Why landscapes?

52% of our agricultural soils are already degraded

70% increase in food production is needed by 2050

Average global temperatures are **1.1°C** Higher than pre-industrial times

40% of the world population are suffering from water scarcity.

47mn hectares of forest have been lost in the last two decades

Over **35,765** species were threatened with extinction in 2020

46% of the world's population was living on less than **$5.50**/day

What are landscapes?

Holistic

Place-based

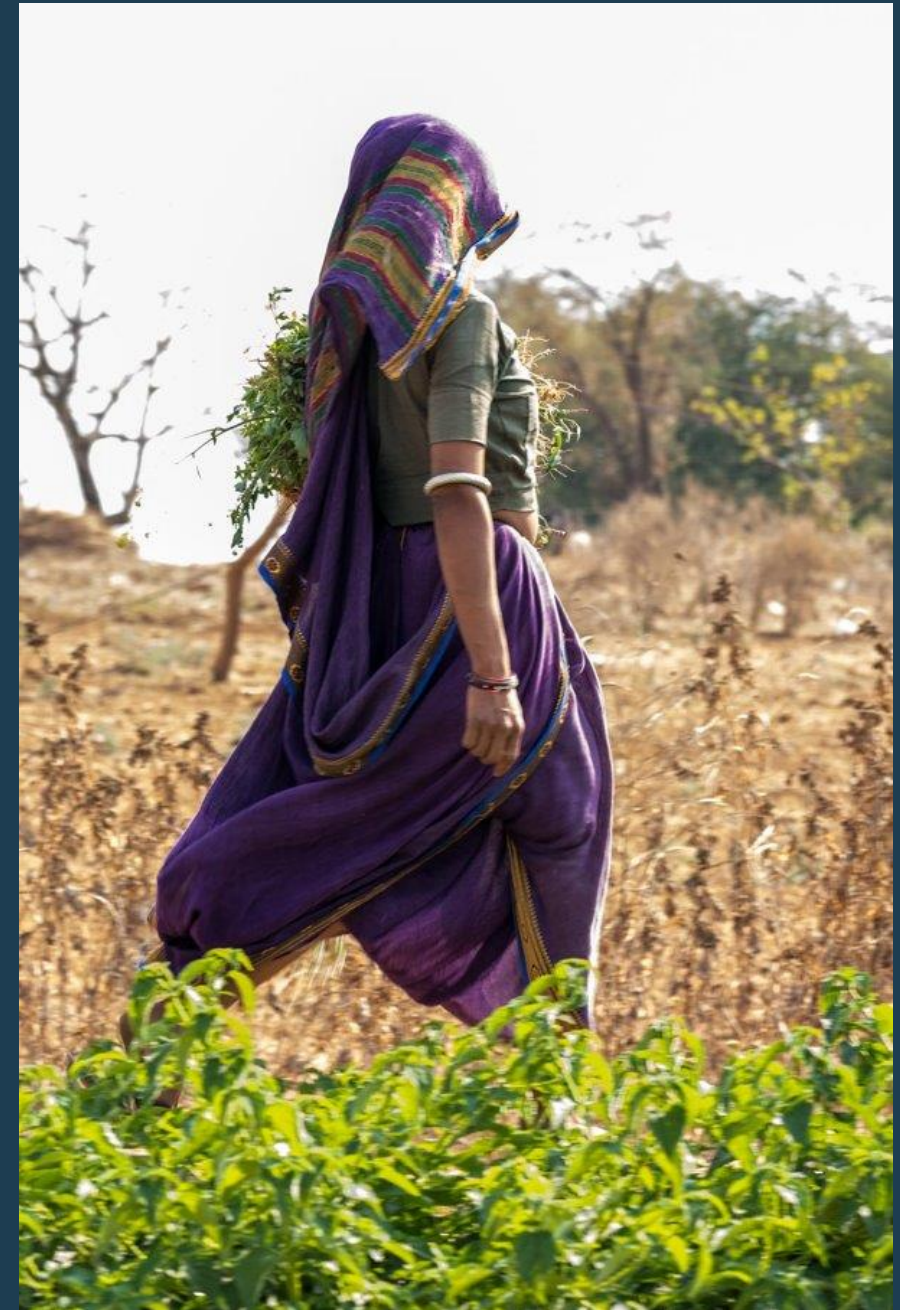**Systems-based**

Policy and government's critical

Creates ecosystem-based impact

Key enablers of landscapes

INVESTMENT

BUSINESS

FRAMEWORKS & STANDARDS

FARMERS

GOVERNMENT

Landscapes present a global opportunity for radical change
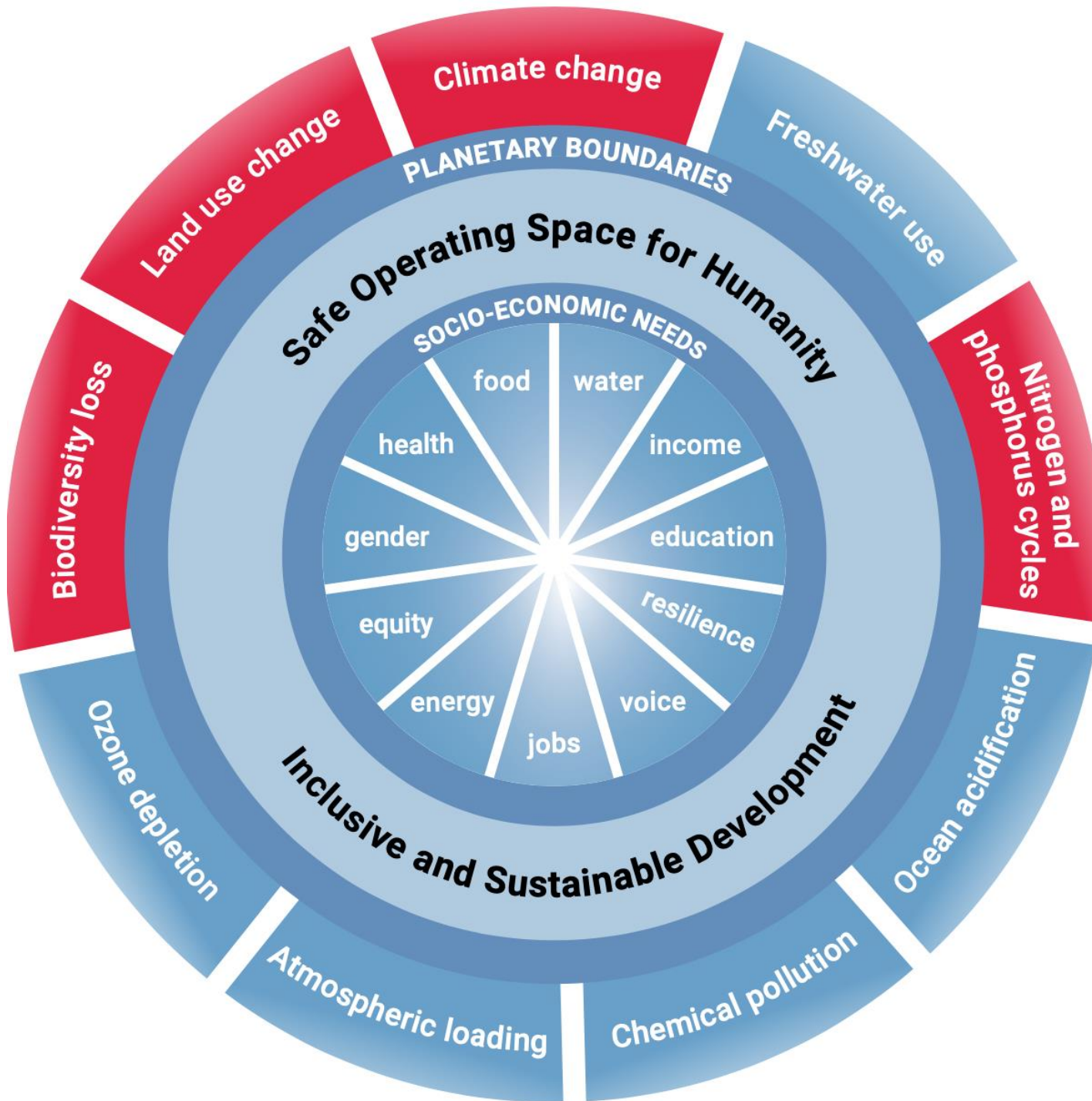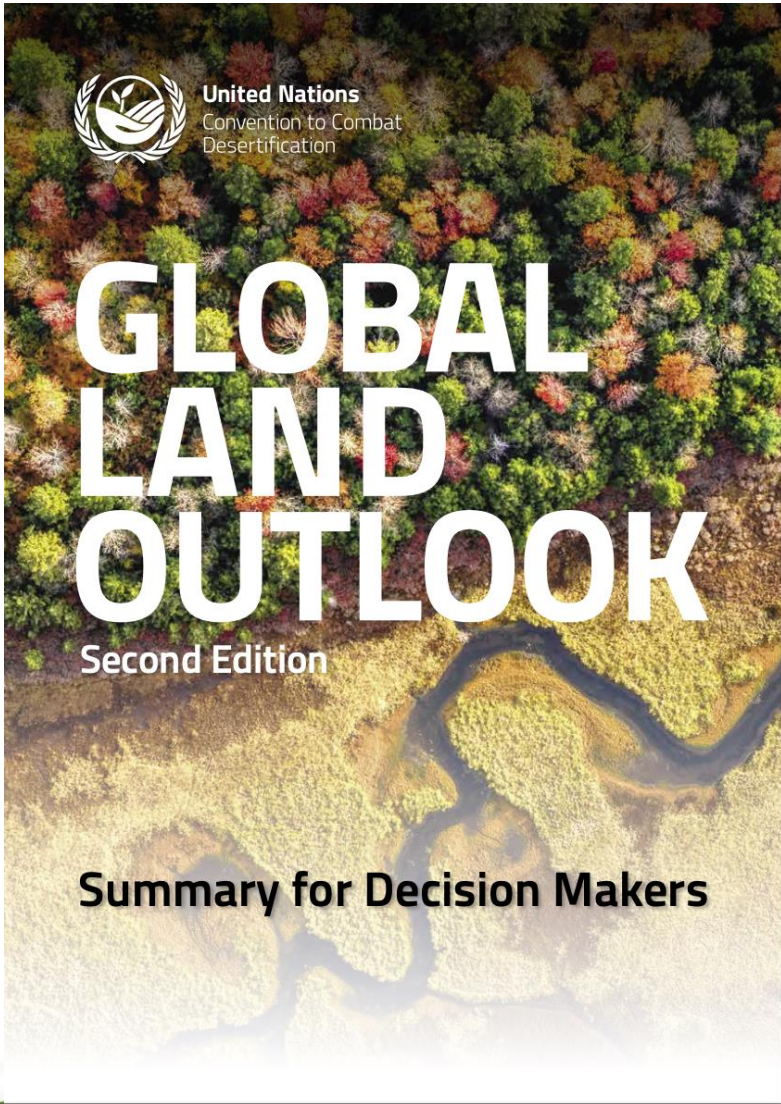
The 4 Returns Framework
A practical proven approach on Integrated Landscape Management

22 June 2022

Willem Ferwerda
CEO Commonland
Fellow Business and Ecosystems at Rotterdam School of Management (Erasmus Univ.)
team lead at IUCN Commission on Ecosystem Management

BTI: Cotton+ Climate Action 22-23 June Malmö, Sweden & Online

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Source: UNCCD, Global Land Outlook 2, 2022

Momentum for a 'Landscape Restoration Industry'

Momentum: Climate, Food, Land & Biodiversity crises:
UNCCD COP15. CBD, COP27, UN Food Summit, UN Decade on Ecosystem Restoration, ESG

Increase of **isolated restoration, conservation, regenerative agri. projects** that can not be compared and learnings can not be exchanged

