Regreening Africa's drylands:
Reverdir les zones semi-arides:
Leçons pour la GMV

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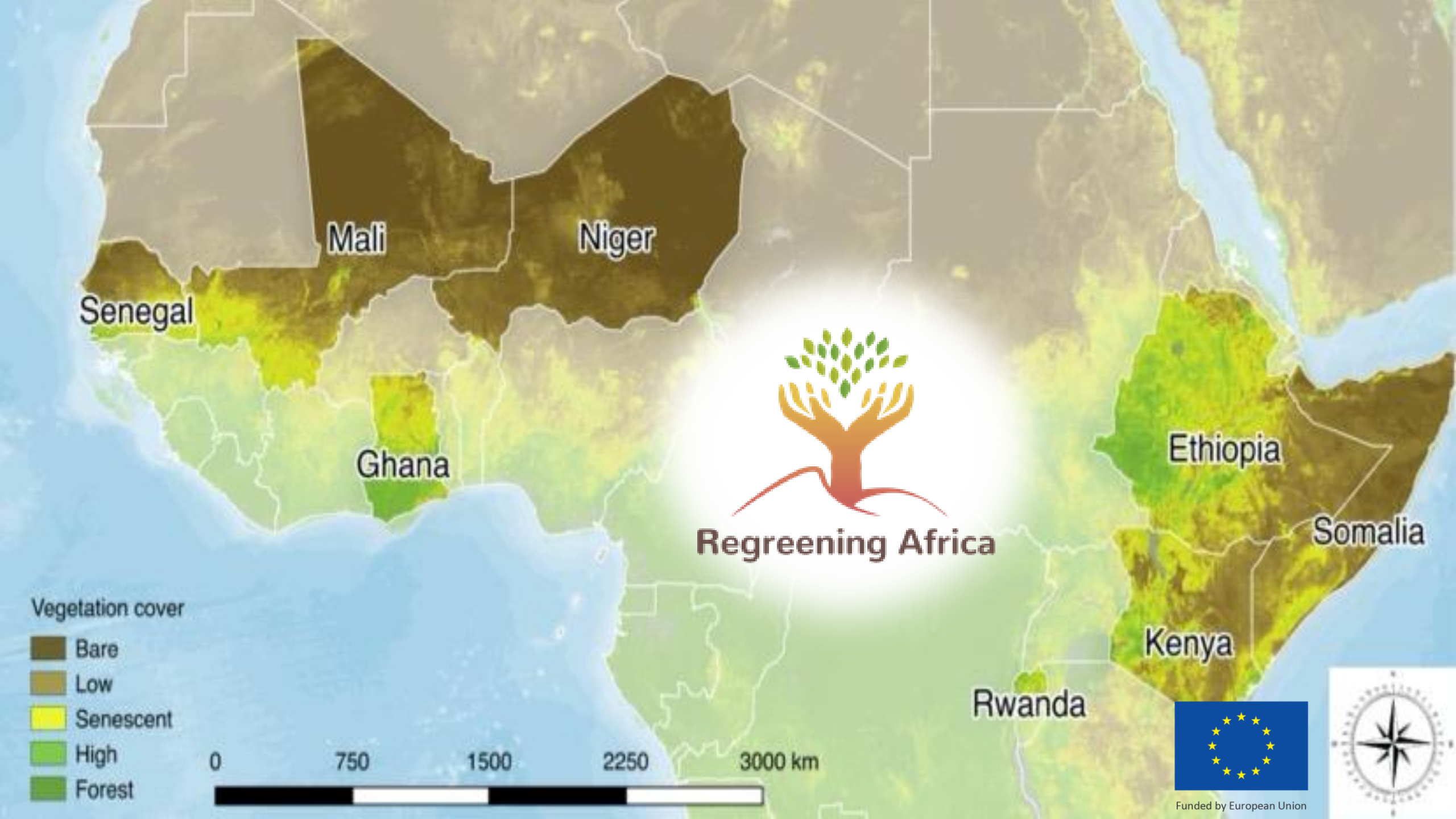


