-NEPAD*
- Case Study Landscape Approach Ethiopia: The successful Learning Watershed Model. *Gete Zeleke, Water and Land Resource Center, WLRC*

Q&A AND OPEN DISCUSSION

Setting the Scene for Sustainable Land Management

How-to SLM Webinar, SDC

5 August 2026

Nicole Harari
WOCAT Executive Management Team
University of Bern, Centre for Development and Environment / WOCAT



“Healthy land is central to the wellbeing of the planet’s ecosystems and biodiversity; it feeds us, shelters us, and provides the backbone to a thriving global economy.”
UNCCD.



Kaluun-Dacar Water Harvesting Haffir, Somalia



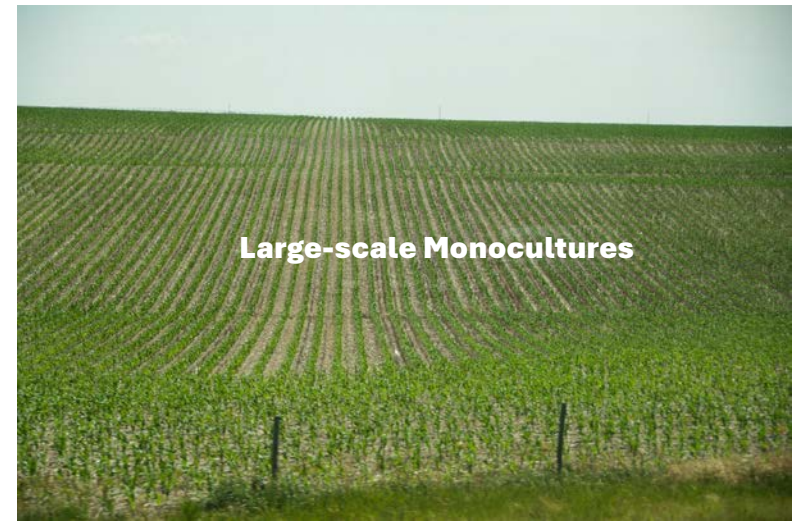
Agroforestry system - apple trees with alfaalfa, Afghanistan



Assisted Natural Regeneration, Niger

Land degradation: a global threat

Up to 40% of the total global land surface is already degraded, impacting almost half of the world's population. All major ecosystems are under threat.



Human-induced land degradation is now recognised as one of the world's most pressing environmental and development challenges.

Land degradation: definition and types



		Soil erosion by water (e.g. gully erosion, mass movements/ landslides, loss of topsoil/ surface erosion)
		Soil erosion by wind (e.g. loss of topsoil, deflation and deposition)
		Chemical soil deterioration (e.g. fertility decline and reduced soil organic matter, soil pollution, salinization)
		Physical soil deterioration (e.g. compaction, sealing, waterlogging)
		Biological degradation (e.g. reduction of vegetation cover, loss of habitats, increase of pests/ diseases)
		Water degradation (e.g. change in quantity of surface water, decline of surface water quality)

Source: WOCAT

Sustainable Land Management: primary objective

SLM **avoids** and **reduces** land degradation and **restores** degraded land - and with that creates **healthy land for the benefits of people and nature**.



TECHNOLOGIES

Rainwater Harvesting for Olive Production [Palestine]

Microcatchment water harvesting captures, stores and allows safe overflow of excess surface runoff collected during heavy rainfall events. The intercepted and deep-infiltrated water enhances soil moisture at/around the microcatchment structure. This eventually boosts plant productivity in dry...

Compiler: [Joren Verbist](#) First published: 2023-05-25 12:11

EN



TECHNOLOGIES

Controlled Grazing [Georgia]

"Controlled Grazing" seeks to harness the behaviours and habits of ruminant livestock to enhance three key ecological functions, namely the removal of plant biomass (grazing), soil and vegetation disturbance (animal impact) and increased nutrient cycling (dung and urine), with the goal of...

Compiler: [Nicholas Euan Sharpe](#) First published: 2026-01-09 12:45

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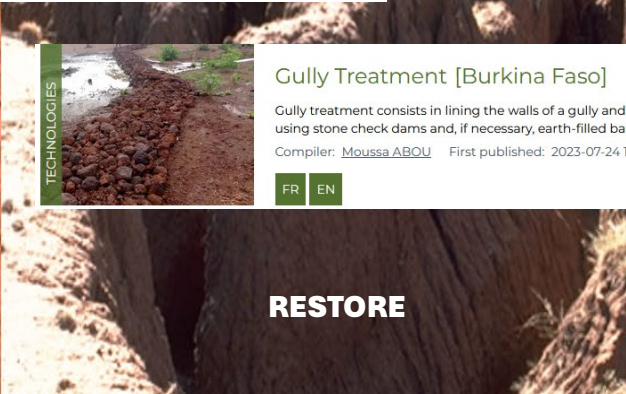
TECHNOLOGIES

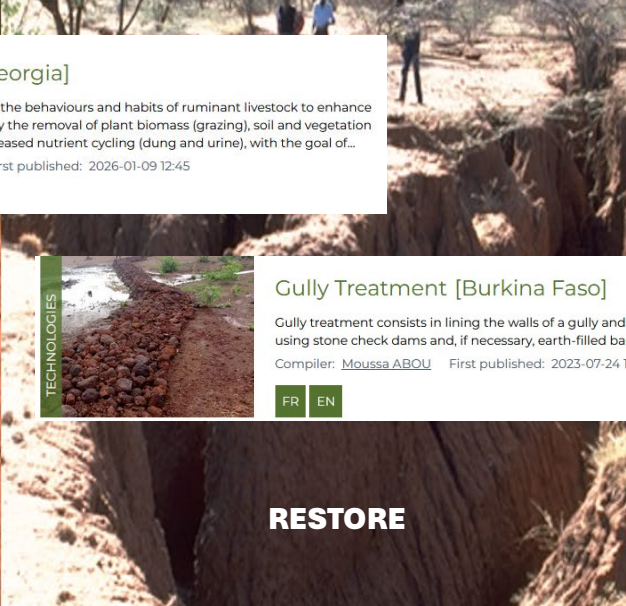
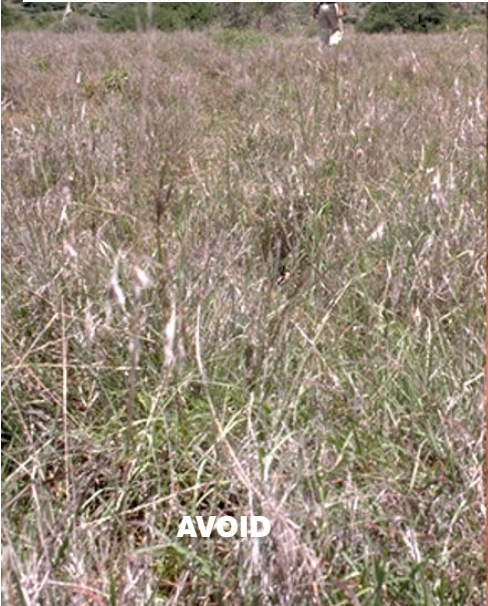
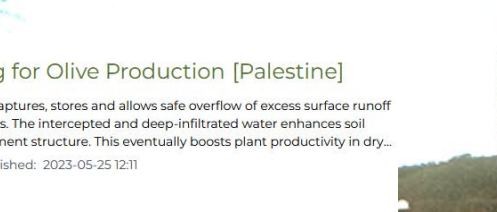
Gully Treatment [Burkina Faso]

Gully treatment consists in lining the walls of a gully and creating a partial barrier within the gully using stone check dams and, if necessary, earth-filled bags.

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FR EN





AVOID

REDUCE

RESTORE

Why SLM matters

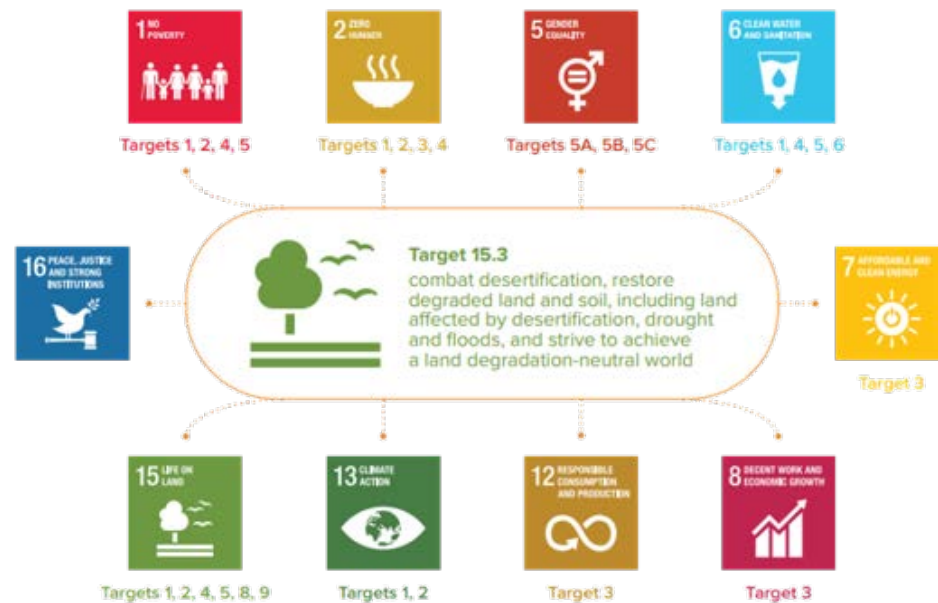
SLM strengthens four interdependent pillars:



Balancing act between production and ecosystem services. It aims to maximise the economic and social benefits from land resources (incl. soils, water, plants, and animals), while ensuring the long-term productive potential and environmental functions of these resources.

SLM and the SDGs

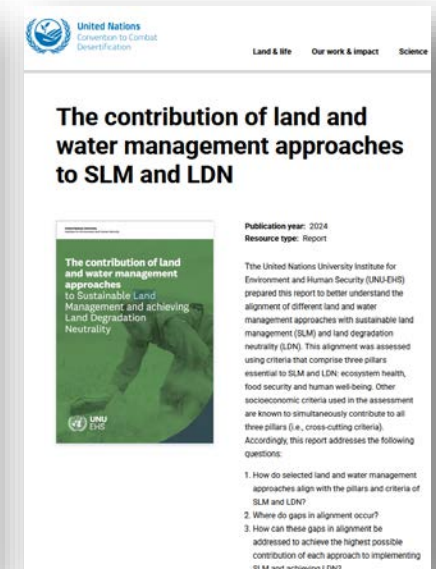
SLM is central to UNCCD's mandate and SDG 15.3, achieving a land degradation neutral world by 2030. It contributes to a wide range of SDGs:



Source: Global Mechanism of the UNCCD.



<https://www.unccd.int/resources/reports/coherence-and-alignment-among-sustainable-land-management-ecosystem-based>



<https://www.unccd.int/resources/reports/contribution-land-and-water-management-approaches-slm-and-ldn>

SLM in Practice: categories of SLM measures



Agronomic measures - focus primarily on crop and soil management practices, generally seeking to improve soil structure, increase organic matter, enhance nutrient cycling and reduce erosion, usually short-term.

e.g. cover cropping, crop rotation, intercropping, mulching



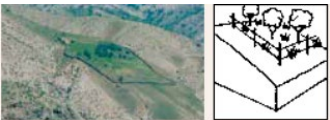
Vegetative measures - use living plants to stabilise soils, regulate water flows and enhance biodiversity, particularly effective in controlling erosion while simultaneously generating products such as fruits, timber, fodder and fuelwood.

e.g. agroforestry, grass strips, fire breaks



Structural measures - involve physical modifications to landscapes to reduce erosion and improve water management, often particularly important in mountainous and dryland environments.

e.g. terraces, bunds, rooftop harvesting, gully rehabilitation



Management measures - focus on changing how land resources are used and governed, often addressing the underlying drivers of degradation rather than only its symptoms.

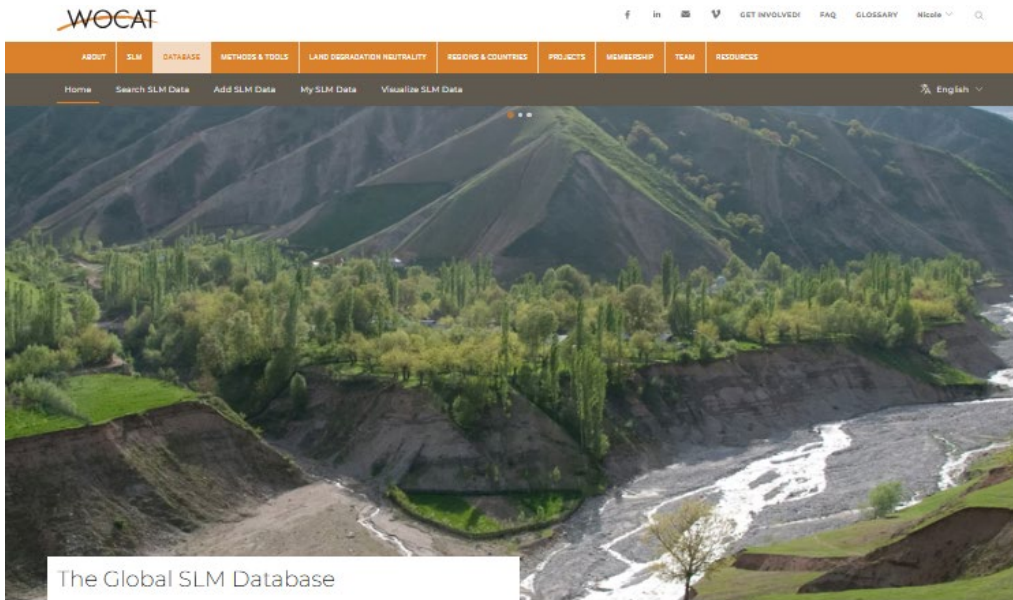
e.g. protected area management, distribution of water points, rotational grazing

... and their combinations

Source: WOCAT

at farm and landscape level

SLM in Practice: Global SLM Database



Large, standardized, multilingual, interoperable open access dataset on SLM practices – **Technologies and Approaches**

Providing **technical insights** on the functionalities, costs, and quantified impacts of SLM Technologies

Supporting replication of SLM practices in similar or diverse contexts or ecosystems

Facilitating the scaling of SLM by informing policies or incentive mechanisms

Welcome to the world's leading repository and go-to information hub for documented, field-tested SLM practices around the globe.