Towards a restoration industry: Scaling up large landscape restoration projects and pipeline development for investors & governments

Increase of funding by governments, DFIs, philanthropy, business, carbon and investors

Decisive moment: need for agreement on the use of a **coherent narrative** within a tested **framework** based on realistic KPIs

Business as usual continues and isolated projects do not achieve systemic change at landscape/ecosystem scale, not sustainable

Source: Commonland, Willem Ferwerda

Making theory work through a practical framework and language that unites stakeholders and business

Moving away from maximizing Return on Investment per hectare to maximizing 4 returns per landscape (min. 100,000 ha)

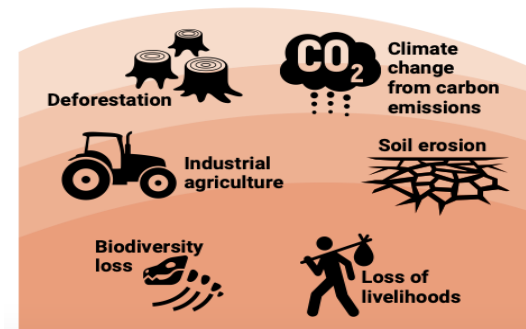**ECOSYSTEM DEGRADATION LEADS TO 4 LOSSES:**

- Loss of purpose or hope
- Loss of employment and security
- Loss in biodiversity, soil & water
- Loss of economic activity

ECOSYSTEM RESTORATION LEADS TO 4 RETURNS:

- Return of inspiration
- Social returns
- Natural returns
- Financial returns

POOR LAND AND WATER MANAGEMENT

leads to drought, soil erosion and desertification

Deforestation
Climate change from carbon emissions
Industrial agriculture
Soil erosion
Biodiversity loss
Loss of livelihoods

ECOSYSTEM RESTORATION

restores soil and water cycles and reverses desertification

Replant & control erosion
Regenerative agriculture
Soil restoration
Sustainable livelihoods
Restore biodiversity & capture carbon
Intact ecological functions