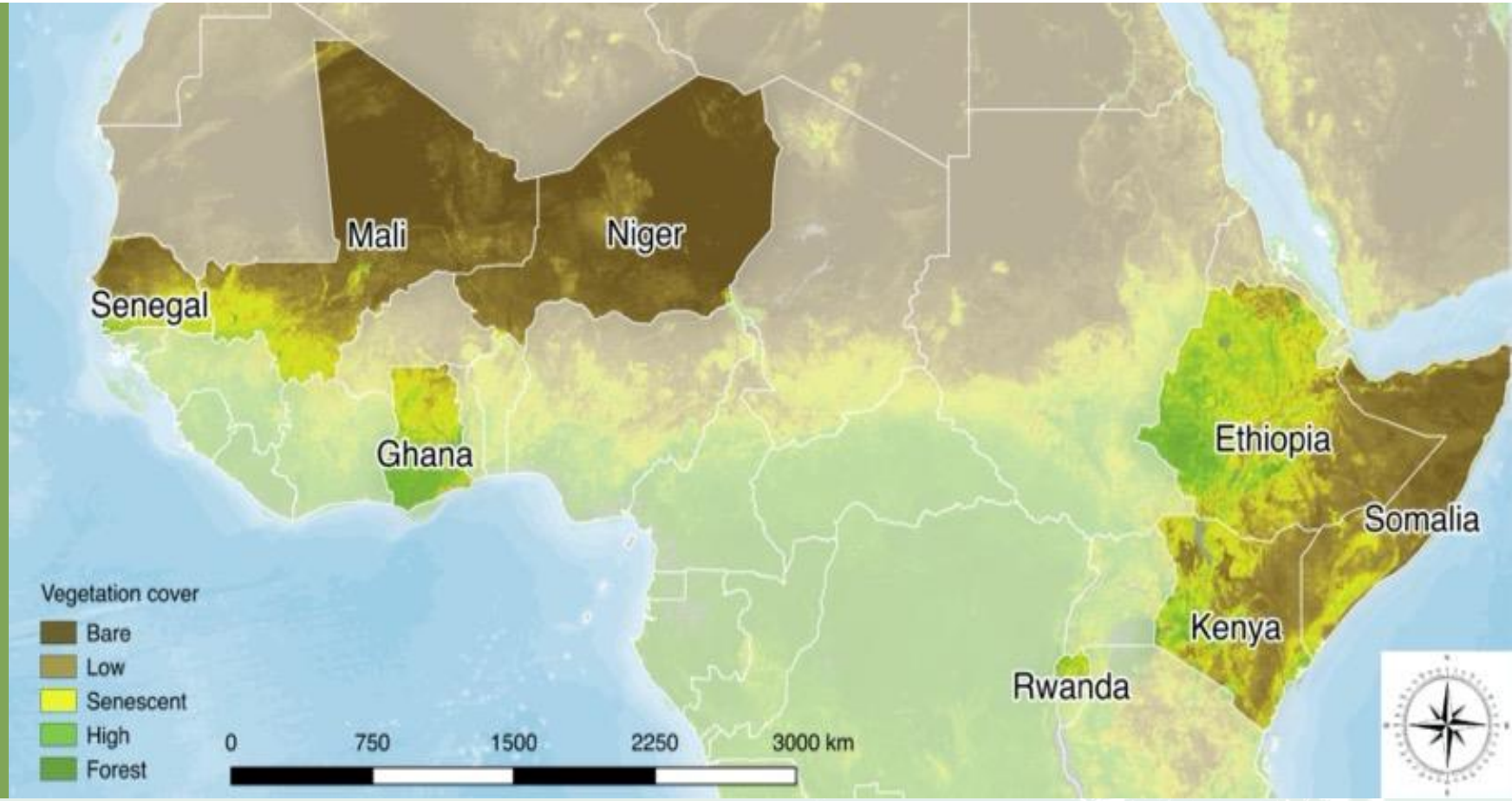
Funded by European Union

Depuis 2017, poursuite des objectifs de la GMV

Approche: ramener les arbres aux…

- *champs*
- *Foncier communautaire*
- *Pâturages*

Objectifs:
500,000 familles
1 million d'hectares
8 pays



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SHARED
the decision hub

Funded by European Union

World Agroforestry

World Vision

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

ELD
THE ECONOMICS OF LAND DEGRADATION

CRS
CATHOLIC RELIEF SERVICES

care

Oxfam International

SAHEL ECO

Evergreening
GLOBAL ALLIANCE

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Résultats

500,000 **Familles paysannes:** objectifs
401,297 **Familles paysannes :** achevé sept 2021
127,073 **Familles paysannes :** vérifié (sondages) Sept 2021

1,000,000 **Ha:** objectifs
665,924 **Ha:** achevé sept 2021
311,199 **Ha:** vérifiés (Land Health Surveillance system) sept 2021

377,810 **Familles paysannes** (appli Reverdir l'Afrique, aout 2022)
145,624 **Ha** (appli Reverdir l'Afrique, aout 2022)

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Leçons clé

1. La pratique doit être adaptée au contexte


Éthiopie: exclosures +


Sénégal: FMNR+

Niger: cycle hyrdique et conservation des sols +

Majorité des pays: pépinières (espèces endogènes favorisées)