The Database serves as a comprehensive global platform enabling practitioners, project designers and implementers, policy-makers, researchers and their institutions to document, share, and scale proven land management solutions.

Global Coverage: Provides free access to over 2,000 SLM practices from more than 100 countries, in a standardized, comparable format.

Supporting Action: Facilitates the design of interventions, evidence-based decision-making, knowledge exchange, and the scaling of proven solutions for restoration, biodiversity conservation and climate change adaptation.

UNCCD Recognised: As the primary database for reporting SLM best practices of the UNCCD and its Parties, the Conference of the Parties, through successive decisions, has encouraged countries' contributions to the Database to support exchange on best practices.

Officially recognized by



Since 2014, the Global SLM Database has been recognized by the UNCCD as the primary recommended database for sharing knowledge and best practices on SLM (Decision 19/COP.15). This recognition has been reaffirmed through Decision 19/COP.14, Decisions 11 and 19/COP.15 and Decision 18/COP.16, which encourage Parties to contribute good practices and support continued collaboration between the UNCCD Secretariat and WOCAT. [Learn more about the WOCAT-UNCCD Partnership](#)

Recommended for



UNCCD Decision 19/COP.15 and 19/COP.16 encourage the GEF to promote the use of the WOCAT Database in its programmes and projects. [Discover SLM practices from GEF programmes and projects](#)

Who can contribute

Have you been part of efforts to successfully implement SLM on the ground and are ready to share your good practices with a global community in a standardized and accessible format? Then we are looking for you!

[Read more](#)

Why to contribute

Showcase your SLM experience and help others learn from it! Your knowledge will become part of an internationally recognized resource that supports learning, policy development, and the scaling of successful solutions worldwide.

[Read more](#)



KEY NUMBERS

2 069 SLM PRACTICES
IN **110 COUNTRIES**

SLM Technologies **1 498**

SLM Approaches **571**

13 new practices published
in the past 30 days

<https://wocat.net/en/database/>

SLM in Practice: Global SLM Database



SLM Technologies

An **SLM Technology** is a land management practice that controls land degradation and enhances productivity and/ or other ecosystem services.

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TECHNOLOGIES

Protection and Sustainable Management of Khoovor Spring [Mongolia]

Khoovor Spring protection is a sustainable land management technology implemented in Dariganga Soum, Sukhbaatar Province, Mongolia. It uses a standardized livestock-exclusion fence, a controlled-access gate, and community-based inspection and maintenance to protect the natural spring source from livestock trampling and contamination. The protected area supports natural vegetation recovery and provides livestock with safer and more reliable access to water.

Compiler: [Undarmaa Dagvasuren](#) First published: 2026-07-30 16:09

EN



TECHNOLOGIES

Maize-Pigeon Pea Intercropping [Malawi]

Intercropping pigeon pea with maize maximizes land productivity while improving soil fertility through biological nitrogen fixation. This sustainable land management practice enhances crop yields, promotes efficient resource use, and contributes to the restoration of degraded land in the southern and central parts of Malawi.

Compiler: [Dailies Banda](#) First published: 2026-07-30 18:09

EN



TECHNOLOGIES

Producing wild cherry seedlings in a schoolyard nursery [Mongolia]

Wild cherry seeds are collected and sown in an open-air nursery within a schoolyard. The planting area is fenced by wooden boards and filled with a humus-rich soil and a light mulch, such as sawdust, is added to retain moisture and control weeds. This practice enhances the survival rate of seedlings – which are planted out in school groves as well as being available for greening projects.

Compiler: [Mandakh Nyamtseren](#) First published: 2026-05-29 13:14

EN



TECHNOLOGIES

Household silage making in winter shelters [Mongolia]

Silage is a type of preserved, fermented fodder that is fed to livestock when grass is scarce or unavailable. Household-level silage production involves growing oats within winter/spring livestock shelters, chopping the harvested crop, and then compacting it in plastic tanks where it forms silage through an anaerobic process.

Compiler: [Mandakh Nyamtseren](#) First published: 2026-05-11 08:36

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TECHNOLOGIES

Integrated Land Management for Gully Erosion Control through Gabions and Rock Check Dams in Guri Gaab Village [Somalia]

This technology rehabilitates active gullies in degraded agro-pastoral land in Guri Gaab Village, Baidoa District, through the construction of six gabion structures and six rock check dams within a 160-hectare watershed. The intervention was implemented to address severe gully erosion, loss of productive land, rapid runoff, and declining vegetation cover.

Compiler: [ABDULLAHI ABDULKADIR](#) First published: 2026-06-20 09:12

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SLM in Practice: Global SLM Database

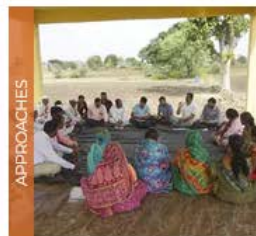


SLM Approaches

An **SLM Approach** defines the ways and means used to implement an SLM Technology, including the stakeholders involved and their roles.

View

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From Seed to Grove: Student-Led Bird Cherry Nursery [Mongolia]

Through "learning by doing" students have propagated bird cherry seedlings, established a grove within the school grounds, and distributed seedlings to local households. This ecological education initiative has been put into practice through the "Thank you, Moihon" programme initiated by a "Green Island" school Eco-Club.

Compiler: [Tserendulam Tseren-Ochir](#) First published: 2026-06-08 10:59

EN



Miombo Restoration and FIAT Metric Validation in Chimanimani National Park [Mozambique]

This approach combines ecological restoration of degraded Miombo woodlands and montane forests with the application of scientifically validated forest integrity assessment tools in Chimanimani National Park. It integrates participatory planning, establishment of permanent monitoring plots, assisted natural regeneration, and enrichment planting with native species, while using Miombo ecosystem metrics and the Forest Integrity Assessment Tool (FIAT) to monitor forest recovery and guide conservation management.

Compiler: [Silveira Manuessa](#) First published: 2026-05-07 16:45

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Ecosystem based Adaptation (EbA) through Farmers' Collectives for Sustainable Management of Natural Resources [India]

The Ecosystem-based Adaptation (EbA) with Farmer Collective (henceforth Farmer Producer Organisations (FPOs)) approach strengthens farmers' resilience to climate change by integrating sustainable water- and land management, biodiversity enhancement and resources governance within farmers' collectives. Implemented in semi-arid regions of Maharashtra and Telangana, the approach combines capacity building, improving soil health, through women-led green business aiming at enabling eco-sensitive and...

Compiler: [Arun Bhagat](#) First published: 2025-11-30 12:40

EN

Capacity Building Process for Participatory Watershed Development [India]

The Capacity Building Process for Participatory Watershed Development is a structured approach to strengthen the technical, managerial, and social skills of Non-Governmental Organizations (NGOs), Partner Implementation Agencies (PIAs), and Village-level Institutions (VIs). It includes orientation, training, participatory tools, mentoring, exposure visits, monitoring, and institutionalization. The process enhances competencies, fosters creativity and confidence, promotes community ownership, and ensures...

Compiler: [Arun Bhagat](#) First published: 2025-11-21 17:54

EN

Participatory Net Planning for Sustainable Watershed Management [India]

Participatory Net Planning (PNP) is a practical methodology that actively engages landowners and local stakeholders in planning and implementing measures for land use, soil conservation, water harvesting, and biomass development. It aims to regenerate ecosystems and improve the sustainability of watersheds through site-specific resource management. PNP emphasizes the conservation, productivity enhancement, and sustainable use of natural and biological resources. It involves assessing the current condition...

Compiler: [Arun Bhagat](#) First published: 2025-12-06 16:34

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SLM in Practice: Global SLM Database



Sand and Dust Storms
Find SLM Technologies relevant to prevent or reduce Sand and Dust Storms (SDS).

[View](#)



Drought
Find SLM Technologies that help to mitigate risk and prepare and respond to Drought.

[View](#)



Water
Access SLM Technologies that aim at Harvesting Water.

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Classification of the SLM Technology

Land use type soil erosion by water water degradation SLM measures

water harvesting irrigation management (incl. water suppl... surface water management (spring, river,... ground water management waste management/waste water manag...

reduce risk of disasters adapt to climate change/ extremes and it...

Goal of the Technology with regard to land degrada...

Natural and human environment

sub-humid semi-arid arid Annual rainfall Slopes on average

Altitudinal zone Market orientation of production system Land use rights

Gender of persons using the land

Your search results (129) Sorting by "Updated at"

Xidda hafir basin [Somalia]
An earthen water harvesting structure constructed in Xidda, Somalia, designed to capture and store surface runoff from seasonal rainfall for domestic use, livestock watering, and small-scale irrigation of a nearby vegetable farm.
Compiler: mohamed ahmed Hiraad First published: 2026-06-23 08:33

Kaluun-Dacar Water Harvesting Haffir [Somalia]
A water harvesting haffir constructed by the Barwaqo Project in Kaluun-Dacar village, Galmudug State, designed to capture and store seasonal surface runoff from the Gu and Deyr rains for livestock, household use, and small-scale fodder production, while reducing soil erosion and enhancing drought resilience.
Compiler: Abdulkadir Ali Mohamed First published: 2026-06-21 15:07

Integrated Land Management for Gully Erosion Control through Gabions and Rock Check Dams in Guri Gaab Village [Somalia]
This technology rehabilitates active gullies in degraded agro-pastoral land in Guri Gaab Village, Baidoa District, through the construction of six gabion structures and six rock check dams within a 160-hectare watershed. The intervention was implemented to address severe gully erosion, loss of productive land, rapid runoff, and declining vegetation cover.

SLM in Practice: Global SLM Database



Cropland
Find SLM practices for cropland.

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Forests
Access SLM practices relevant to manage forests.

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Rangelands
Check out SLM practices in rangelands.

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Mountains
Find SLM practices in mountains/ high altitude.

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Reseeding local fodder species in Bamyan rangelands using indigenous and scientific methods [Afghanistan]

Artificial reseedling is a key method for restoring degraded rangelands. It involves reintroducing native, palatable fodder species to improve vegetation cover, soil health, and biodiversity. This process boosts forage for grazing animals, stabilizes soil, and helps combat desertification, enhancing ecosystem health and productivity.

Compiler: Gul Nabi Khan Noorani First published: 2025-01-27 08:19

EN



Implementing Site Quarantine to reduce rangeland degradation in the highlands of Badghis [Afghanistan]

Restoring degraded rangelands through quarantine in Qadis district, Badghis Afghanistan.

Compiler: Shamsulhaq Shams First published: 2025-03-23 08:03

EN



Managed Burning of Rangeland [Bhutan]

Burning of rangeland ("tsamdro") is a traditional management practice adopted by highlanders to control unpalatable grass and shrub species. This helps them produce adequate fodder for their yaks, cattle, horses, and sheep by creating a favorable environment for palatable grasses.

Compiler: ONGPO LEPCHA First published: 2024-02-28 17:39

EN



Community supported pasture and rangeland rehabilitation works [Angola]

Rehabilitation of rangelands involves selection of key pasture and fodder species, and their reintroduction into strategic areas through stakeholder participation. The technology is also supported by communal management plans, which were created to address the root causes of land degradation.

Compiler: Nicholas Euan Sharpe First published: 2018-02-05 11:13

EN



Rangeland Restoration by cutting invasive species and grass reseedling and managing grazing [Kenya]

This 'Rangeland Restoration' technology is part of a 'Holistic Rangeland Management' approach. It involves clearing of invasive vegetation (predominantly *Acacia reficiens*) and reseedling with grass (*Cenchrus ciliaris*) and allowing resting and reduced grazing pressure to rehabilitate degraded communal grazing land.

Compiler: Harry Wells First published: 2018-05-22 07:57

EN

FR



Fertilizing and re-seeding degraded rangelands [Iceland]

Rangeland restoration - Spreading small portions of inorganic fertilizer and seeds on degraded rangelands

Compiler: Thorunn Petursdottir First published: 2017-03-15 16:26

EN



Rangelands resting [Tunisia]

This technique is based on the principle of leaving the rangeland protected (by excluding grazing during 2-3 years) to allow the plant cover to recover.

Compiler: Mongi Ben Zaid First published: 2017-03-21 15:32

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Rangeland Improvement in Savanah with High Livestocks [Tanzania]



SLM in Practice: Global SLM Database

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SLM Approaches

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APPROACHES



Action Research on Property Right-Related Conflicts in Sala village [Burkina Faso]

The research-action project on conflicts associated with property rights in the village of Sala is an inclusive approach involving consultation between various village stakeholders, designed to reduce and manage land-related conflicts.

Compiler: [Moussa ABOU](#) First published: 2023-08-07 15:22

FR EN

APPROACHES



SLM implementation through Village Development Councils [Burkina Faso]

Sustainable Land Management (SLM) through Village Development Councils (CVDs) is an approach that empowers stakeholders to implement the SLM technologies promoted by ProSoil. This approach combines land tenure aspects with those of Sustainable Land Management.

Compiler: [Moussa ABOU](#) First published: 2023-08-09 09:36

FR EN

TECHNOLOGIES



Minimum Tillage [Burkina Faso]

Minimum tillage consists of working the soil superficially using a tined plough to scarify it and break up the previous year's ridges. This is a soil preparation technique that consists of not turning over the soil, which is a key principle of conservation agriculture.

Compiler: [Moussa ABOU](#) First published: 2023-08-07 15:22

FR EN

TECHNOLOGIES



Vegetation of contour stone bunds using herbaceous species [Burkina Faso]

Vegetation along contour stone bunds with herbaceous species adds an additional water and soil conservation measure on sloping agricultural lands.

Compiler: [Moussa ABOU](#) First published: 2023-08-09 09:36

FR EN

LOGIES



Gully Treatment [Burkina Faso]

Gully treatment consists in lining the walls of a gully and creating a partial barrier within the gully using stone check dams and, if necessary, earth-filled bags.