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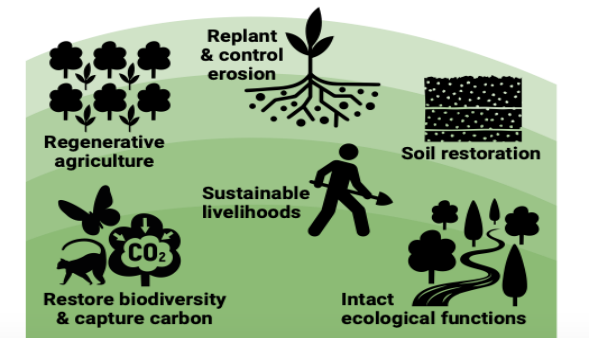
Source: 4 Returns. RSM-Erasmus Univ. IUCN CEM 2015

4 returns are delivered by 3 landscape zones during a minimum period of 20 years

Economic Zone: Urban areas, infrastructure. Delivering high & sustainable economic productivity. Monocultures are part of the economic zone.

Combined Zone: Restoring biodiversity, soil through regenerative agriculture & agroforestry delivering sustainable landscape productivity.

Natural zone: Restoring the ecological foundation and biodiversity.

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3 landscape zones works with all stakeholders

Example from Tamil Nadu (India)
farmers and their landscape zoning

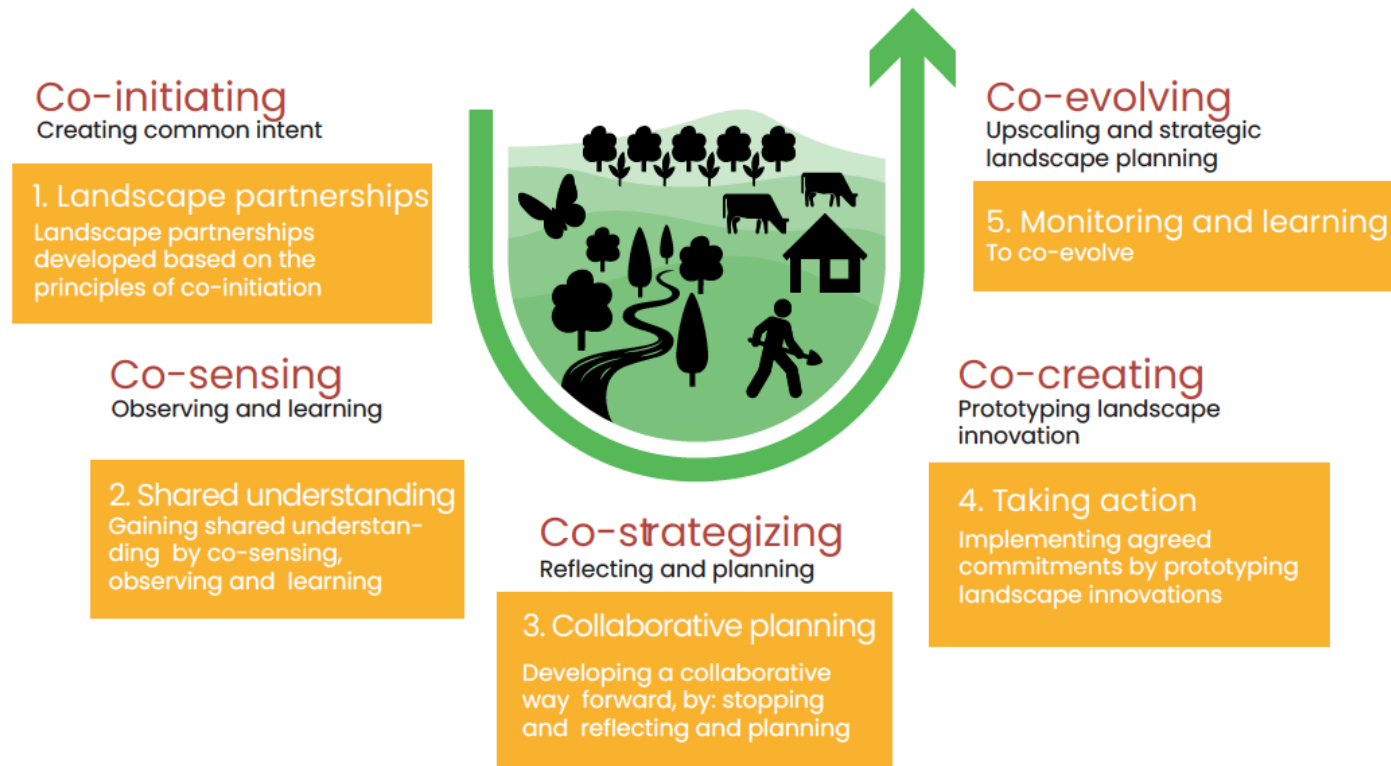**Economic Zone**: village, processing, trading, communities

Combined Zone: regenerative agro-forestry of coconut, rice, mango, sugarcane, flowers, etc.

Natural zone: water, wetlands and forests

Credit: Dhan Foundation

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We structured stakeholder alignment through 5 process elements based on co-creation with Theory U

❖ The Theory U is a practical method for guiding awareness-based system change within a landscape partnership
❖ This image shows how to move through the 5 elements whilst applying the principles of Theory U

Co-initiating
Creating common intent

1. Landscape partnerships
Landscape partnerships developed based on the principles of co-initiation

Co-sensing
Observing and learning

2. Shared understanding
Gaining shared understanding by co-sensing, observing and learning

Co-strategizing
Reflecting and planning

3. Collaborative planning
Developing a collaborative way forward, by: stopping and reflecting and planning

Co-evolving
Upscaling and strategic landscape planning

5. Monitoring and learning
To co-evolve

Co-creating
Prototyping landscape innovation

4. Taking action
Implementing agreed commitments by prototyping landscape innovations

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UNITED NATIONS DECADE ON
**ECOSYSTEM
RESTORATION**
2021-2030

Process
5 Elements

Our landscape restoration process consists of 5 elements.

- Establishing a **landscape partnership**
- Reach a **shared understanding**
- Building a **landscape plan**
- Ensure **effective implementation**
- Develop **monitoring and learning**

Impact
4 Returns

Our landscape restoration framework delivers 4 types of returns to the landscape and its stakeholders.

Return of Inspiration
Opening people's eyes to the possibility of a better future

Social Returns
Creating jobs, businesses, networks, and social prosperity

Natural Returns
Restoring the health, resilience and prosperity of landscapes

Financial Returns
Realising long-term, sustainable, and local income

Landscapes
3 Zones

For successful landscape restoration we distinguish, restore and connect 3 types of zones.