Leçons clé

2. Mesurer tout ce qui possible.

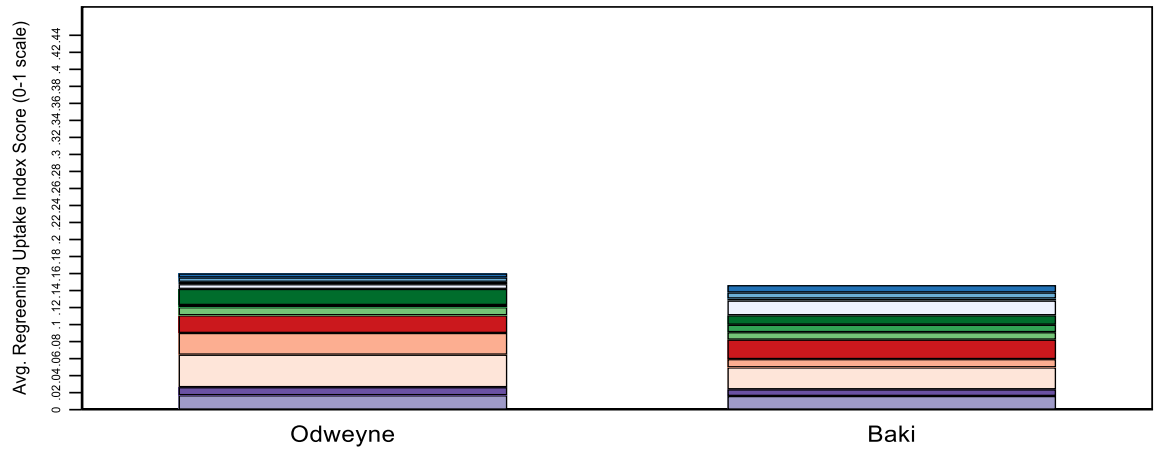
Nous mesurons des dimensions mutliples.

Baseline

Somaliland

Today

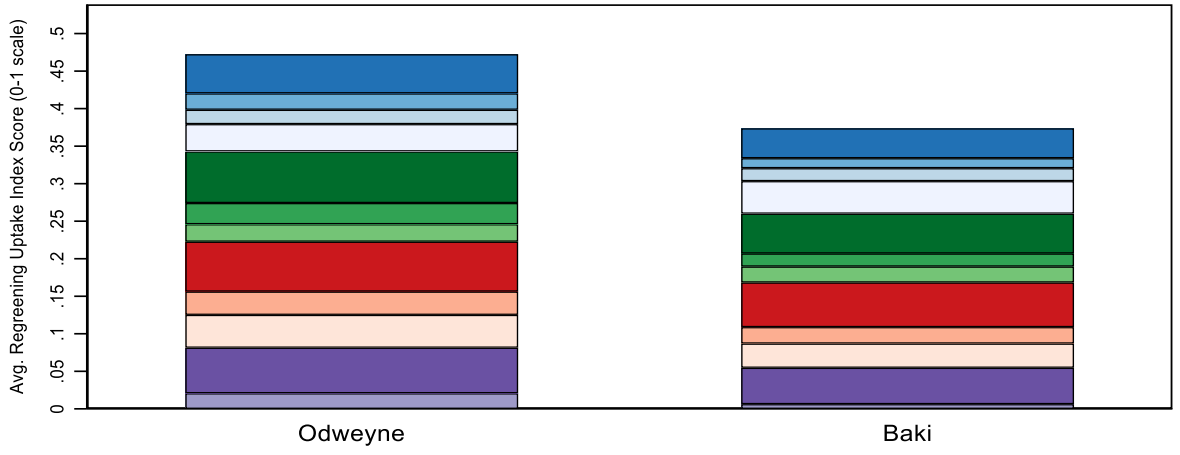
Regreening Uptake Index, with dimension & indicator contribution-Baseline



Each stacked bar indicates the country's average score on the index, as well the weighted contribution of each dimension and indicator. The greater the height of an individual sub-bar, the greater the indicator's contribution to the index. Sampling weights used to account for differences in population sizes among surveyed village clusters.

AF = Agroforestry
DM = Decision Making
LUA = Land Use Area

Regreening Uptake Index, with dimension & indicator contribution-Endline



Each stacked bar indicates the country's average score on the index, as well the weighted contribution of each dimension and indicator. The greater the height of an individual sub-bar, the greater the indicator's contribution to the index. Sampling weights used to account for differences in population sizes among surveyed village clusters.