Compiler: [Moussa ABOU](#) First published: 2023-07-24 10:41

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SLM Approaches

Your search results (20)

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TECHNOLOGIES



Modified stoves to improve household energy efficiency and reduce impact on forests [Tajikistan]

This energy-efficient stove was developed in close cooperation with the local blacksmith and pilot households. Its major features are a shorter burning chamber, lower height, air draft controller, enlarged burners and double circled pipes for heating water. The modified stove consumes much less firewood. It is possible to add heat exchangers and water boiling tank/water radiators which will further increase efficiency.

Compiler: [Daler Domulldzhanov](#) First published: 2022-02-15 09:54

EN

APPROACHES



Early Warning System [Chad]

The early warning system is a mechanism which enables to prevent risks related to food insecurity.

Compiler: [Mahamat Moussa Absakine](#) First published: 2017-10-31 15:52

FR EN

APPROACHES



Fighting malnutrition by promoting locally produced horlicks (multigrain nutrition balls) [India]

Multigrain nutritional ball to fight malnutrition and improve the health of rural communities especially during and after disasters like floods (and droughts).

Compiler: [MARIA ROSELIN](#) First published: 2017-10-19 11:35

EN

APPROACHES



Community storage shed [Chad]

Community storage sheds contribute to the food security of vulnerable rural households by facilitating access to stocks and the availability of food during the period between harvests (shortage). The approach makes it possible to mobilize a community with the intention to establish a storage shed for food security at the village level.

Compiler: [Mahamat Moussa Absakine](#) First published: 2017-10-31 15:51

FR EN

LOGIES



Multigrain Nutrient Ball [India]

Introducing a multigrain flour to prevent malnutrition of rural communities, enhancing community resilience to natural disasters such as floods.

SLM in Practice: Global SLM Database

Classification of the SLM Technology

Land use type

Degradation type

SLM measures

SLM group

Improve production

Goal of the Technology with regard to land degradation

Natural and human environment

arid

Annual rainfall

Slopes on average

Altitudinal zone

Market orientation of production system

communal (organized)

Gender of persons using the land

Your search results (19)

Sorting by "Updated at"

TECHNOLOGIES



EN

Kaluun-Dacar Water Harvesting Haffir [Somalia]

A water harvesting haffir constructed by the Barwaaqo Project in Kaluun-Dacar village, Galmudug State, designed to capture and store seasonal surface runoff from the Gu and Deyr rains for livestock, household use, and small scale fodder production, while reducing soil erosion and enhancing drought resilience.

Compiler: [Abdubasir Ali Mohamed](#) First published: 2026-06-21 15:07

TECHNOLOGIES



FR

Plantation de frêne (Fraxinus dimorpha) pour la lutte contre l'érosion, comme fourrage, et comme bois de feu [Morocco]

Du frêne (Fraxinus dimorpha) est planté par les jeunes du douar Ardouz avec d'autres espèces forestières (chêne vert, Quercus ilex) afin d'être ultérieurement taillé en têtard pour être valorisé comme fourrage et pour l'utilisation comme bois de feu.

Compiler: [Stefan Graf](#) First published: 2021-04-21 14:57

TECHNOLOGIES



FR

Parcelle agroforestière expérimentale à Fililou [Morocco]

Dans le cadre d'un projet de la FAO une parcelle agroforestière expérimentale conçue par la population a été installée à Fililou, pour lutter contre l'érosion hydrique d'une part, et tester des essences forestières susceptibles de s'adapter aux conditions agroécologiques de la zone d'autre part.

Compiler: [Sara Maassouf](#) First published: 2020-09-24 13:42

TECHNOLOGIES



RU EN

Solar greenhouses [Tajikistan]

Growing crops in solar greenhouses to support a year round crop yield.

Compiler: [Rustam Kalandarov](#) First published: 2017-03-16 15:48

Description of the SLM Approach

traditional/indigenous

Participation and roles of stakeholders involved

Involvement of stakeholders

Who decided on the selection of the Technology/ Technologies

Technical support, capacity building, and knowledge management

Was training provided to land users/other stakeholders?

Do land users have access to an advisory service?

Level at which institutions have been strengthened or established

Financing and external material support

Range of annual budget

Did land users receive financial/ material support for implementation

Your search results (68)

Sorting by "Created at"

APPROACHES



EN

BEEKEEPING FOR CONSERVATION OF NATURAL TREES AND FOREST RESERVES [Tanzania]

Beekeeping is an activity which involves maintenance of bee colonies by using man-made hives within a selected forest area which provides the required feed and habitat resources required by bees. Through beekeeping, trees are conserved as they provide flowers hence ensuring feeds for bees. Beekeeping is used as an approach of protecting forest reserves against encroachments. Bee products, produced within the value chain, improve the livelihoods of beekeepers and communities at large while conserving the...

Compiler: [LINDA SHIO](#) First published: 2025-01-22 17:33

APPROACHES



EN

Traditional labour sharing for farming [Bhutan]

In the past, it was difficult for households to complete seasonal farming activities like ploughing, sowing, and transplanting in time. So, land users came together by adopting 'latsat' or labour sharing. This involves pooling land users, who work on a rotational basis on the plots of the different group members. Labour sharing is a very old approach but is still being practiced throughout the country.

Compiler: [ONGPO LEDCHA](#) First published: 2024-02-28 17:37

APPROACHES



EN

Sacred Groves as Informal Protected Areas [Bhutan]

A sacred grove is considered to be the home of the Local Deity of a region and is revered and protected by the people with respect and dedication. Here, a sacred grove of trees and undisturbed ground surround a majestic blue pine that is believed to be more than 350 years old.

Compiler: [Karma Wangdi](#) First published: 2024-04-01 17:33

APPROACHES



EN

Integrated Agroforestry System [Ethiopia]

The integrated agroforestry system is a self-initiated approach by a land user to implement agroforestry as part of an indigenous practice and has evolved over the years through technical support, training, and supplies of coffee and tree seedlings by the Office of Agriculture and Coffee Improvement Project. Had there been a participatory process throughout, it would have helped in design and also in scaling up.

Compiler: [GEMALU TET](#) First published: 2023-01-17 17:33

Огара овец на выделенном участке при(поселкового) гласбида [У. Назаркулов (Ташкент, 100113, Чилансар В.ул. Karagaran 21)]

CLASSIFICATION OF THE TECHNOLOGY	
Main purpose - greenhouse production - prevent, reduce land degradation; restore/rehabilitate land - conserve ecosystem - protect a watershed/ downstream areas – in combination with other technologies - preserve/ improve biodiversity - reduce risk of disasters - adapt to climate change/ extremes and its impacts - mitigate climate change and its impacts - create beneficial economic impact - create beneficial social impact	Land use  Grazing land - semi-natural: pastoralism - Animal type: Пастбищное/ сенокосное животноводство, 10-25 т/га/эк
Purpose related to land degradation - prevent land degradation - reduce land degradation - control/ reduce soil severely degraded land - adapt to land degradation - not applicable	Water supply - rainfed - irrigated (partial irrigated) - full irrigation
	Degradation addressed  soil erosion by wind Et: loss of topsoil  physical soil deterioration Pc: compaction  biological degradation Bc: reduction of vegetation cover
SLM group - rotational systems (crop rotation, fallows, shifting cultivation) - pastoralism and grazing land management	SLM measures  management measures M2: Change of management/ intensity level

Technical specifications

Around the water wells, where the sheep graze, the pasture is divided in two sectors. The first sector is used during spring, and the second one during summer. Each sector is divided into three rotation areas (segments) which are grazed sequentially. In the autumn the flock is driven to the second water well, where the pasture is also split in two sectors that are used in a rotation, in autumn and winter.

Location: Village of Kyzyl Irtavl, Romitan district, Bulkhana oblast.
Date: 10-10-2011

Technical knowledge required for field staff / advisors: moderate
Technical knowledge required for land users: moderate

Main technical functions: improvement of ground cover, water harvesting / increase water supply, promotion of vegetation species and varieties (quality, esp pasturable fodder)
Change of land use practices / intensity level: from unsystematic grazing to rotation based grazing
Layout change according to natural and human environment:
Scheme of grazing around watering wells

Author: A. Nazarkulov, Z. Kataralt St., Chylanzar B., Tashkent, 100178

NATURAL ENVIRONMENT			
Average annual rainfall ☐ < 250 mm ☐ 250 - 500 mm ☐ 500 - 750 mm ☐ 750 - 1,000 mm ☐ 1,000 - 1,500 mm ☐ 1,500 - 2,000 mm ☐ 2,000 - 3,000 mm ☐ 3,000 - 4,000 mm ☐ > 4,000 mm	Agro-climatic zone ☐ humid ☐ sub-humid ☐ semi-arid ☐ arid	Specifications on climate precipitation rate is 120-250 mm/year, 80-90% of which falls between October and April Thermal climate class: temperature. For 2 months the air temp is > 50 °C, and for 9 months it is > 10 °C	
Slope ☐ flat (0-2%) ☐ gentle (3-5%) ☐ moderate (6-10%) ☐ rolling (11-12%) ☐ rolling (13-15%) ☐ steep (16-30%) ☐ very steep (>30%)	Landforms ☐ plateaus/plateaus ☐ ridges ☐ mountain slopes ☐ hill slopes ☐ footslopes ☐ valley floors	Altitude ☐ 0 - 100 m a.s.l. ☒ 101 - 500 m a.s.l. ☐ 501 - 1,000 m a.s.l. ☐ 1,001 - 1,500 m a.s.l. ☐ 1,501 - 2,000 m a.s.l. ☐ 2,001 - 2,500 m a.s.l. ☐ 2,501 - 3,000 m a.s.l. ☐ 3,001 - 4,000 m a.s.l. ☐ > 4,000 m a.s.l.	Technology is applicable ☐ @ some situations ☐ @ some situations ☐ not relevant
Soil depth ☐ very shallow (0-20 cm) ☐ shallow (21-30 cm) ☐ moderately deep (31-80 cm) ☐ deep (81-120 cm) ☐ very deep (>120 cm)	Soil texture (topsoil) ☐ coarse/ light (sandy) ☐ medium (loamy, silty) ☐ fine/ heavy (clay)	Soil texture (> 20 cm below surface) ☐ coarse/ light (sandy) ☐ medium (loamy, silty) ☐ fine/ heavy (clay)	Topsoil organic matter content ☐ high (>3%) ☐ medium (1-3%) ☒ low (<1%)
Groundwater table ☐ on surface ☐ < 5 m ☒ 5 - 20 m ☐ > 50 m	Availability of surface water ☐ excess ☐ good ☐ medium ☒ poor/ none	Water quality (untreated) ☐ good drinking water ☐ poor drinking water (treatment required) ☐ for agricultural use only (irrigation) ☐ unsuitable	Is salinity a problem ☐ Yes ☒ No
			Occurrence of floods ☐ Yes ☒ No

Market orientation	Off-farm income	Relative level of wealth	Level of mechanization
☐ subsistence (self supply) ☐ subsistence ☐ commercial ☐ commercial/market	☐ less than 10% of all income ☐ > 50% of all income ☐ > 50% of all income	☐ very poor ☐ poor ☐ average ☐ rich ☐ very rich	☐ manual work ☐ animal traction ☐ mechanized/motor
Sedentary or nomadic	Individuals or groups	Gender	Age
☐ sedentary ☐ semi-nomadic ☐ nomadic	☐ individual/household ☐ group/community ☐ cooperative ☐ employee company	☐ women ☒ men	☐ children ☐ youth ☐ middle-aged ☐ elderly

Land Use Legend:

- 0.5 – 1 ha
- 1 – 2 ha
- 2 – 5 ha
- 5 – 10 ha
- 10 – 50 ha
- 100 – 100 ha
- 100 – 500 ha
- 500 – 1,000 ha
- 1,000 – 30,000 ha
- > 10,000 ha

Land Use Categories:

- medium-scale company
- communal village group
- individual, not titled
- individual, titled
- large-scale individual
- small-scale communal (organisations)
- leased communal (organisations)
- leased individual

Water use rights

- open access (rural)
- communal (organisations)
- leased
- individual

Access to services and infrastructure

Service	poor	good
health	poor	good
education	poor	good
technical assistance	poor	good
employment (e.g. off-farm)	poor	good
markets	poor	good
energy	poor	good
roads and transport	poor	good
drinking water and sanitation	poor	good
financial services	poor	good

Socio-economic impacts	
animal production	decreased increased
farm income	decreased increased
increase in livestock grazing efficiency	decrease increase
increase in the sector's competitiveness	decrease increase
Socio-cultural impacts	
food security/ self-sufficiency	reduced improved
community institutions	weakened strengthened
conflict mitigation	worsened improved
The application of the technology and activities performed	decreased increased
contribution to human well-being	decreased increased

Up to a 35% increase in animal weight and milk

by the pasture users' commission improved mutual understanding and collaboration between the community members.

An increase in livestock production as a result of pasture use facilitates an increase in the farm's

Benefits compared with establishment costs	
Short-term returns	very negative very positive
Long-term returns	very negative very positive
Benefits compared with maintenance costs	
Short-term returns	very negative very positive
Long-term returns	very negative very positive

Assuming that the variable costs per sheep are around 8 USD, the farm's income may reach up to USD 24, i.e. economic feasibility of rehabilitation of wells is justified.

Gradual climate change				
annual temperature increase	not well at all			very well
Climate-related extremes (disasters)				
local rainstorm	not well at all			very well
local windstorm	not well at all			very well
drought	not well at all			very well

Percentage of land users in the area who have adopted the Technology

single cases/experimental

- 1-10 %
- 11-50 %
- > 50 %

Of all those who have adopted the Technology, how many have done so without receiving material incentives?

- 0-10 %
- 11-50 %
- 51-90 %
- 91-100 %

Has the Technology been modified recently to adapt to changing conditions?