Natural Zone
Regenerating a landscape's ecological foundation by restoring and protection of biodiversity within natural ecosystems such as wetlands, grasslands and forests

Combined Zone
Combining food, fibre and biodiversity productivity through regenerative agriculture, agroforestry and soil restoration.
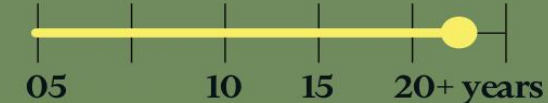
Economic Zone
Delivering sustainable economic productivity with dedicated areas for activities that create value, typically concentrated in urban areas, infrastructure and processing.

Time
20+ years

Successful systematic landscape restoration takes one generation, or 20 years.

05   10   15   20+ years

A minimum of 20 years, or one generation, is needed to successfully implement large-scale integrated landscape management.

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Monitor & Evaluate KPIs

Left Panel

4 Returns Outcomes	Domains	Indicator examples
Return of Inspiration	Awareness	Number of people demonstrating positive attitudes and beliefs towards landscape restoration and its practices (# of people exposed through on- and offline interactions)
Outcome indicator Inspired & Connected people: Combined number of people aware of the opportunity of landscape restoration, participated in the 4 returns approach, and start 4 returns initiatives.	Participation	Number of people participating in landscape restoration initiatives and/or in 4 returns restorative businesses (# of people engaged)
	Replication	Number of landscape restoration initiatives and/or enterprises being established inside or outside the respective target landscapes (# of new businesses, initiatives, or projects created/piloted)
	Most Significant Change stories*	MSC Stories show that by Return of Inspiration people have a deeper connection to their landscape.
Return of Social Capital	Employment	Number of direct/indirect jobs created/supported* at the venture/landscape level (# jobs created/supported)
Outcome indicator Strong communities & Networks: combined (In)direct employment rates, entrepreneurial skills and social landscape network(s) have increased and/or improved.	Entrepreneurship	Number of people whose entrepreneurial and professional skills have been improved (# of participants in entrepreneurial and skills trainings, surveys)
	Network	Number of different groups connected to convey knowledge, information, and other support for innovation (# of network partners, e.g. Universities, community centres, Business schools, government etc.)
	Most Significant Change stories*	MSC Stories show that by Return of Social Capital people have a deeper connection to their landscape.

*We recommend also looking at jobs supported, instead of just created, because you also want to improve the quality of existing jobs.

Right Panel

4 Returns Outcomes	Domains	Indicator examples
Return of Natural Capital	Biodiversity	Hectares where abundance and diversity of species are improved/maintained, and/or number of practices initiated to improve and maintain biodiversity (# pro-biodiversity ha / # pro-biodiversity practices)
Outcome indicator Improved holistic management: Number of hectares (# ha) under improved management (aggregating the progress made on soil, biodiversity, water, and other)	Soil Health	Soil Organic Matter, pH, Cation-exchange capacity (CEC) values increase over 5 year time periods and visual assessments of soil structure and water drainage levels of the soil improve (change in SOM, pH, CEC, soil structure, and/or water drainage)
	Water	Improved water flow and / or improved water quality (m3 or % or other relevant unit)
	Carbon	Carbon is being sequestered into the landscape (tonnes of CO_2 sequestered)
	Most Significant Change stories*	MSC Stories show that by return of Natural Capital people have a deeper connection to their landscape.
Return of Financial Capital	Business development	Business cases are being identified, set up and/or tested** (# cases)
Outcome indicator Strengthened local economy: Combined sum of additional grant and/or commercial funding flows mobilized for integrated 4 returns landscape interventions (both direct and indirect/leveraged).	Profitability	Positive cash flows have been generated for the restorative (matured) business case(s) and/or there is room for reinvesting in the business (positive cash flow and/or reinvestment potential)
	Investors	IRR for investors is met for their respective thresholds (IRR met)
	Farmer Income	Total increase in annual farmer income and/or beneficial cost/benefit ratio in favour of the farmer (amount or ratio)
	Most Significant Change stories*	MSC Stories show that by return of Financial Capital people have a deeper connection to their landscape.

**We recommend to also include cases that have become inactive to keep track of your business innovation journey over time.

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Spain:
1 million hectares

PROCESS: 5 ELEMENTS

Element	indicator	Status
LANDSCAPE PARTNERSHIP	Stakeholder map	→
	Multi stakeholder agreement	→
SHARED UNDERSTANDING	Nat/socl capital	→
	Drivers analysis	→
VISION & PLANNING	Vision	→
	Action plan	→
	Spacial plan	→
TAKING ACTION	Actions resourced	↻
	Effective implementation	→
IMPACT AND LEARNING	Monitoring system	↻
	Learning strategy	→

→ In place   → Underway   ↻ Adapted

IMPACT: 4 RETURNS

Returns	Indicator	Target	Status
INSPIRATION	No of members	<2.000	350
	No partnerships	<60	10
	Inspiration project	<10	3
SOCIAL	No. farmers in transition	1,600	180
	% Next generation farmers and local entrepreneurs	95	75
	% Farmers reporting high quality of life	50	36
NATURAL	Ha combined zone under restoration	<70K	14K
	% of priority eco-corridors under restoration	60%	5%
	Ton/yr of CO2 sequestration	86K	16K
FINANCIAL	Pipeline development	100	18
	4 Returns businesses	15	3

AREAS: 3 ZONES

■ Natural Zone - 575.000 ha
■ Combined Zone - 410.000 ha
■ Economic Zone - 15.000 ha

Natural Park Sierra de Cazorla Segura y Las Villas

Natural Park Sierra Maria-Los Vélez

Natural Park Sierra de Baza

Natural Park Sierra Nevada

Source: WI/LFL/CL 4 Returns Framework for Landscape Restoration, UN Decade 2021

Spain:
Visualizing 20+-year goals by zone

- Landscape analysis
- Future vision for the landscape
- 4 Returns Strategy
- Achievements to-date
- Detailed roadmap
- Overview funding needs

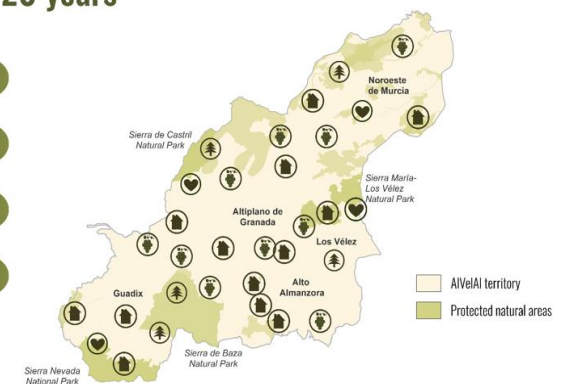**Natural zone restoration: 20 years**

- HECTARS (HA): 4.000
- TREES AND BUSHES: 1.500.000
- PONDS: 300
- INVESTMENT (€): 7.680.000
- CARBON SEQUESTRATION (TONS): 94.070
- SEEDS: 5.800.000