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LUA = Land Use Area

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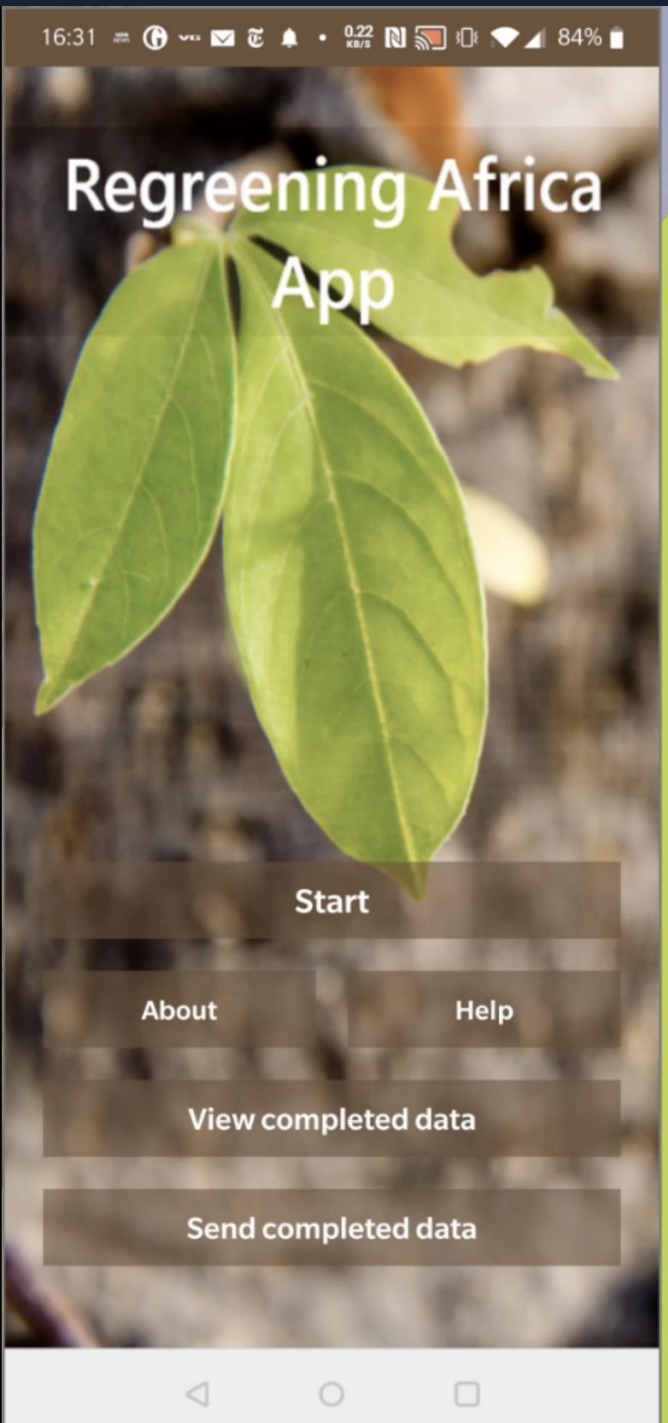
Science citoyenne