- climatic change/ extremes
- changing markets
- labour availability (e.g. due to migration)

Strengths: land user's view	Weaknesses/disadvantages/ risks: land user's view
- Plants' palatability improves, plants are less affected by trampling by animals - Helps increasing animal weight and milk yield - Animals are satiated within a shorter walking distance, decreasing energy consumption for both animals and shepherds	- It is believed that the rehabilitation of watering wells without external support is too expensive for local communities. - Estimating economic benefit may provide visibility of efficient rehabilitation of the wells in case of appropriate management - Lack of the knowledge needed to develop a pasture rotation scheme - Carrying out field training may have significant benefits in the building of knowledge
Strengths: compiler's or other key resource person's view The technology promotes a balance between the needs of the	

Strengths: compiler's or other key resource person's view

- The technology promotes a balance between the needs of the local livestock producer community and the pastures' requirement for self restoration
- The technology is based on the local livestock producers' experience and uses local labor resources: shepherds skilled in the technique of rotation-based grazing of sheep flocks, as well as the existing watering well infrastructure.
- There's no need for large investments to introduce the technology
- The technology can easily be adapted with support of local administrations

Weaknesses/ disadvantages/ risks: land user's view — how to overcome

- It is believed that the rehabilitation of watering wells without external support is too expensive for local communities. — Estimating economic benefit may provide visibility of efficient rehabilitation of the wells in case of appropriate management
- Lack of the knowledge needed to develop a pasture rotation scheme — Carrying out field training may have significant benefits in the building of knowledge

Weaknesses/ disadvantages/ risks: compiler's or other key resource person's view — how to overcome

- Required initial investments for the rehabilitation of watering wells, which pasture users do not have in sufficient quantity — Micro-financing may be required.
- An insufficient level of awareness and knowledge of the root causes of the problems and an insufficient level of ecological education in the population — Pasture users' capacity level building

Compiler Rustam Ibragimov	Editors	Reviewers Alexandra Gavilano Deborah Niggli
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Resource persons

Resource persons
Tatyana Khamzina - SLM specialist
Irina Bekmirzaeva - SLM specialist

Full description in the WOCAT database
<http://wocat.net/en/database/technologies/1527>

Linked SLM data
Approaches: Pasture Calendar <https://wocat.net/en/database/approaches/3466/>

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- United Nations Development Programme Uzbekistan (UNDP Uzbekistan) - Uzbekistan

- Central Asian Countries Initiative for Land Management (CACILM II)
- UNDP/GEF Project Uzbekistan (UNDP/GEF Project Uzbekistan)

- Информационный бюллетень 2: Проект «Достижение стабильности экосистем на деградированных землях в Каракалпакстане пустыне Кызылкум», Ташкент 2010. — www.unlrfp.org
- План управления животноводством и пастбищами проектной территории «Кызыл Рават», С.Юсупов, А.Рахмимов, Ташкент 2010.
- Руководство «Экономические мероприятия по устойчивому животноводству и борьбе с деградацией земель в пустынях региона Узбекистан», Х. Норова, С. Юсупов, Ташкент 2011. — www.unlrfp.org

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Utilization of the standardized data and evidence

SLM Enabling Environment

Successful SLM focuses both on the **practices on the land** as well as **the ways and means that support their implementation** through **institutions, incentives, capacities and governance**.

Key elements:

Land Tenure: Secure land tenure is one of the strongest predictors of long-term investment in SLM by land users.

Gender: Gender inequalities influence access to land, resources, information and decision-making.

Incentives: Adoption of SLM often involves short-term costs while the benefits are usually seen more on the long term. Incentives can provide solid support and be anchored within policies or private sector engagement schemes.

Capacities: Many SLM practices require new knowledge and skills. Capacity development may be needed at multiple levels, from land users to government representatives.

Policies: Policies can encourage or discourage SLM. Examples of supportive policies include recognition of customary tenure, incentives for restoration, integration of SLM into agricultural strategies, landscape/land use planning frameworks, and climate adaptation strategies. Conversely, policies promoting unsustainable expansion or short-term exploitation may undermine SLM efforts.

Regional and continental frameworks

While national-level LDN targets, biodiversity targets, and NDCs drive local SLM implementation, various regional and continental frameworks also support SLM efforts:

Africa	Agenda 2063	Adopted in 2015 by Heads of State and Government of the African Union, it addresses SLM by focusing on environmentally sustainable and climate-resilient economies and communities, and by promoting people-centered land governance that ensures secure land tenure for all, especially women and girls. SLM key actions are related to ecosystem and forest management, sustainable forest management, sustainable rangeland management, secure land tenure, value creation and food security.
	CAADP Kampala Declaration, Strategy and Action Plan (2026-2035)	Aims to transform African agri-food systems through six strategic objectives of which one is building resilient agri-food systems to which SLM directly contributes through practices that combat land degradation, enhance productivity and support climate change adaptation and mitigation.
	2024 Nairobi Declaration on Fertilizer and Soil Health	Adopted by Heads of State and Government of the African Union in 2024, it targets, amongst others, to reverse land degradation and restore soil health on at least 30% of degraded soil by 2034.
	AFR100	A Pan-African, country-led initiative adopted in 2015 by African Union Heads of States summit with the objective to bring 100 million hectares of degraded lands into restoration by 2030.
Middle East	Middle East Green Initiative (MGI)	Launched by Saudi Arabia in 2021, it is a major regional driver aiming to plant 50 billion trees across the region to rehabilitate degraded lands. The Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD) provides the underlying scientific framework.
Central Asia	Central Asian Countries Initiative for Land Management (CACILM)	Launched in 2006, it is the core partnership framework driving SLM, backed heavily by the UNCCD's LDN targets to combat land degradation and desertification.
Latin America and the Caribbean	Initiative 20x20	A regional partnership launched at UNFCCC COP20 in Lima 2014, it aims to drive country-led land restoration across LAC nations, targeting 50-52 million hectares by 2030. It serves as a bridge to countries' Nationally Determined Contributions (NDCs).
	Forum of Ministers of Environment – Lima Declaration	Key components of the Lima Declaration focus on land, water and ecosystem resilience through the water-land nexus and water security, drought and desertification resilience and multi-country ecosystem restoration.
Southeast Asia	ASEAN Multi-Sectoral Framework on Climate Change (AFCC)	Launched in 2009 by ASEAN and operationalized under the oversight of the ASEAN Ministers on Agriculture and Forestry, the framework coordinates strategies. It integrates climate adaptation and mitigation measures to secure food supplies, protect communities and ensure sustainable land and resource use.

SLM and Food Systems

SLM ultimately provides the ecological foundation upon which sustainable food systems depend.

By maintaining productive and healthy land resources, SLM strengthens the environmental, economic and social pillars of food systems, safeguarding the resource base needed by future generations.





Thank You

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WOCAT
World Overview of Conservation Approaches and Technologies

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SLM and MEAs

Why and how is Land Degradation Neutrality (SDG 15.3) relevant to the three Rio Conventions?

Dr. Ingrid Teich

Senior Research Scientist

University of Bern, Centre for Development and Environment / WOCAT

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Biodiversity depends on healthy land

Land stores carbon

Why and how is Land Degradation Neutrality (SDG 15.3) relevant to the three Rio Conventions?

Healthy soils increase resilience



A photograph of a rural landscape. In the foreground, there is a vibrant green rice field. To the left, a small cluster of buildings and trees is visible. The background consists of rolling green hills under a cloudy sky. The text is overlaid on the center of the image.

ALL OF THEM!
Carbon, biodiversity, food, water,
livelihoods, land degradation **all happen in**
exactly the same place.

Which Rio Convention is this landscape about?

The conventions may be asking different questions...
...but governments and projects often need the same
decisions

Where to restore?

*What SLMs to
implement?*

Why/ what works?

Who benefits?

How do we monitor?

LDN provides
a common implementation framework



What makes LDN a relevant implementation framework for the Rio Conventions

LANDSCAPE

LDN is a **landscape approach** that balances ecosystem health and human well-being.

SPATIAL

LDN provides a **spatially explicit framework** to prioritize actions and monitor progress.

EVIDENCE

LDN **integrates** Earth Observation, national data and local knowledge into a common evidence base of **land condition** for SLM.

DECISIONS

LDN links monitoring with **practical land management decisions**.

HEALTHY LAND

LDN focuses on **healthy ecosystem functioning**, which sustains both carbon sequestration and biodiversity.

PLANNING

LDN bridges environmental objectives and development priorities through **integrated land use planning**.





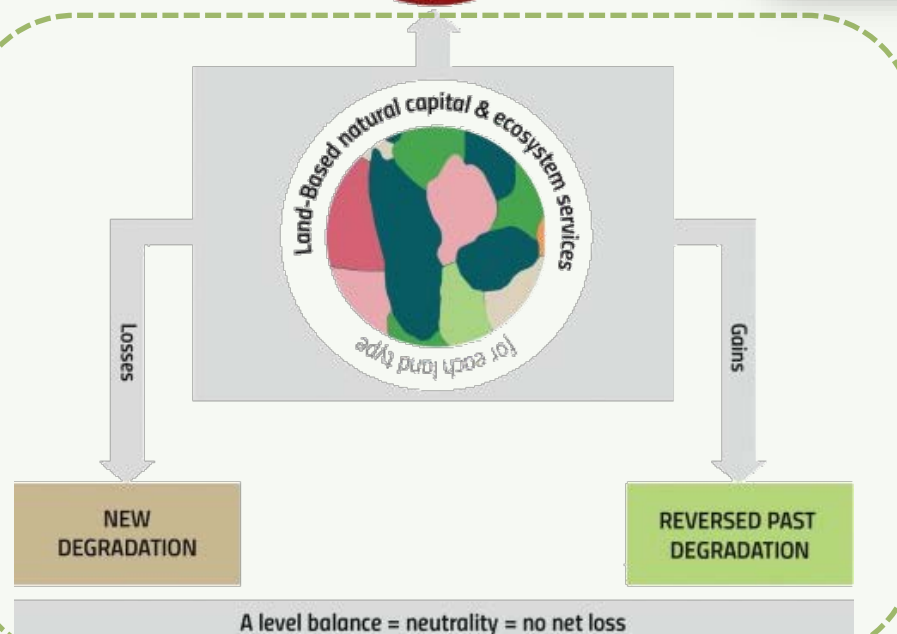
NEUTRALITY MECHANISM



END DESERTIFICATION AND RESTORE DEGRADED LAND

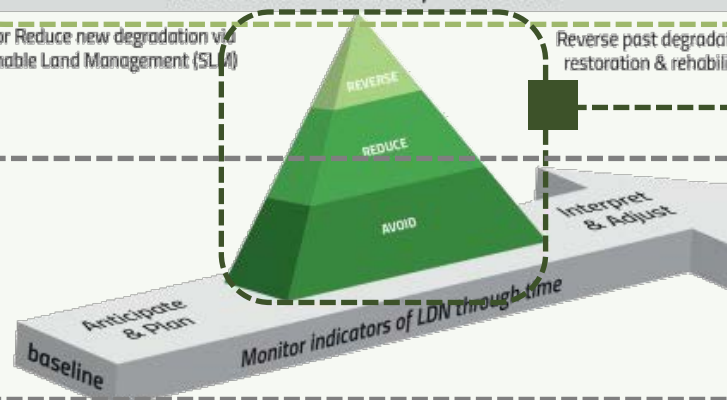
By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.

LDN MONITORING



Avoid or Reduce new degradation via Sustainable Land Management (SLM)

Reverse past degradation via restoration & rehabilitation

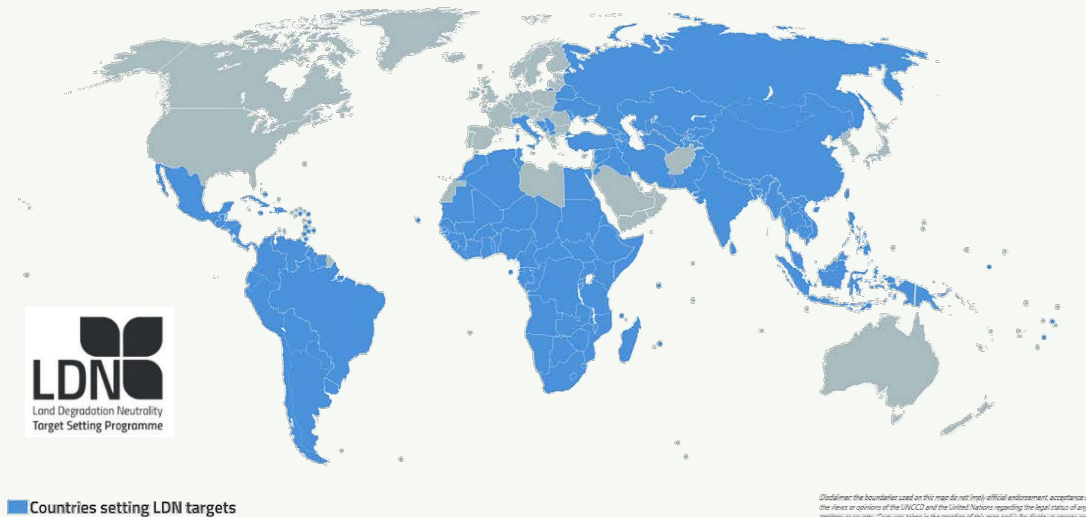


LDN RESPONSE HIERARCHY

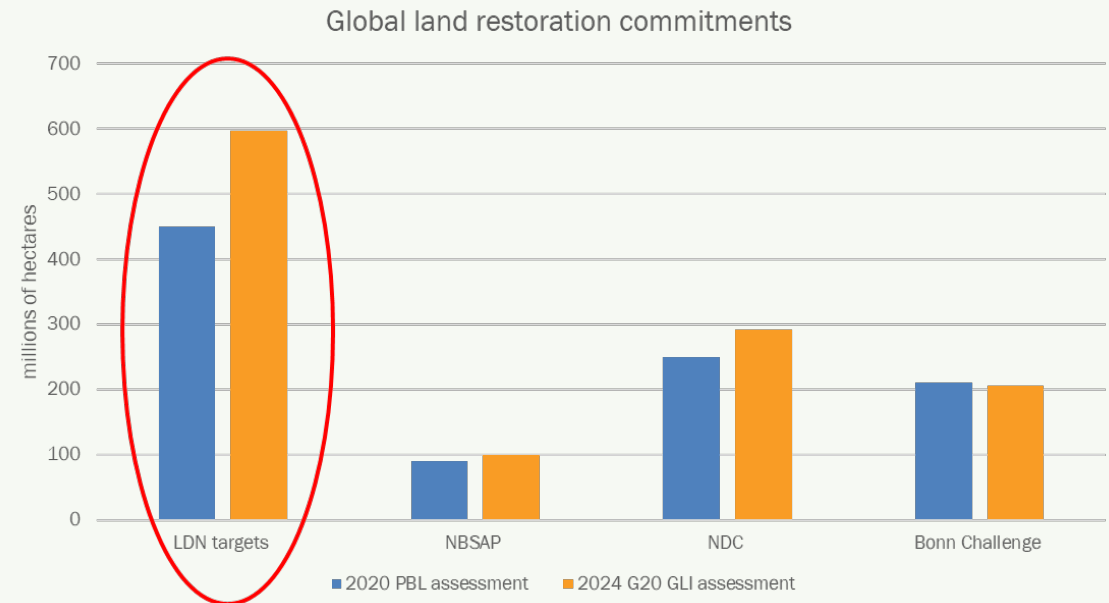


LDN Targets

The Global Mechanism and the secretariat of the UNCCD established the **Land Degradation Neutrality Target Setting Programme (LDN TSP)** to assist countries to achieve LDN by 2030