AlVelAl territory
Protected natural areas

Combined zone: 20 years

- HA FULLY REGENERATIVE: 10.000
- HA IMPROVE MANAGEMENT: 40.000
- HA POSITIVELY INFLUENCED: 60.000

AlVelAl territory
Protected natural areas

Economic zone: 20 years

- REGENERATIVE PRODUCTS
- INSPIRATION
- TOURISM
- RESTORATION
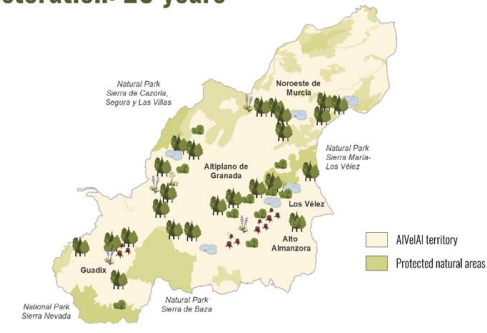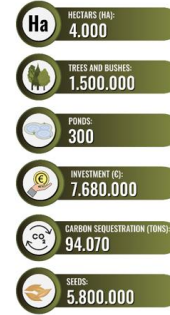
AlVelAl territory
Protected natural areas

Benefits of 4 Returns Framework

- The 4 Returns framework is **universally understood** to build a resilience landscape
- Guidance for long term landscape vision where **regenerative cotton** can be integrated in the combined zone
- Serves as a **bridge** between bottom up (actions on the land) and top-down business and institutional policies.
- The 20+ years timeline **avoids overpromising** and greenwashing.
- Upfront investment in landscape partnerships will **bring down long term risks**.
- It is aligned with BTI criteria, ESG, SDGs, UN Decade on Ecosystem Restoration and Rio UN conventions (Climate, Biodiversity, Land Degradation)
- M & E may serve as a potential standard for a future **Landscape Asset Class**

crop protection water soil health biodiversity fibre quality decent work management system
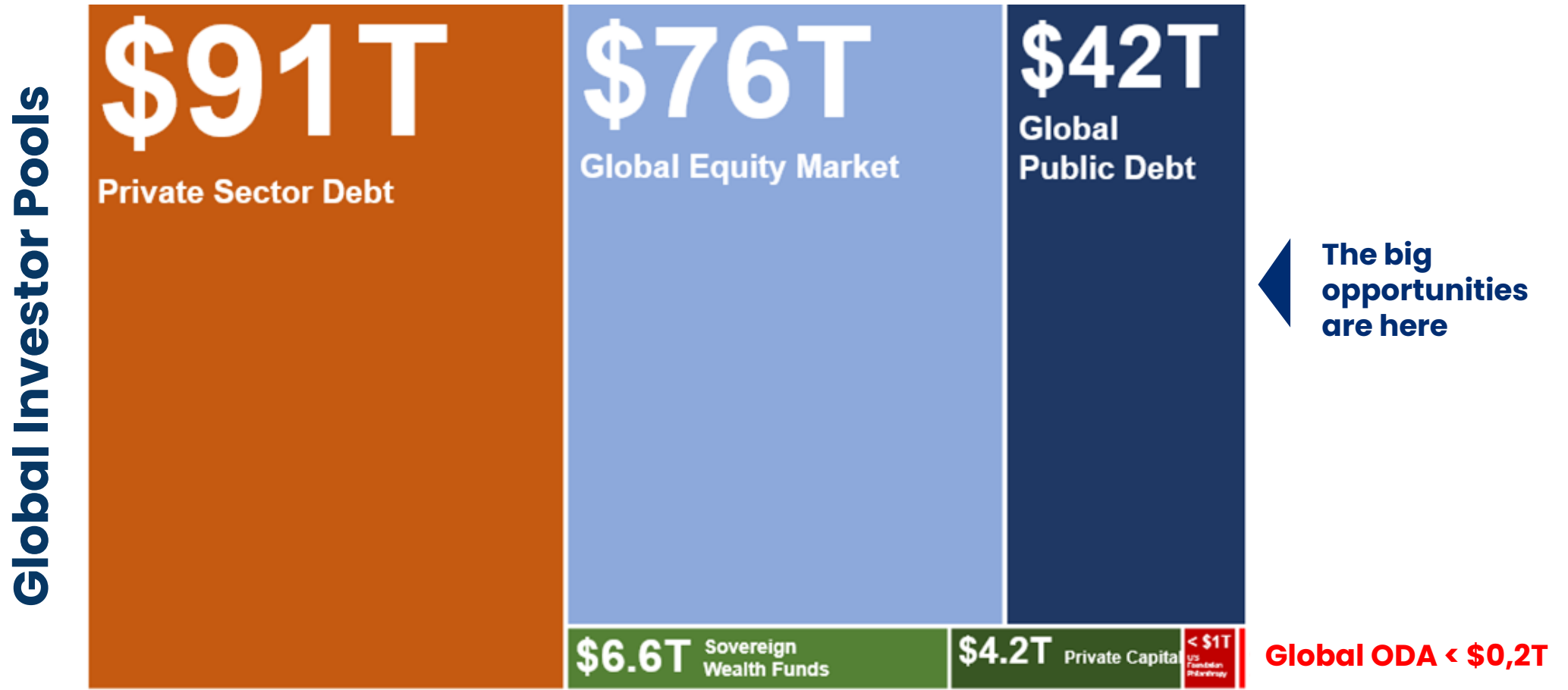
Landscape Finance