Citizen science data collection

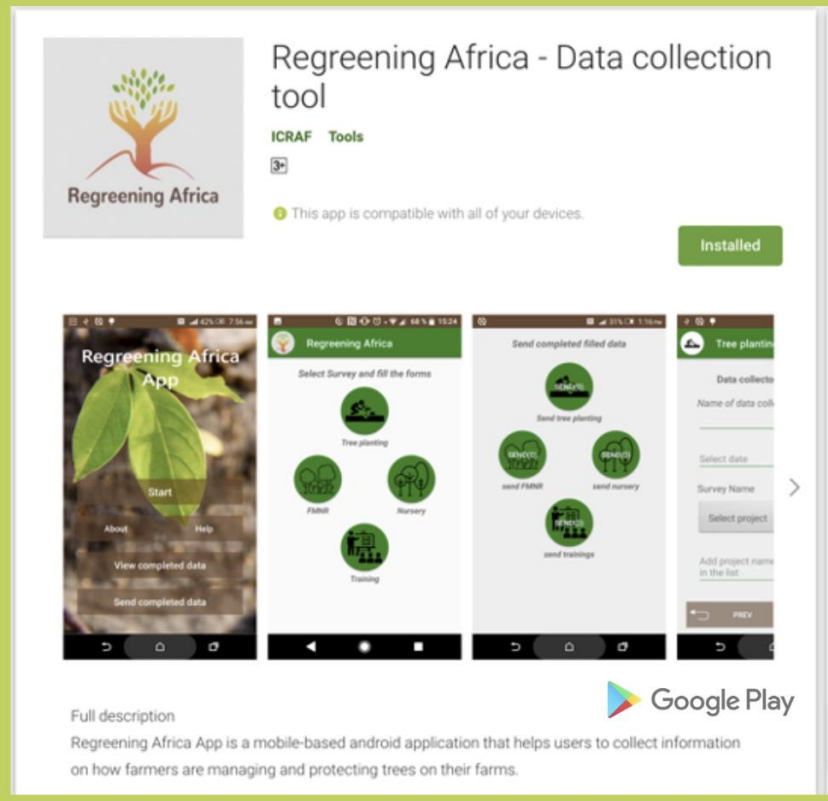


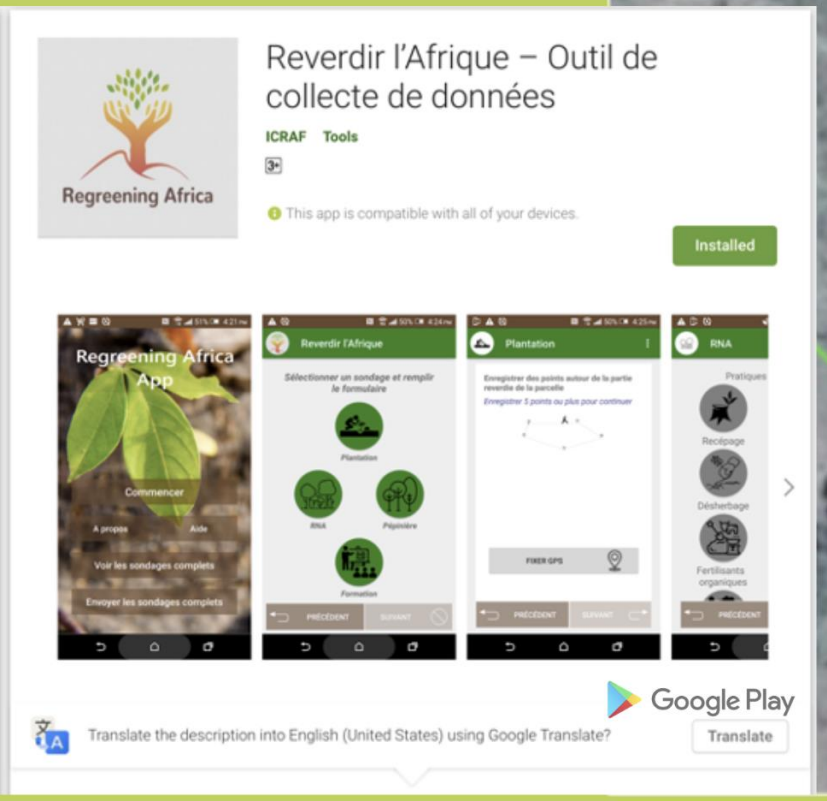
Used by:

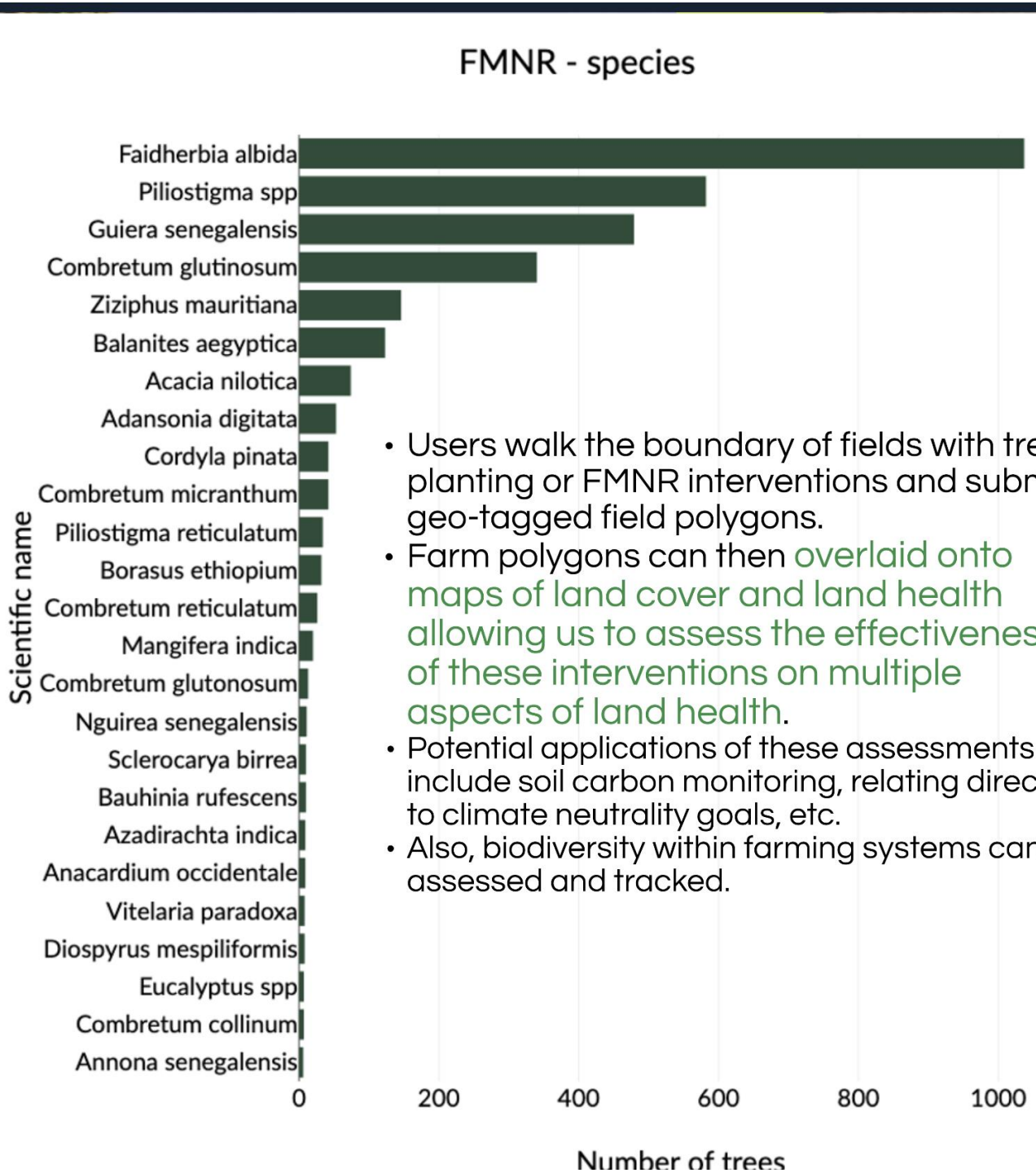
- Implementing partners
- Extension agents
- Lead farmers
- Scientists