131 countries engaged in setting LDN targets (country-led, voluntary, and non-legally binding policy process based on best-available data on LDN indicators and related national assessments). **124 countries have reported LDN targets to the UNCCD** to date (via LDN-TSP and PRAIS during 2018 & 2022 national reporting)



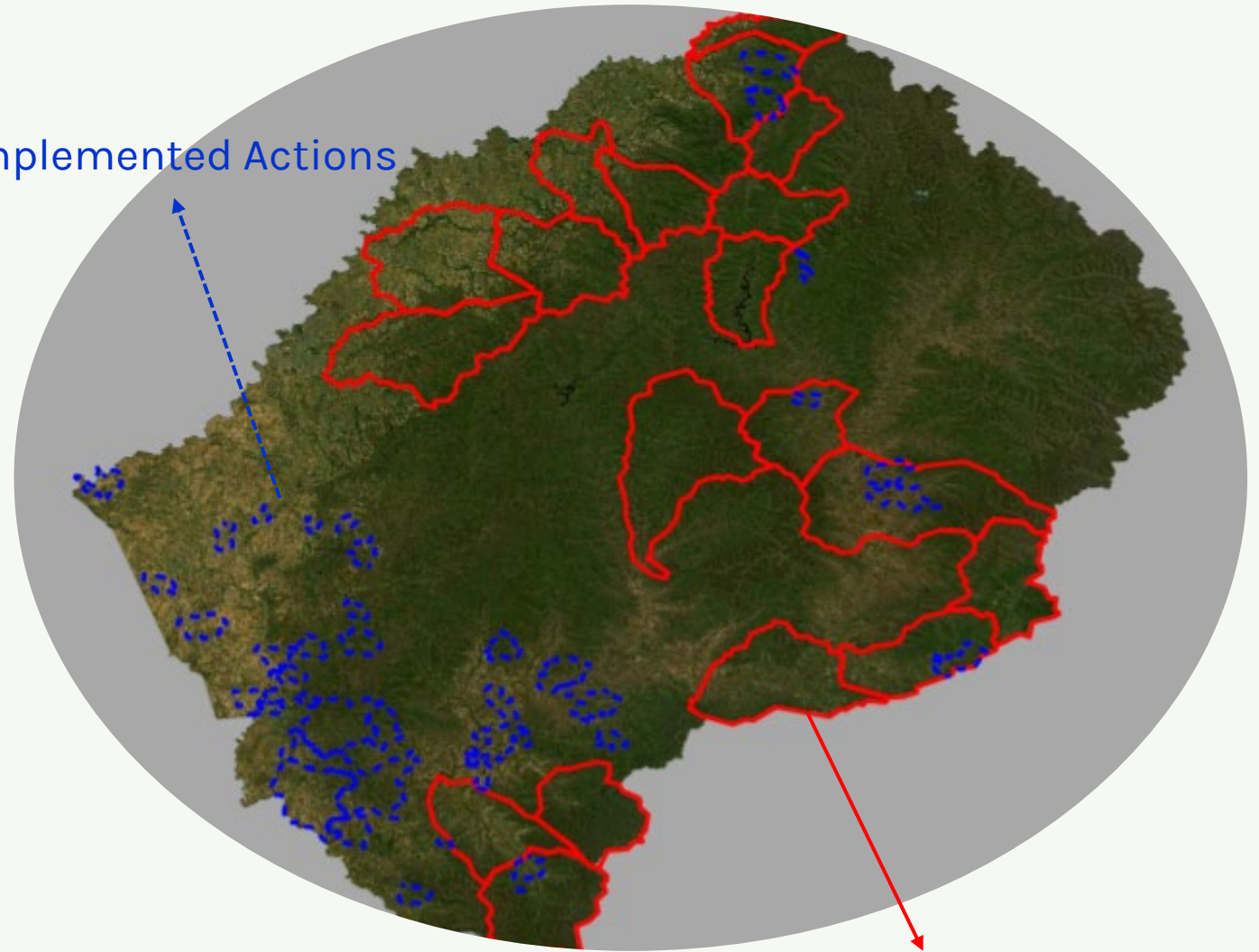
Globally, it has resulted in voluntary commitments to **restore almost 600 million hectares of degraded land**, complementing other commitments under NDCs, NBSAPs and Bonn Challenge.

Lesotho

Lesotho has spatially explicit priority areas linked to their LDN targets, some of which include:

- Reduce the rate of soil erosion and sealing (conversion to artificial land cover) by 20% by 2030 as compared to 2015
- Improve productivity and SOC stocks to 1% in all land classes by 2030 as compared to 2015
- Rehabilitate 600,000 hectares of degraded land to functionality by 2030

Implemented Actions



Voluntary LDN targets

Source: <https://data.unccd.int/country-ldntargets?country=LSO>

It is not just about better coordination, it is about better decisions in landscapes

LDN is not a perfect framework.

Its strength lies in providing a common implementation framework. Like any framework, it has limitations that need to be recognized. There are trade-offs, it requires capacities and effort to produce relevant maps of land condition, there is no “one-size-fits-all” solution, among others.

But...

LDN is one of the few internationally agreed frameworks explicitly designed to support integrated landscape decision-making. It provides a practical framework for shifting the conversation from reporting targets to deciding where to act, what actions to prioritize, and how to monitor progress, using a common spatial evidence base that supports integrated landscape management.

LDN is becoming one of the most useful implementation frameworks for the Rio Conventions.



Thanks!

Do you have any questions?

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<https://wocat.net/en/>

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SWISS AGENCY FOR DEVELOPMENT AND
COOPERATION (SDC) WEBINAR

Policy Frameworks for Sustainable Land Management Implementation in Africa

*From continental commitments to financed, country-owned
delivery*

Kwame Ababio



05.August

Key Message:

- Africa's policy architecture is in place.*

Delivery now depends on integration,

- Investment and*
- Measurable implementation at country level.*

The Opportunity: Turning Land Commitments into Delivery

- SLM is a delivery agenda for food security, climate resilience, biodiversity and rural livelihoods.
- Africa has strong continental frameworks — the challenge is translating them into financed national programmes.



Food Security



Climate Resilience



Biodiversity



Rural Livelihoods



Why Land Is Central to Africa's Resilience

SLM is not only an environmental agenda — it is an economic, agricultural and resilience agenda.

WHEN LAND DEGRADES



Reduces agricultural productivity



Weakens water systems



Increases vulnerability to climate shocks

WHEN LAND IS HEALTHY



Improves food systems



Stores carbon and protects ecosystems



Supports rural jobs and local economies

The Continental Architecture Is Already in Place

Vision, agriculture transformation, land restoration, sustainable use of biodiversity, climate resilience and implementation support — mutually reinforcing, not separate processes.



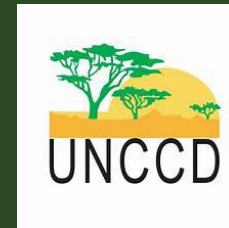
Agenda 2063

Sets the vision for inclusive, sustainable and climate-resilient development.



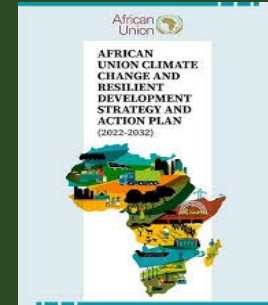
CAADP

Places sustainable land and water management at the centre of agricultural transformation.



UNCCD LDN & SDG 15.3.1

Provide a measurable pathway for tracking land condition.



AU CC Resilient Devt Plan Biodiversity Action Plan

Provides a continental pathway for coherent policy development and implementation



Connects continental ambition with national implementation support

Frameworks in Action: Regional and Country Examples

REGIONAL

Great Green Wall Initiative

AU-led, spanning the Sahel and now Southern Africa (SADC GGWI). Targets 100M ha restored, 250M tonnes of carbon sequestered and 10M green jobs by 2030.

ECOWAP (ECOWAS Agricultural Policy)

Adopted 2005. West Africa's CAADP-aligned regional policy, embedding land and water management through its Regional Agricultural Investment Programme.

AFR100

African Forest Landscape Restoration Initiative. 30+ countries; over 100M ha pledged for restoration, linked to the global Bonn Challenge.

COUNTRY

Ethiopia — Sustainable Land Management Program

2008–2018. Watershed restoration across 135 watersheds, land certification and institutional capacity-building, financed with the World Bank and GEF.

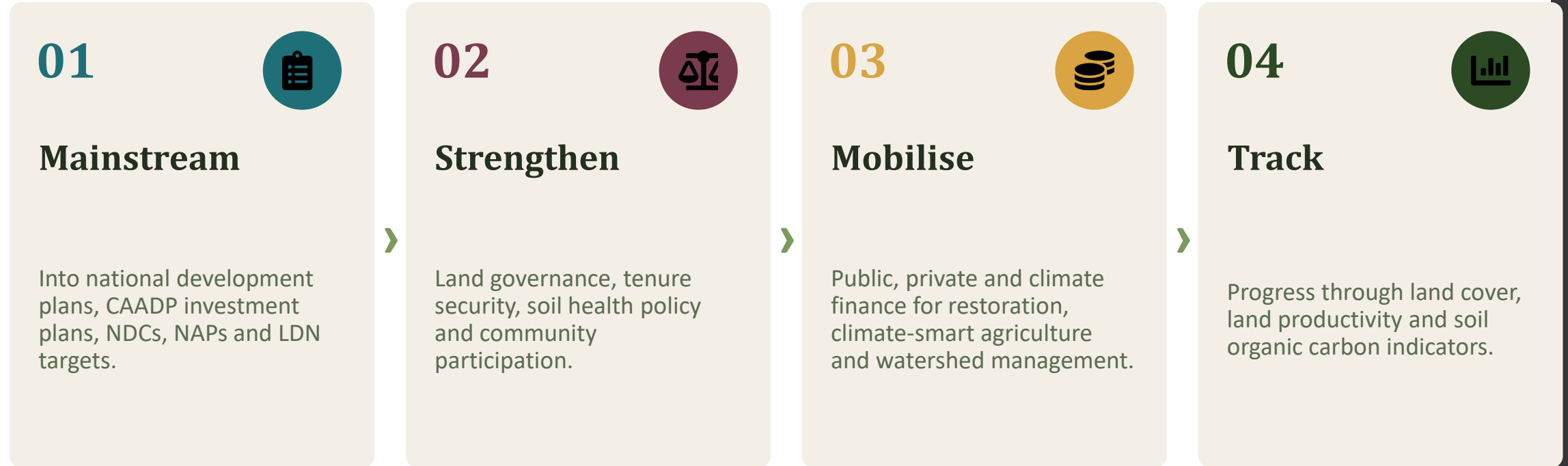
Niger — 3N Initiative

“Nigériens Nourish Nigériens,” launched 2012. Cross-sectoral national food-security strategy targeting 3.2M ha of restored degraded land by 2030.

Rwanda — National Land Policy & Tenure Regularisation

2004 policy plus a nationwide titling programme registering over 10 million land parcels, underpinning tenure security and climate-resilient investment.

Implementation Pathway: From Frameworks to Country Systems



Implementation succeeds when policy alignment is matched by institutions, finance, monitoring and local ownership.

Acceleration Priorities: What Must Happen Next

- Shift from isolated projects to country-owned SLM programmes.
- Improve coordination across agriculture, environment, water, climate and finance institutions.
- Invest in data systems, extension services, local institutions and knowledge exchange.



Women, youth, pastoralists and smallholder farmers at the **centre** of design and benefit-sharing.