Better Cotton Conference
Malmö
24 June 2022
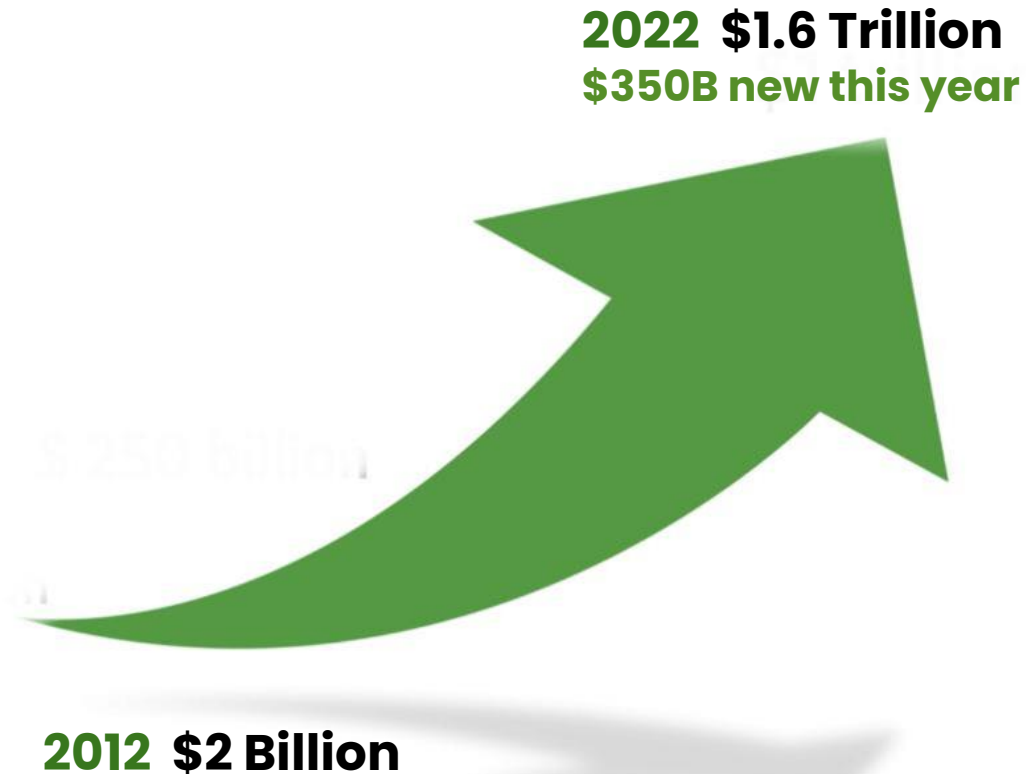
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Landscape Finance:
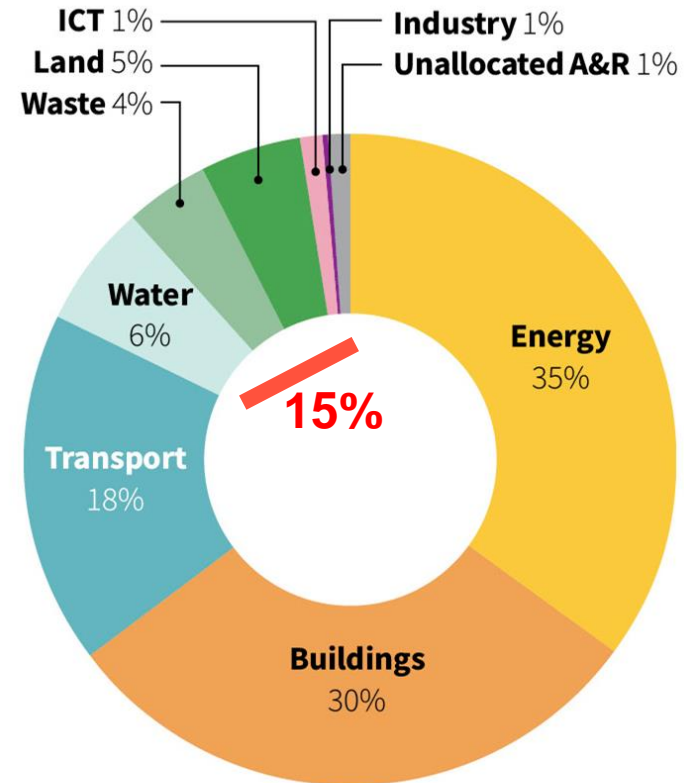## Engaging commercial finance for nature and regeneration

Global Investor Pools

$91T
Private Sector Debt

$76T
Global Equity Market

$42T
Global Public Debt

◀ The big opportunities are here

$6.6T Sovereign Wealth Funds

$4.2T Private Capital

< $1T US Foundation Philanthropy

Global ODA < $0,2T

Most sustainability funds are sourced here

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Green Bonds
Large finance for land use is rapidly growing

2022 $1.6 Trillion
$350B new this year

2012 $2 Billion

Use of Green Bonds 2021

ICT 1%
Land 5%
Waste 4%

Industry 1%
Unallocated A&R 1%

Water 6%

Transport 18%

Energy 35%

Buildings 30%

15%

© Climate Bonds Initiative 2022

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Landscapes: An integrated solution

Large

Holistic

High Impact

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Landscape methodology

TIME 20+ years	**Minimum 20 years (one generation)** is a realistic timeframe to successfully implement large-scale integrated landscape management activities with all stakeholders				
PROCESS 5 Elements	Landscape partnership	Shared understanding	Vision and Plan	Taking Action	Impact and learning
	Governance		Finance		Markets
IMPACT 4 Returns	Return of Inspiration	Return of Social Capital	Return of Natural Capital		Return of Financial Capital
PLACES 3 Zones	Natural Zone	Combined Zone		Economic Zone	

The Little Sustainable Landscapes Book
Achieving the Sustainable Development Goals through integrated landscape management

THE 4 RETURNS FRAMEWORK FOR LANDSCAPE RESTORATION
ECOSYSTEM RESTORATION

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Landscape finance examples

Forest carbon

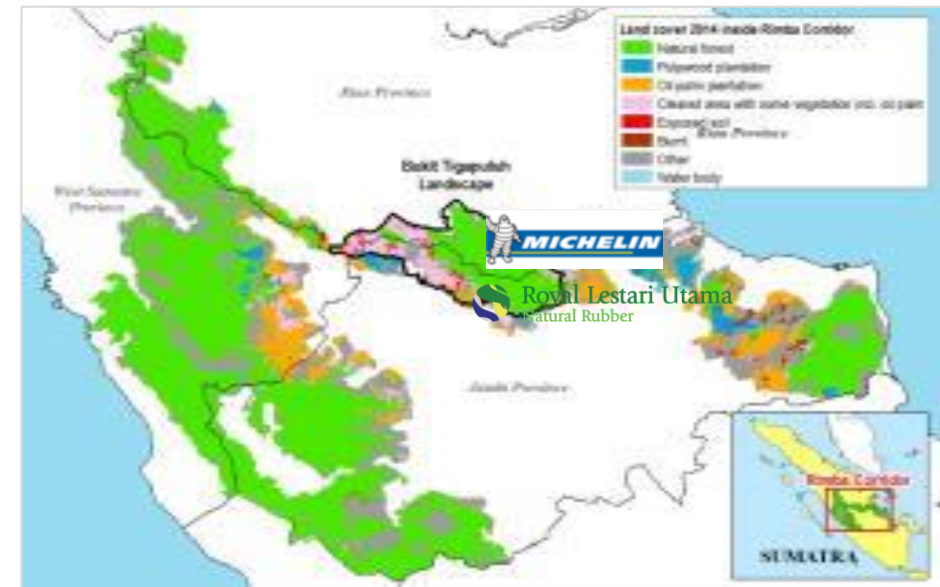DRC **Mai Ndombe Province Emission Reduction Program**
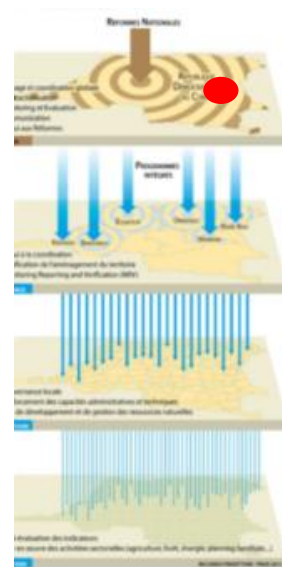
- USD 170 M investment
- 29 MtCO2e ERs across 13 M hectares
- 1.2 M ha reduced impact forestry
- 2 M ha improved agriculture
- 6 M ha biodiversity corridor