Modules:

- Tree planting
- FMNR
- Nurseries
- Training







- Users walk the boundary of fields with tree planting or FMNR interventions and submit geo-tagged field polygons.
- Farm polygons can then overlaid onto maps of land cover and land health allowing us to assess the effectiveness of these interventions on multiple aspects of land health.
- Potential applications of these assessments include soil carbon monitoring, relating directly to climate neutrality goals, etc.
- Also, biodiversity within farming systems can be assessed and tracked.

Leçons clé

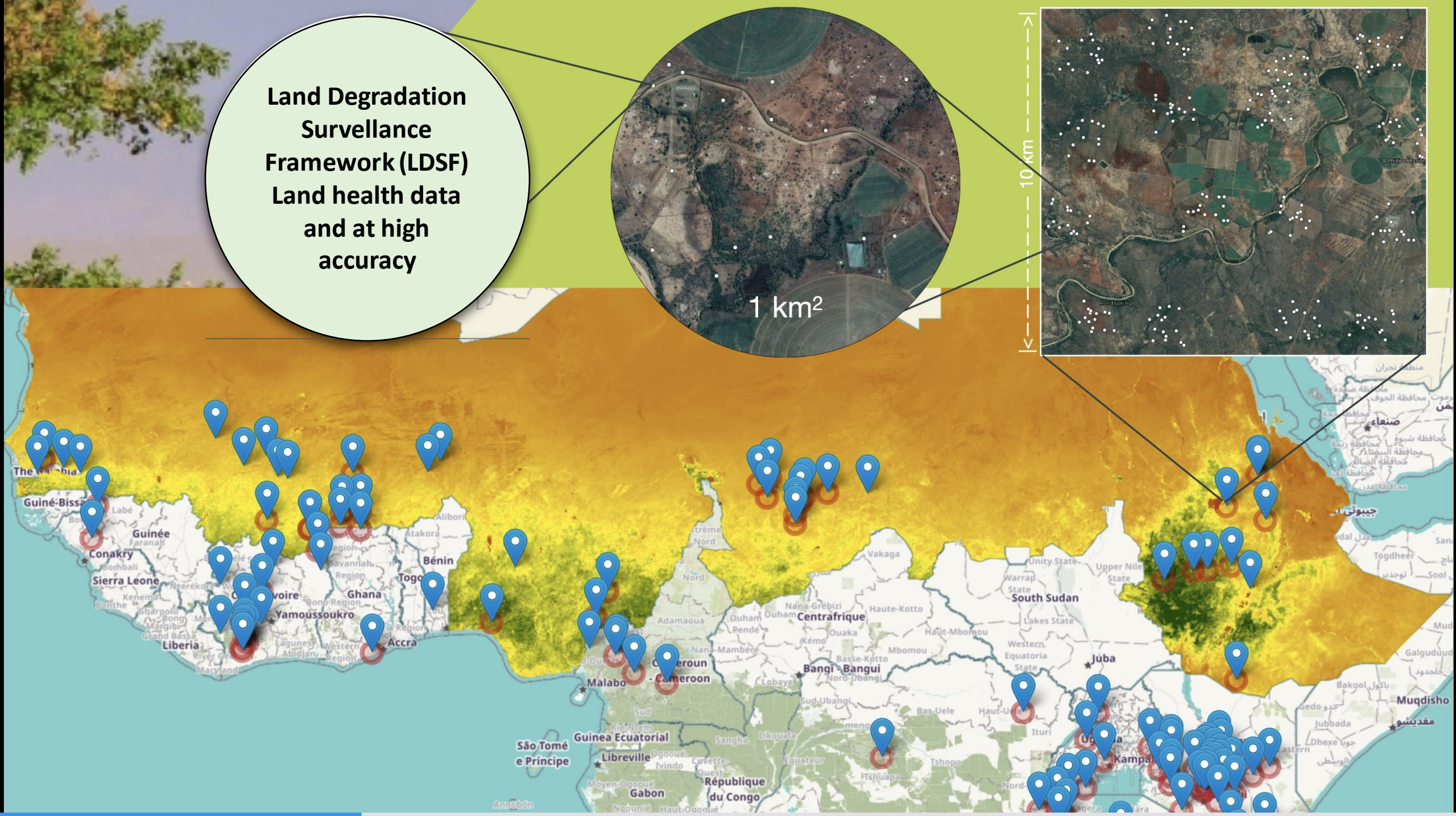
3. Construire sur les acquis

World Agroforestry

GeoScience Lab
Landscapes Portal
http://landscapeportal.org

THE LAND DEGRADATION SURVEILLANCE FRAMEWORK

The Land Degradation Surveillance Framework (or LDSF) is designed to provide a biophysical baseline at landscape level, and a monitoring and evaluation framework for assessing processes of land degradation and the effectiveness of rehabilitation measures (recovery) over time.