INTEGRATE · FINANCE · IMPLEMENT · MEASURE

WATER AND LAND RESOURCE CENTRE (WLRC)

Landscape Approach in Ethiopia: The successful Learning Watershed Model

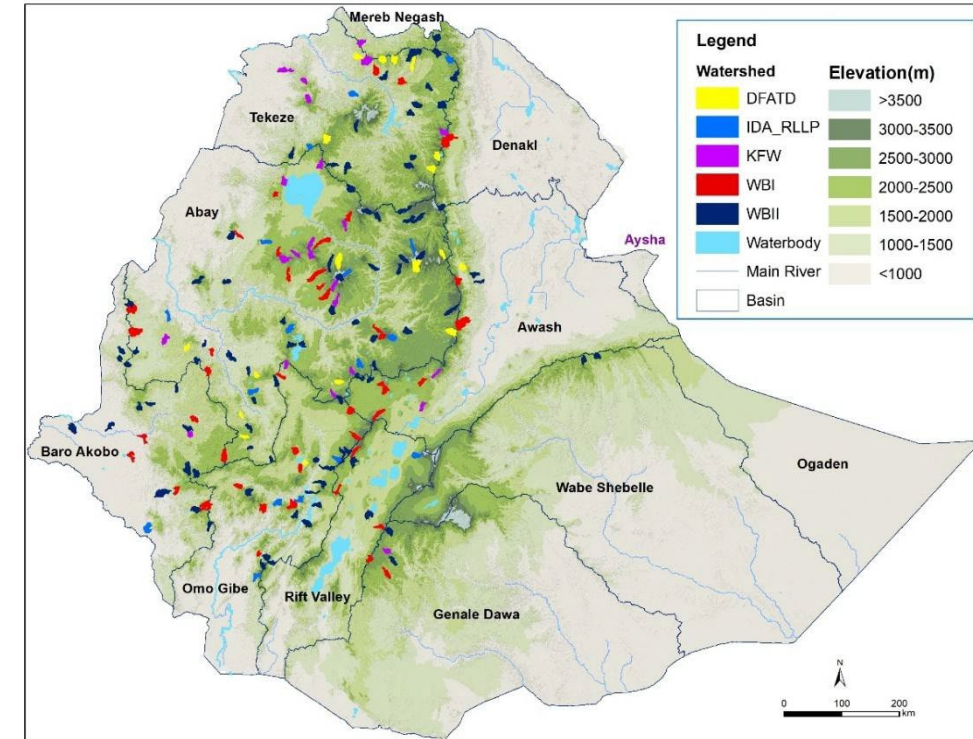
From Degradation To Abundance

By Gete Zelek (PhD), Director, WLRC
Addis Ababa, Ethiopia , August 8, 2026

Efforts & Challenges in IWM

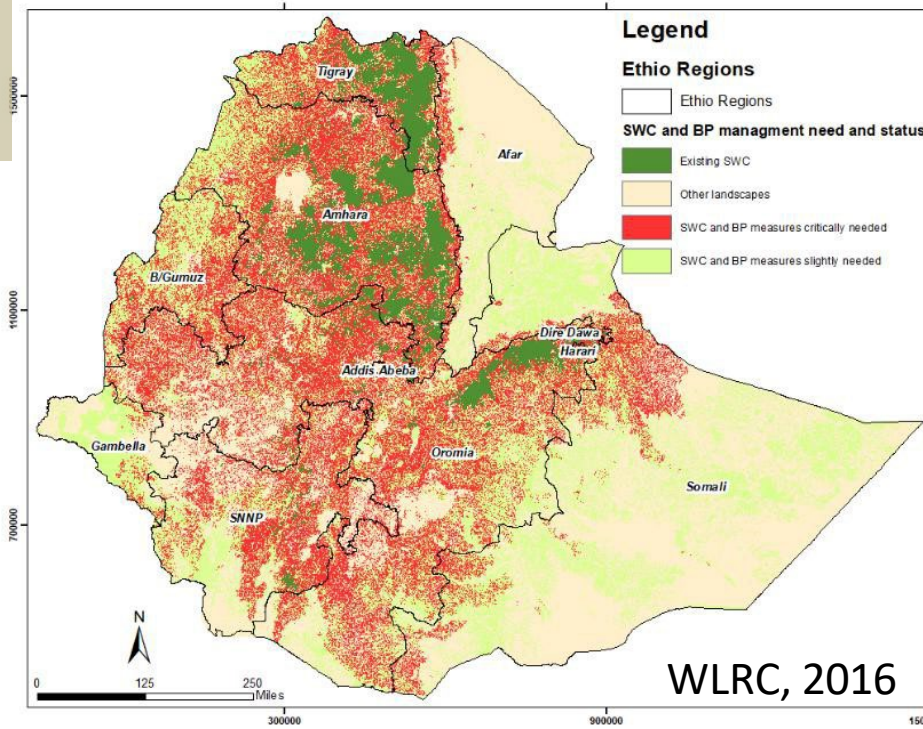
■ Ethiopia's efforts on IWM: three categories

1. Through many national programmes and projects
 - Active: SLMP-1, SLMP-2, RLLP, KFW, CALM, PSNP, WLRC-LWs and ILMWA, etc
 - Phased-out projects: MERET, NBI Fast Track Project on IWM, SUN, and many others
1. Community mobilization for IWM
 - Every year communities contribute free labour – upto 60 days → millions of labour days per year
3. Recently government led special initiatives – **Ethiopian Green Legacy Initiative (EGLI)**





**The effort suffers from
Unsustainability of SWC/IWM**



**Over the last 42
(1974-2016) years
Ethiopia managed
to conserve 7.7
million ha by SWC
(23% of area that
need SWC)**

**But the country
constructed much more**



Photo: Gete, 2012

As a result Land degradation is still major challenge



Photo: Tibebu 2020





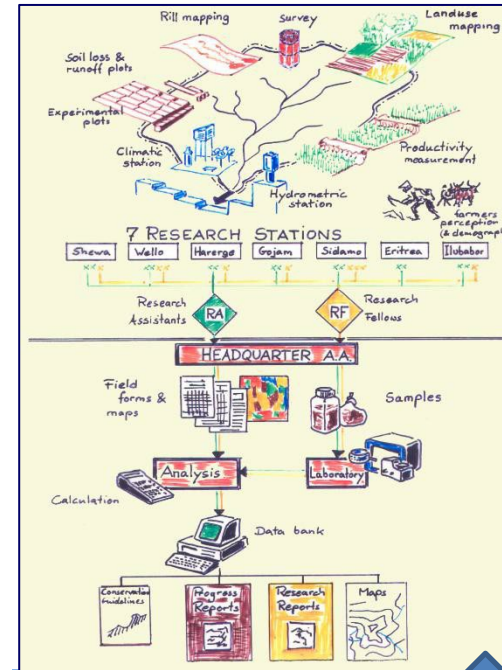
- Loss of top soil, soil nutrient
- Affect water storage structures
freshwater lakes and wetlands



Why LWs

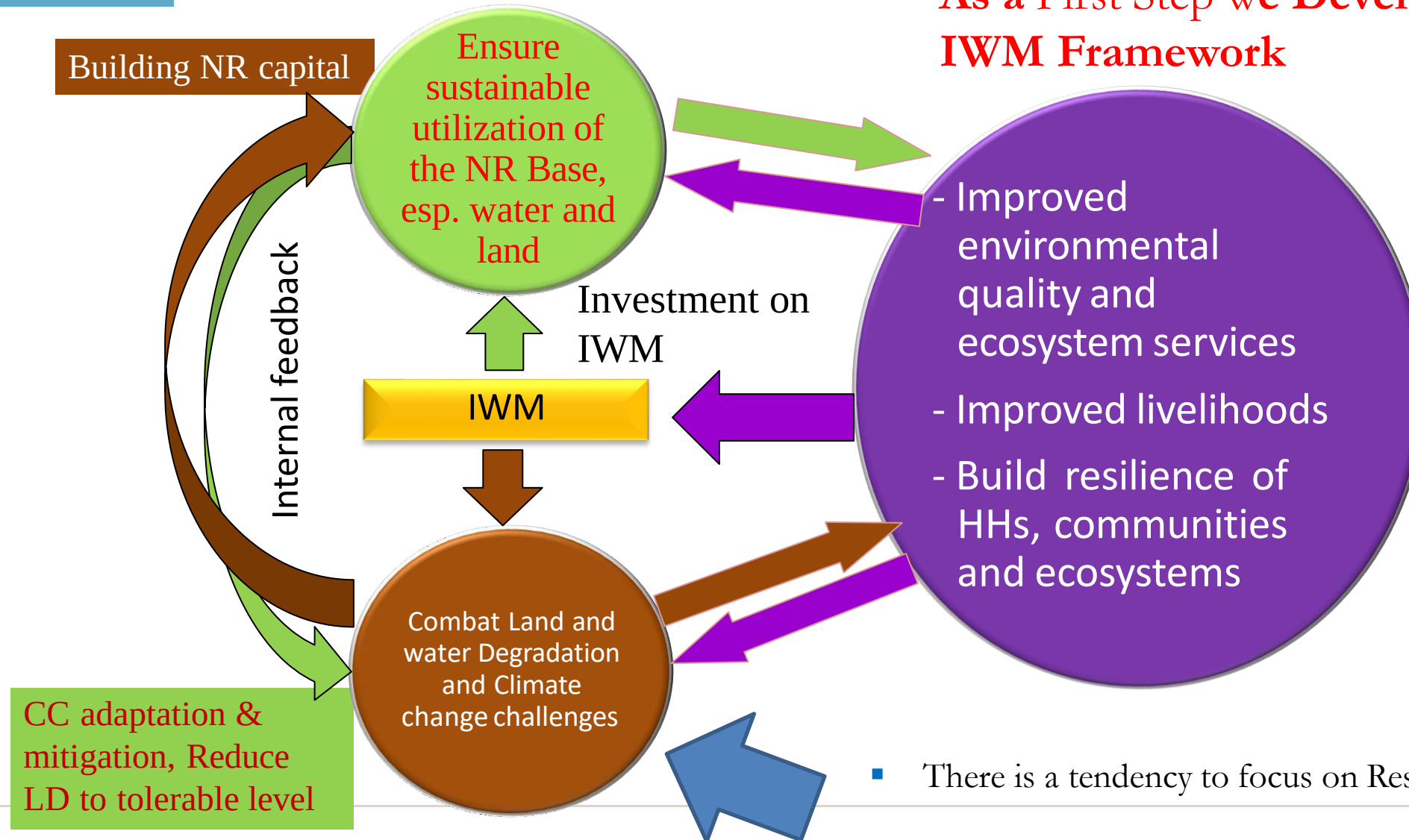
- There was a need to bridge research with development
- There was a need to design IWM at watershed level that is properly designed following the IWM principles that also addresses all observed gaps (since 1974):
 - Lack of proper Baseline situation data
 - Poor participatory approach & design
 - Focus only on independent technologies mainly SWC or planation – little integration
 - Lack of livelihoods focus
 - Poor sustainability and lack of tools
 - Poor institutional linkage
 - Lack of an inbuilt scientific monitoring – biophysical and socio-economic

➔ That is where we brought in the LW concept



The LW – Model Causes – Where do we start ?

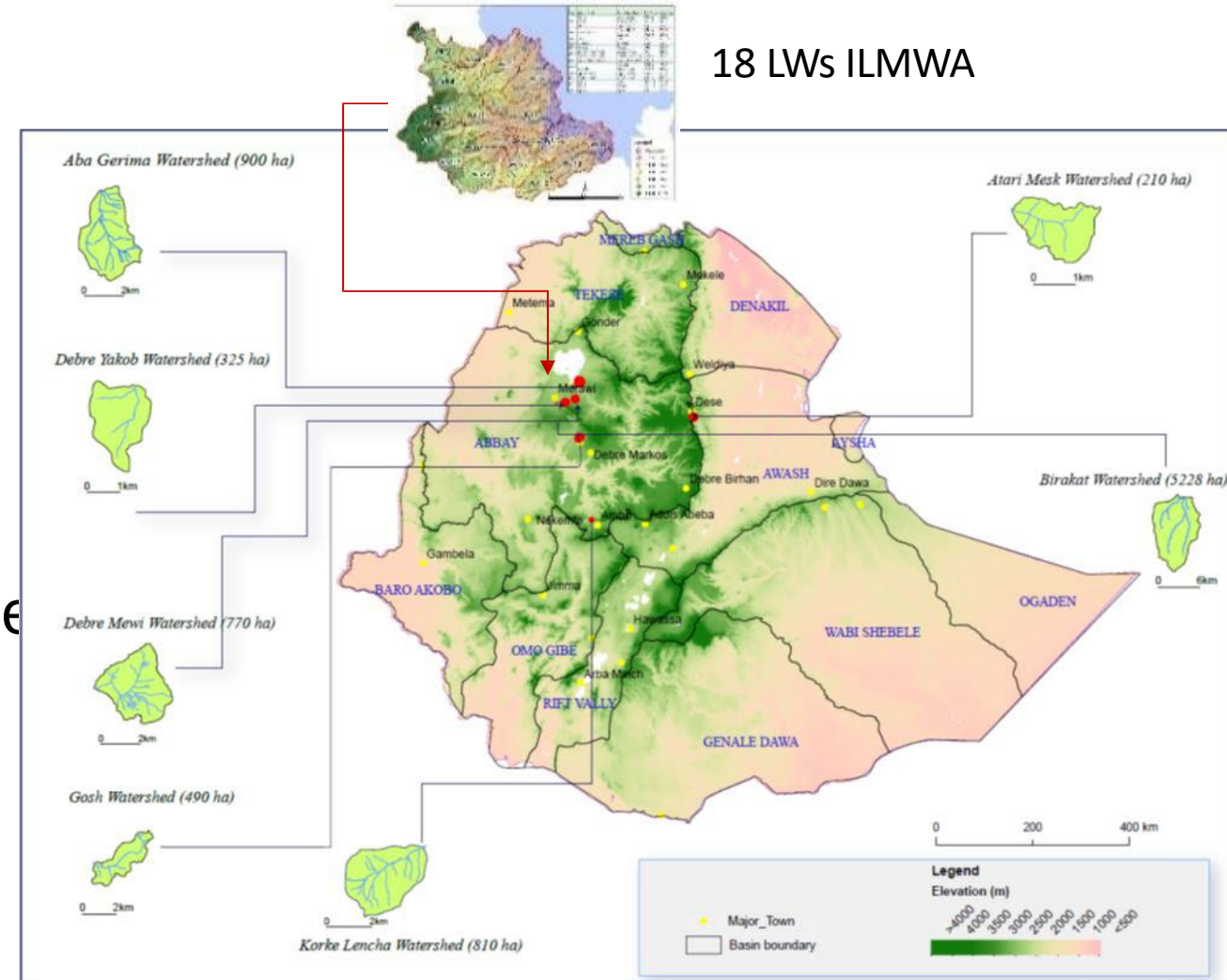
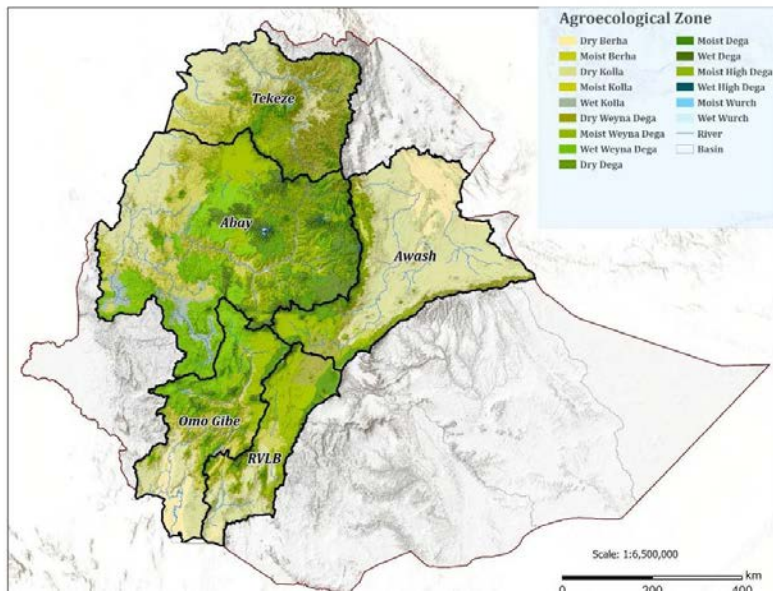
As a First Step we Developed the
IWM Framework