Landscape sourcing

Indonesia **Jambi Tropical Landscape Finance Facility**

- USD 215 M in two tranches
- 400,000 M ha corridor
- Tiger, orangutan and elephant
- Focus on wildlife friendly rubber

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Landscape finance examples

Reef resilience
Fiji **Great Sea Reef Resilience Program / Matanataki**

Matanataki

- Ensuring resilience of the third longest barrier reef in the world
- $50 M private investment and business incubation system
- $30 M public investment GCF

Peatland finance
Scotland **The Flow Country**

NatureScot

- 400,000 M ha peatland system
- Twice the carbon content of all UK forests
- Focus on carbon, World Heritage branding and green business

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Building investment funds

Dutch Fund for Climate and Development

Dutch Fund for Climate and Development

- **€160 M fund**
- **Built on 4 Returns methodology**
- **Supporting landscape level implementation in 10 countries**
- **Investing in 35 NBS projects**

KEY PERFORMANCE INDICATORS

- 12,5 million PEOPLE PROVIDED WITH DRINKING WATER
- 100,00 Ha FARMLAND SUSTAINABLY MANAGED
- 100,000 Ha FOREST & WETLAND SUSTAINABLY MANAGED
- € 500 m PRIVATE FINANCE MOBILISED
- 13,5 m TOTAL BENEFICIARIES
- 40,000,000 tCO₂ REDUCED GHG EMISSIONS

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Investments at landscape level

	NATURE BASED SOLUTIONS	LANDSCAPE INSTRUMENTS	LANDSCAPE INVESTMENT FUNDS	THEMATIC FUNDS
PHILANTHROPIC AND GOVERNMENT	Grant Projects			Forest landscape restoration
COMMERCIAL	Bankable Projects			WASH / Catchment
RESULTS BASED	Performance Projects			Energy
	€1-50M each	€50-200M each	€100M-1B each	€50-€500M each
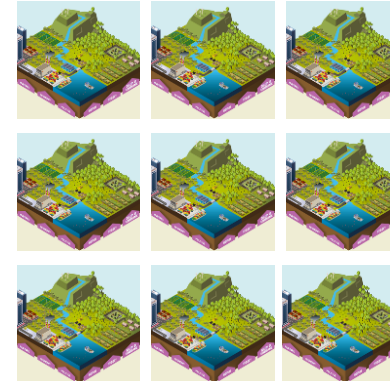
IUCN
Nature based Solutions
The nature of progress

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Landscape Scale

Benefits

- Risk and cost reduction

- Larger finance

- Shared value and synergies

- Regulatory solutions

- More coherent impact tracking

- Stronger stories and branding

Challenges

- Time consuming

- Costly at early stages

- Complex

- Still evolving as a methodology

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Paul Chatterton
Lead and Founder
e: paul@landscapelab.org

Thank you

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Enablers of Landscape Approaches

IDH's **Production, Protection, Inclusion (PPI) approach** to achieve an inclusive goal and inspire sustainable landscape management.

Agricultural products are grown sustainably, nature can flourish, and communities prosper

Long-lasting and stable partnerships and cooperation that outlast political cycles

Private and financial sectors enable and finance change towards enhanced sustainability

Strengthening Landscape Governance

Multi-stakeholder coalition | Commitments | Enabling policies | Compacts | Monitoring

Connecting Demand with Supply

Global and local demand | Verified Sourcing Areas

Catalysing New Sources of Finance

Technical Assistance | Investable Projects | New Finance Instruments

Implementation of PPI

SUSTAINABLE PRODUCTION

- Increased adoption of sustainable production and regenerative agri-practices
- Reduction in greenhouse gas emissions

INCLUSION

- Improved incomes
- Gender equity in the supply chain
- Improved livelihoods for tribal communities

PROTECTION & RESTORATION

- Improved access to and management of water
- Restored soil health
- Preserving biodiversity

idh the sustainable trade initiative

Working together – through a design framework

STEP 1

Scoping
Landscape Analysis

Landscape Analysis

Stakeholder Mapping

STEP 2

Building a Landscape Coalition
(Co-envisioning)

Vision Definition

STEP 3

Developing Building Blocks
(Setting Goals, LoIs Signed)

S – Specific
M – Measurable
A – Attainable
R – Relevant
T – Time Bound

GOALS

Definition of the Local Targets

STEP 4

Finalizing the Compact
(1-Multistakeholder plan)

Document Signed by al parties involved In the compact building process which contains the vision and quantitative targets

Memorandum of Understanding

Post Compact (Implementation)

Governance

Monitoring

Investment

RPL Collaborative

Originally founded by **Laudes Foundation, IDH The Sustainable Trade Initiative and WWF India,** the Collaborative aims to catalyse and scale a model where:

Producers grow agri-commodities using natural and regenerative farming principles that restore natural resources and reduce emissions from farming systems

Smallholder farmers and communities thrive through improved economic stability, enhanced livelihoods and greater participation in decision-making

Businesses can source responsibly while creating inclusive supply chain relationships

5 Year MoU with the Government of Madhya Pradesh & RPLC

Collaborative & Compacts Launch

Working with the producers community

- **45+ organisations** across Private sector, government, CSOs producers' organization representative
- **14 Compact Partners (8 Private Sector from cotton, spices, horticulture)**

SourceUp©

The cooperation platform for supply chain sustainability changemakers

www.sourceup.org

A PLATFORM THAT CONNECTS

- AN USER INTERFACE WHICH STIMULATES INTERACTION
- PROJECTS
- TRANSPARENT & VISUAL PROGRESS
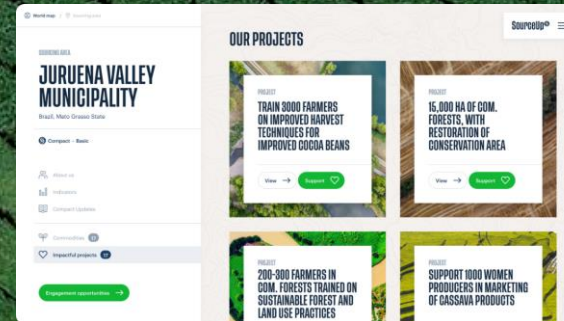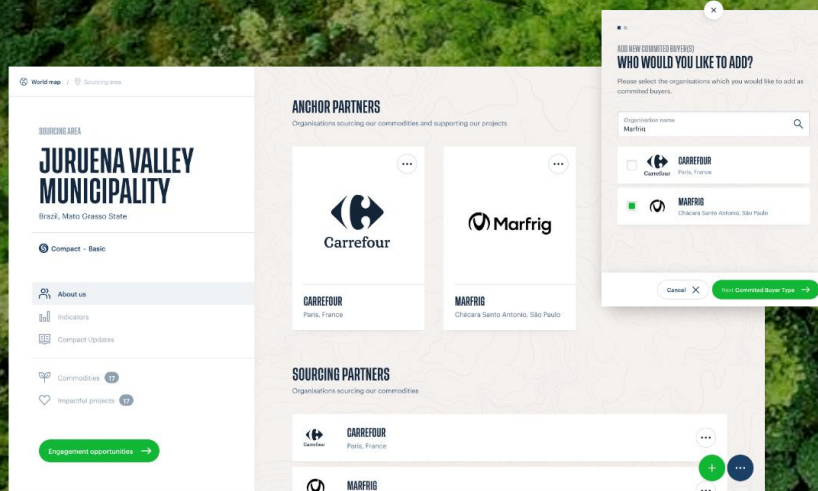
A new market mechanism to lift the sustainability level of entire landscapes