Land Degradation Survellance Framework (LDSF) Land health data and at high accuracy
1 km²
10 km
Guinée
Conakry
Sierra Leone
Liberia
Ghana
Yamoussoukro
Accra
Bénin
Togo
Malabo
Guinea Ecuatorial
São Tomé e Príncipe
Libreville
Gabon
République du Congo
Centrafrique
Bangi - Bangui
South Sudan
Juba
Kampala
Muqdisho
صنعاء

LDSF INDICATORS

The LDSF measures a wide range of indicators, that serve as a valuable biophysical baseline.

Indicators measured with the LDSF

LAND USE

- **Current**
- **Historical**
- **Ownership**

IMPACT ON HABITAT

LAND DEGRADATION

- **Soil erosion prevalence**
- **Soil water conservation measures**
- **Root-depth restrictions**
- **Rock/stone cover**

LAND COVER

- **Vegetation stucture (LCCS)**
- **Vegetation types**
- **Woody vegetation**
  - Shrubs
    - Density
    - Distribution
    - Diversity
  - Trees
    - Density
    - Distribution
    - Diversity
- **Herbaceous vegetation**
  - Type
  - Cover rating
- **Rangeland health module**
  - Grass species diversity and distribution
  - Annual to perennial ratio
  - Bare ground

TOPOGRAPHY/ LANDFORM

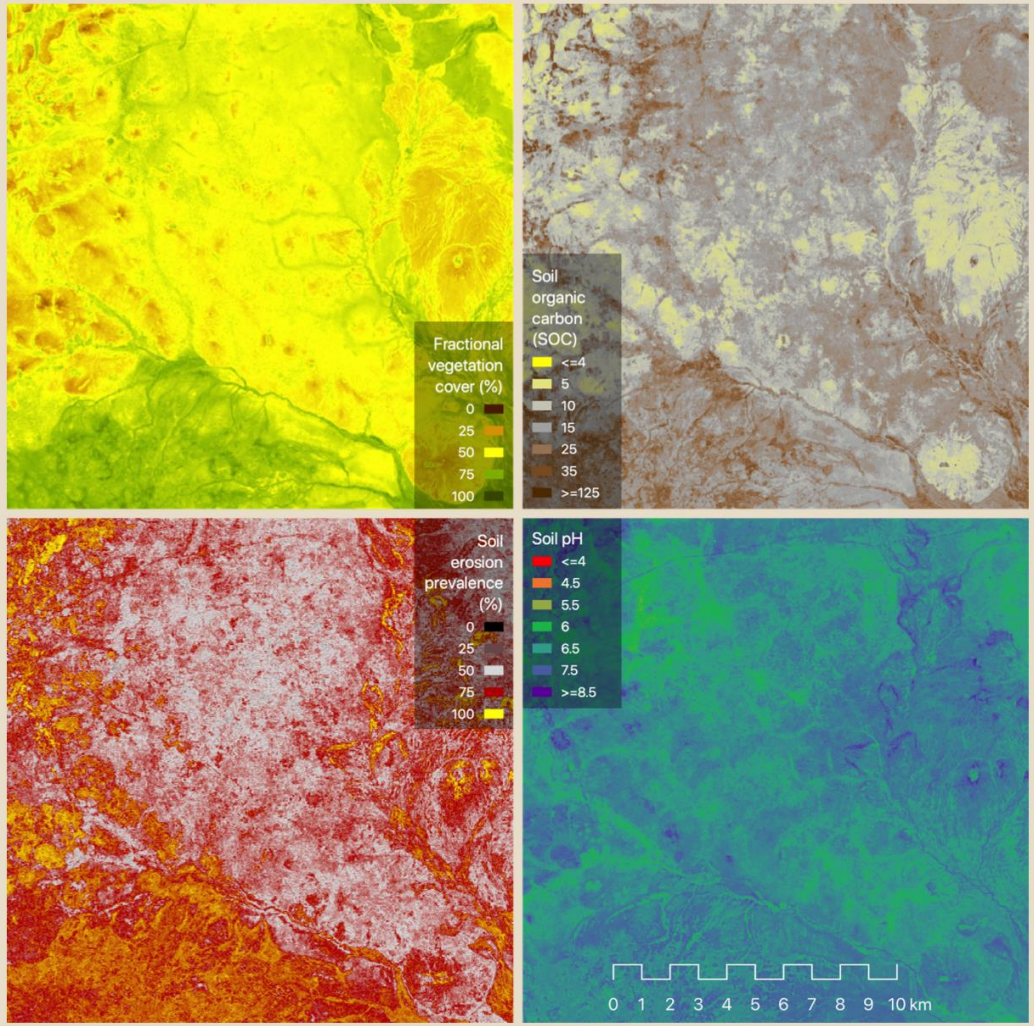
SOIL HEALTH

- **Soil organic carbon (SOC)**
- **Total nitrogen**
- **Infiltration capacity**
- **Soil pH/acidity**
- **Texture (sand and clay)**
- **Cumulative soil mass**
- **Earthworm presence**