- There is a tendency to focus on Restoration only

Where in Ethiopia

- We started with seven LWs
- We upscale them to 18 LWs
 - – covering 11,750 ha
- Now we are upscaling the experience



Baseline situation of our LWs in pictures (2012)



Gulley Erosion is a common problem in every parts of Ethiopia on communal grasslands, hills and cultivated lands

January 2012



DEBRE YAKOB

Communal grazing land

Change is possible and can be quick if the IWM principle is properly followed – you can easily minimize erosion by 75%

February 2015

- What we did here:
 - Establish users groups
 - Develop utilization and management plan
 - Develop bylaws
 - Apply simple rehabilitation technologies (physical and biological)
 - Close follow-up and support

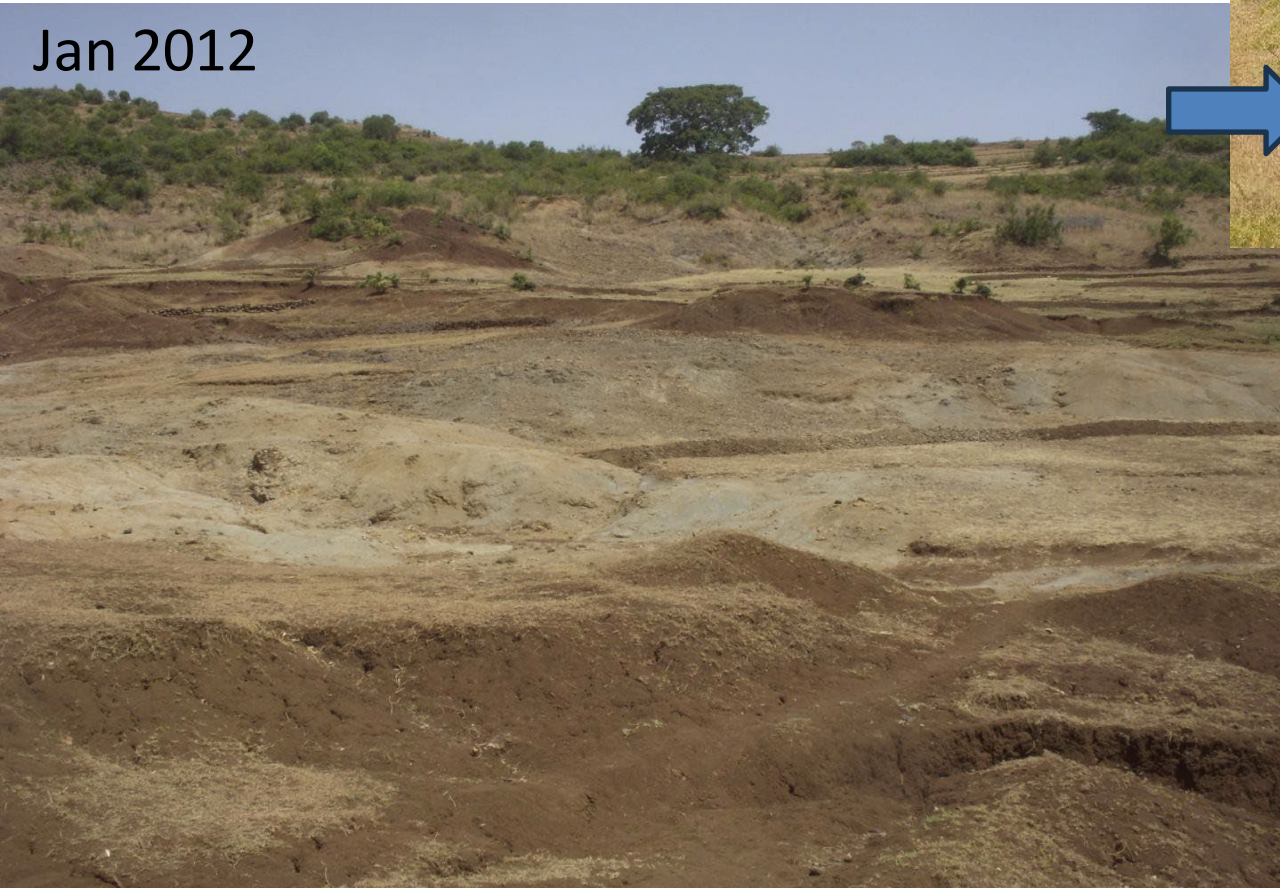




Area Closure

**Converting degraded hillside
into productive land with the
same process**

Jan 2012



February 2023



Making Farm Terraces Productive

November, 2013

July 2012

Making bunds on cultivated land productive

- Forage development
- Can be also fruit
- Or cash crop like Gesho (Hops)

→ **Cash Bunding**



December 2015

SWC structures are made
Productive -converted into
cash bunds – a key for
sustainability



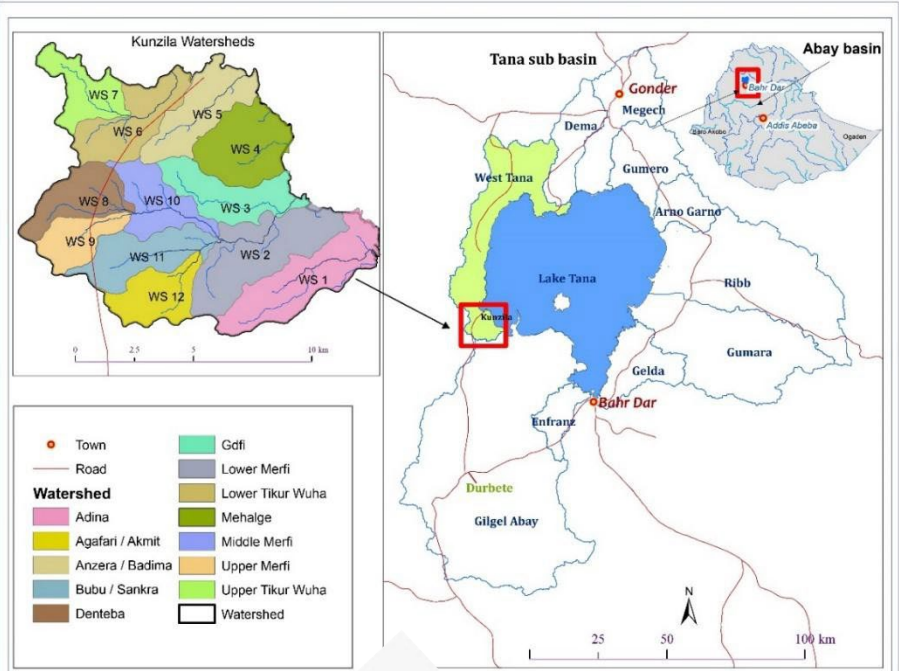
To enhance livelihoods we transform Homesteads into Agroforestry productive lands with **many packages**



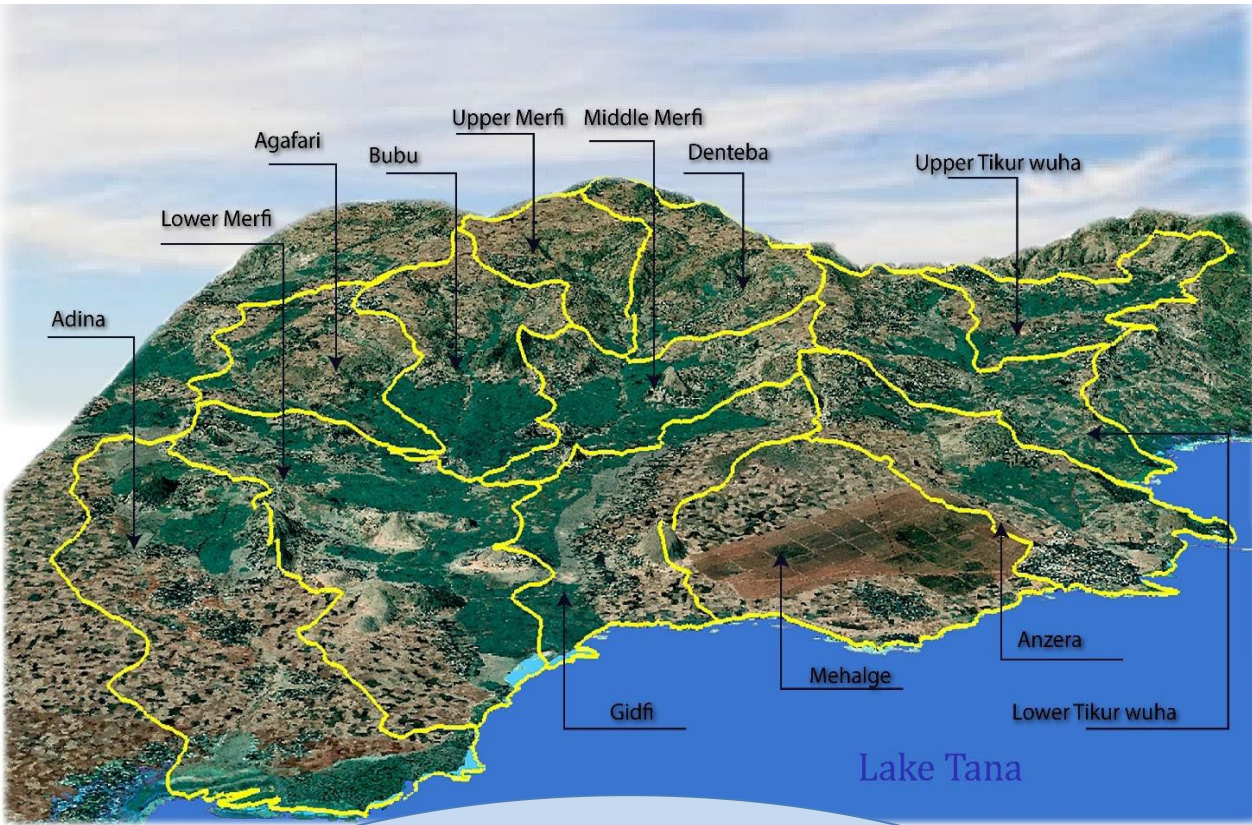
Upscaling 01

KILMWA

In 2020 we upscale the Lessons from LWs to KILMWA



18 WS,
6- Kebeles,
11,720ha



WASH/Capacity Dev

ILM/Scientific Monitoring/ Capacity Development/ Project Mgt

Community

It has 8 Components

Financed By

Ministry of Foreign Affairs of the Netherlands

~€20 Million
2020-2024 (5 Years)

9,681 p.,
Kunzila town

28,942 people,
#6 rural Kebeles

65,850 people, including surrounding areas (directly & through spin over effects)

Wider society - Indirect Beneficiaries through spin over effects

Baseline situation – very frightening

- Huge land degradation and Siltation of Lake Tana



- Poor livestock management, less than 43% forage supply



- Poor access to basic water supply:
70% of HHs, 67% of schools
& 75% Health Care Facilities





Home Gardening as part of Homestead Development Approach was expended - key component of the LWs in improving livelihoods, nutrition and empowering women

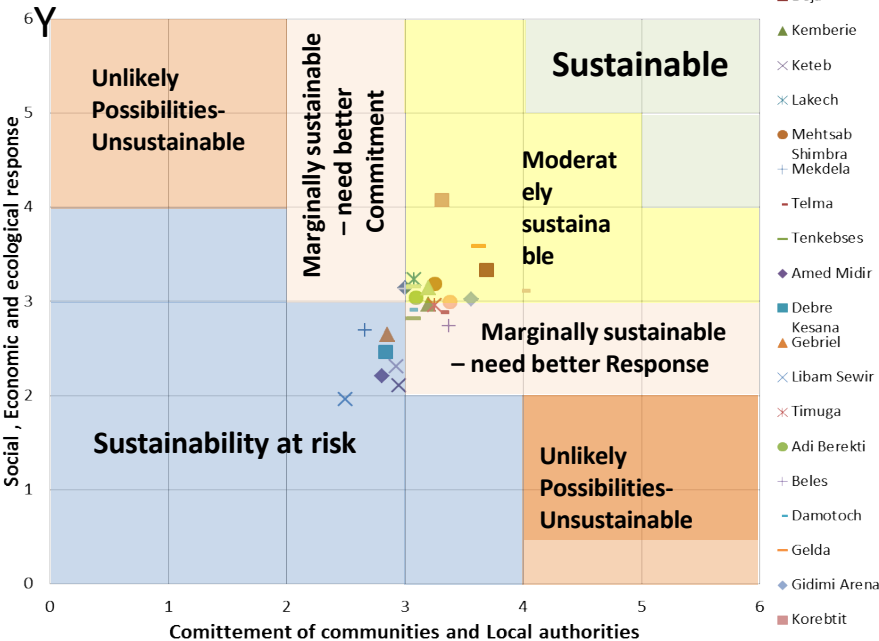


The Sustainability Assessment Tool

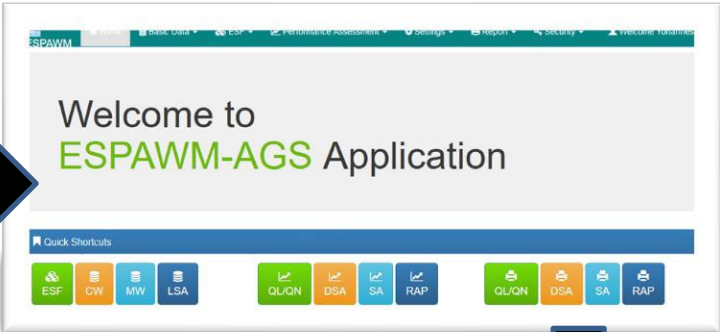
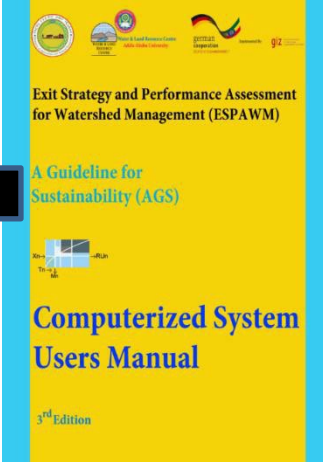
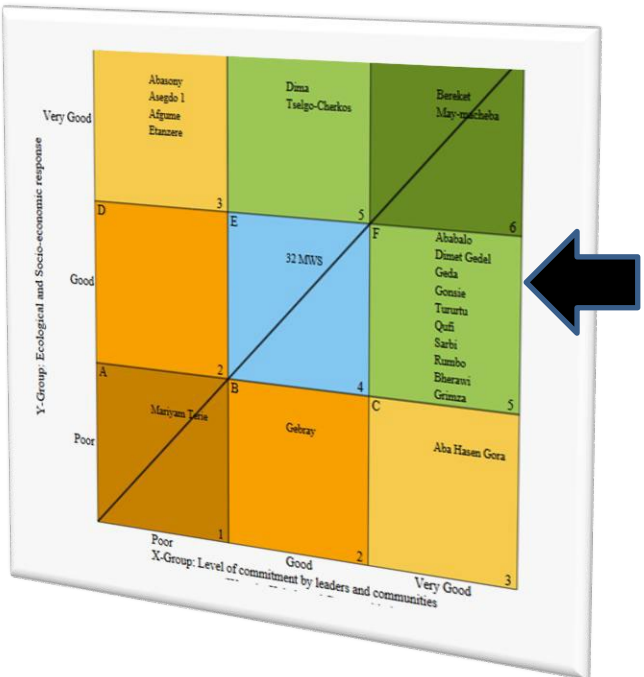
What It Does