It makes all the difference to have this involvement with the field, to really understand the complexity of the production chain until it reaches the top

LUCIO VICENTE
Head of Sustainability at Grupo Carrefour, Brasil

Global Steering Committee

Development Partners

Funding Partners

www.sourceup.org

Better Cotton Conference

Adaptation to Landscape approach (ATLA)

22 June 2022

ATLA project in a nutshell

> **Component 1**: Development of strategic roadmap for Better Cotton Standard System adaption to landscape approach

> **Component 2**: Pilot projects

- Explore Better Cotton Standard system contribution to landscape management in the context of the Buyuk Menderes Project,Turkey.

- Develop a stakeholder analysis and engagement strategy as part of a regional jurisdictional approach in Punjab, Pakistan

ATLA pilot project #1
Buyuk Menderes Basin, Turkey

Size
25 000km2
Population
2.5 Million
River Length
548 km

Target Key Biodiversity Areas (KBAs)

Bafa Lake Nature Park
potential Ramsar Site, Important Bird Area

Buyuk Menderes Delta National Park
potential Ramsar site, Important Bird Area

Home to species of global importance

Dalmatian pelican
European Eel
Eurasian otter

Target Sector
Cotton
14% of national cotton production

Target Sector
Textile
60% of national home textile exports in Denizli

Uşak

Denizli

Aydın

Key Industries

Textiles

Agriculture

Cotton

Tanneries

Metal

Electrical

Olive Oil

Geothermal Energy

better cotton™
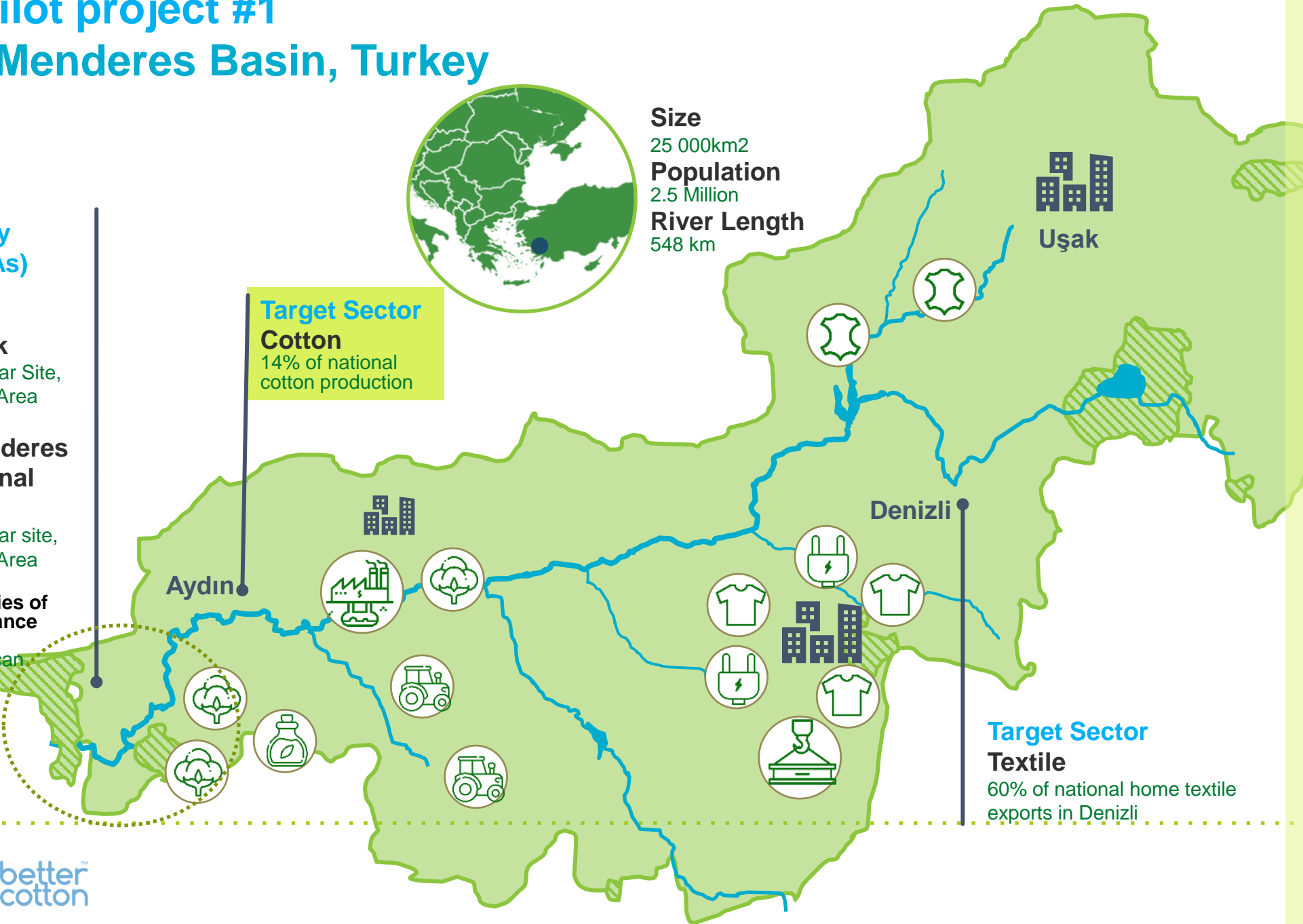
ATLA pilot project #2
Punjab province, Pakistan

Stakeholder engagement

Stakeholder analysis and mapping

Stakeholder engagement strategy

Strategies / Action Plans or Roadmap

Goals, Targets, Strategies and Joint action plan developed and implemented by NSC members

Formation of 'National Steering Committee (NSC)'

Memoramdum of Understanding signed with participants

NSC 1st Meeting

Monitoring & Evaluation

M&E framework designed to measure NSC progress against joint action plan

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KEY STRATEGIC RECOMMENDATIONS

- Prioritize Better Cotton investment in Landscape initiatives/projects

- Define scope and scale of landscape programmes

- Build or contribute to project multistakeholder partnerships

- Explore further adaptation of the Better Cotton Standard System to LS/JA

  → Principles and Criteria

  → Monitoring and Evaluation

  → Capacity-building

- Develop a value proposition for Brands members to invest in LS/JA projects

Thank you