- In built ES
- Assess quality
- Determine WS Development stage
- Sustainability
- Quantify remaining actions towards sustainability
- Post exit evaluation

Plotted with actual values of X and



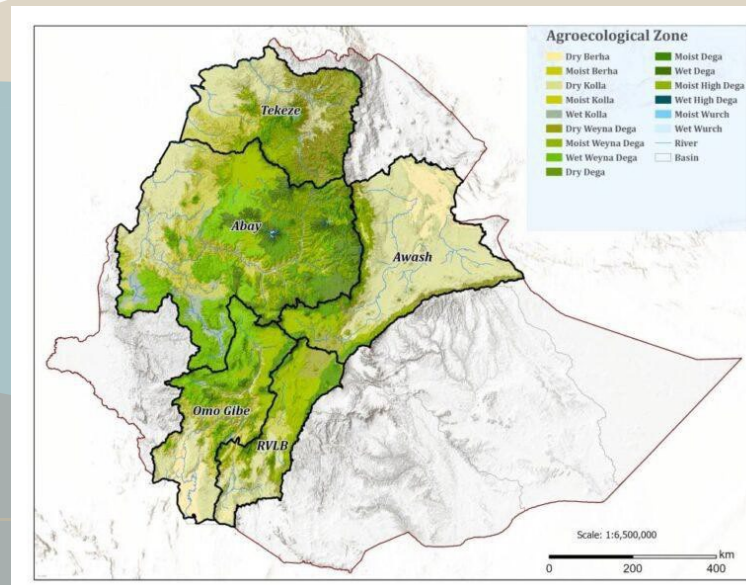
Average Value of X and Y



Upscaling 02



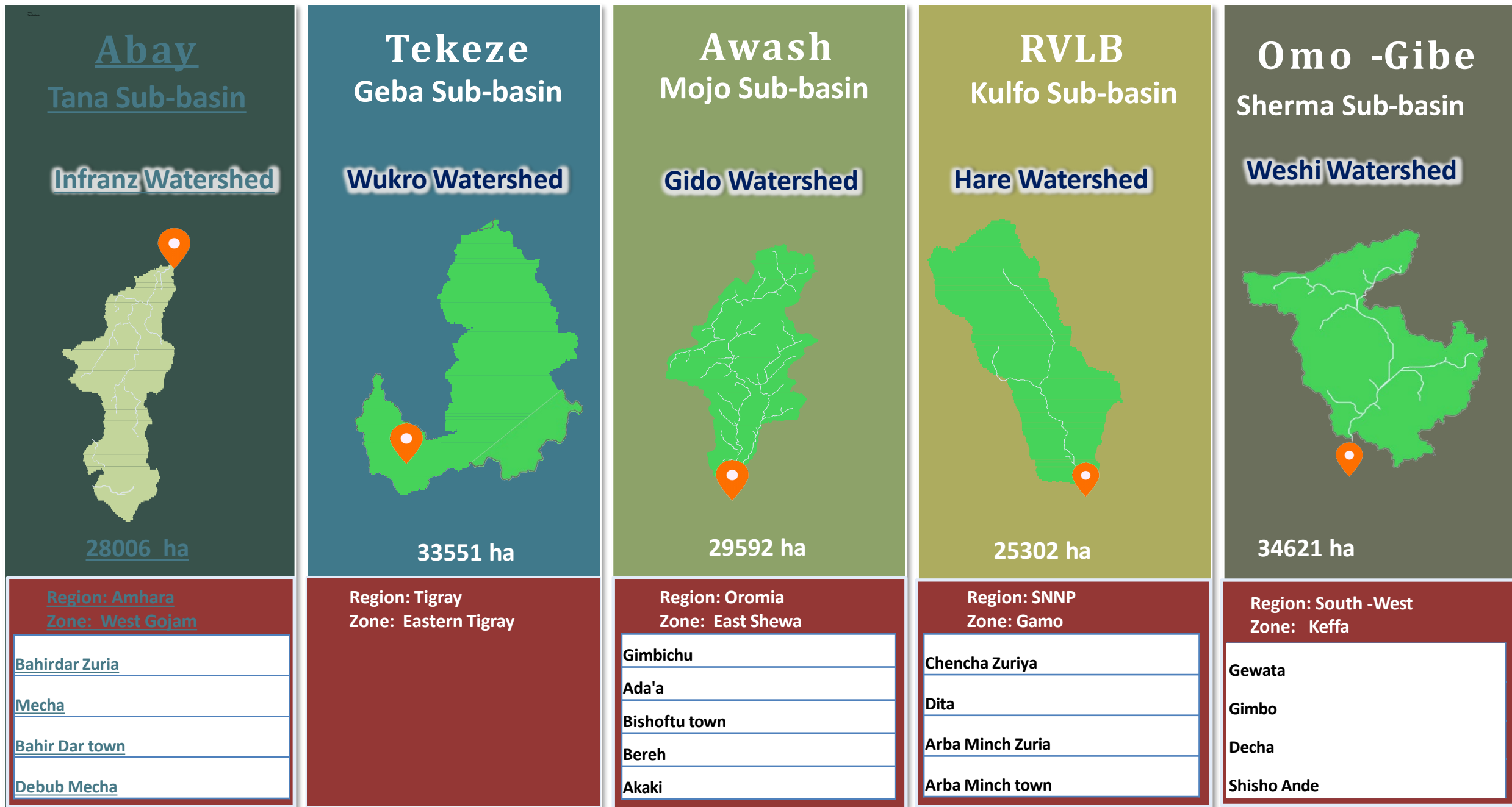
- Fiver basins
- 2024-2028
- 45 Million EURO
- Financed by EU & MoFAN, ETH Gov and Communities



The five basins hold 73% of national water

89.8 BCM surface runoff and 2.66 BCM groundwater, of 92.46 BCM total

Five IWRM Learning Sub-basins or Catchments Selected – SBMP prepared



Community Consultation (on restoration & bylaws)

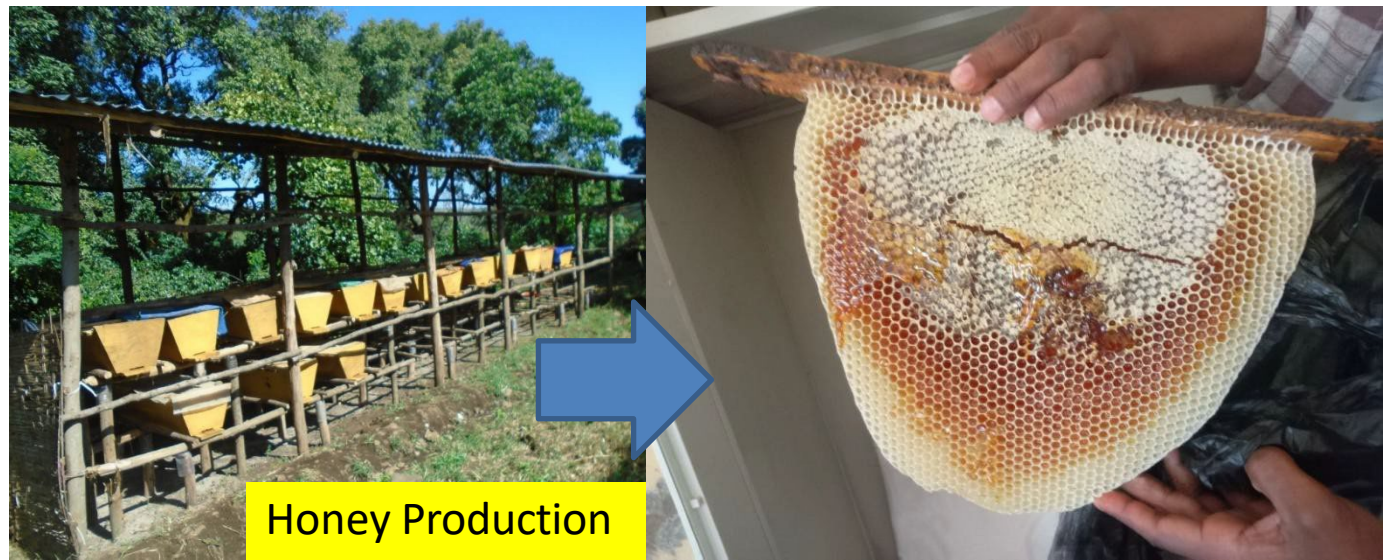


Mass Mobilization on NRM -Trench



Concluding Remark

- The support from SDC was instrumental towards our successful landscape approach
- We demonstrated that both ecosystem and livelihoods can be transformed
- The transferability to other African countries is proved (in 2018 we gave training in Kenya) – we can out-scale it easily
- What is needed small resource and willingness to out-scale through AfrioCAT in Africa



Honey Production

A serene landscape featuring a calm body of water, likely a pond or a slow-moving stream. The water's surface is still, reflecting the surrounding greenery and the sky. On the far bank, a dense line of trees and bushes frames a small, rustic wooden structure with a weathered, corrugated metal roof. The foreground is filled with various plants, including tall grasses and small white flowers, adding to the natural feel of the scene. The overall atmosphere is peaceful and idyllic.

Thank You



Q&A

AND OPEN DISCUSSION



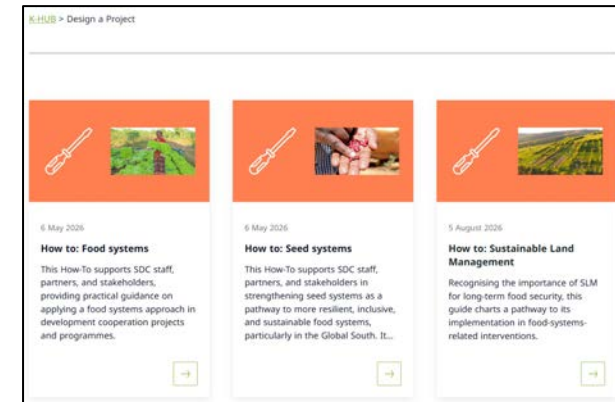
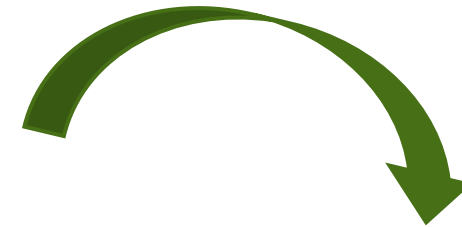
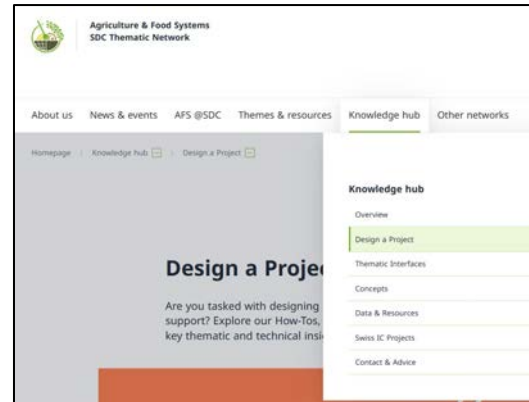
TAKE-AWAYS



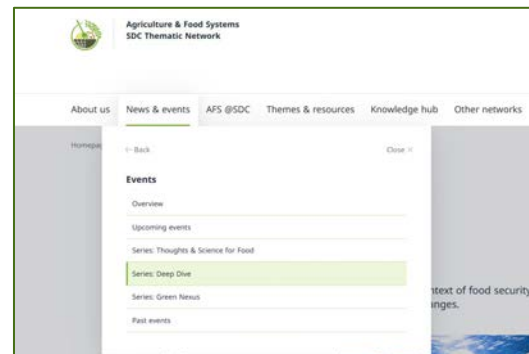


How-To SLM :

RESOURCES



Webinar material:





WHAT'S COMING UP ?



11 August 2026

**Sustainable Land Management:
Knowledge fair**

This second of two SLM webinars within the new AFS Deep Dive Series showcases concrete innovations and practices developed or applied by...

11 August 2026

10:00 - 11:30



2 September 2026

Thoughts for Food 27

Short, informal session to share some thoughts for food with A&FS Network members and anyone else interested

2 September 2026 09:00 - 10:00