PREDICTIVE MAPS

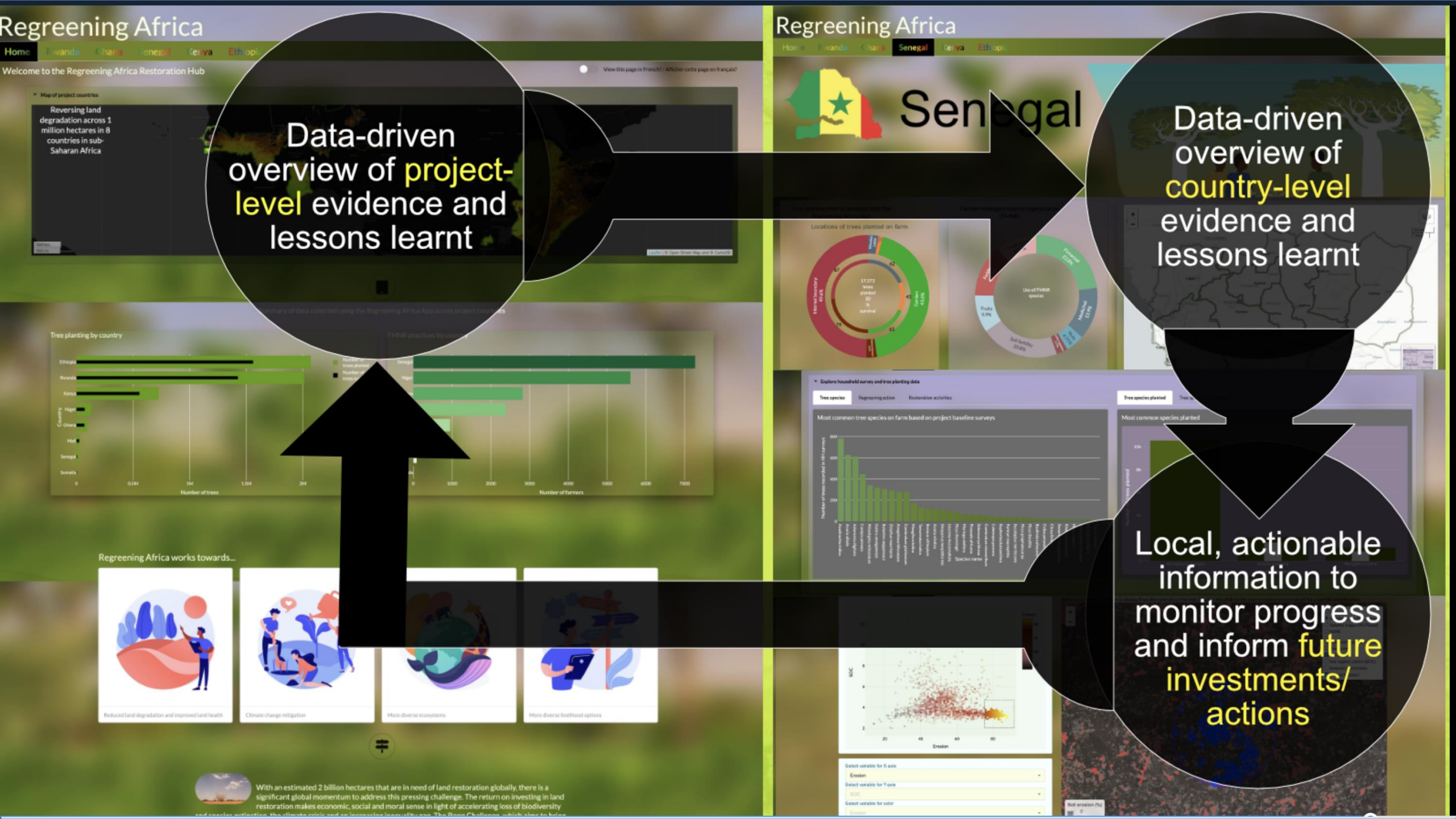
Data from multiple global sites are used to create predictive mapping outputs at multiple spatial scales, with fine-resolution maps produced at 5 to 10m resolution or lower, high resolution maps at 20 to 30m resolution, and moderate resolution maps at 250 to 500m resolution. This enables you to zoom in to a specific area of your site and assess the possible indicators therein.

The LDSF is part of the Ecosystem Health Surveillance System (EcoHSS) developed by ICRAF. As part of this system, **spatial assessments are produced of land degradation processes, soil functional properties, vegetation cover and biodiversity.**

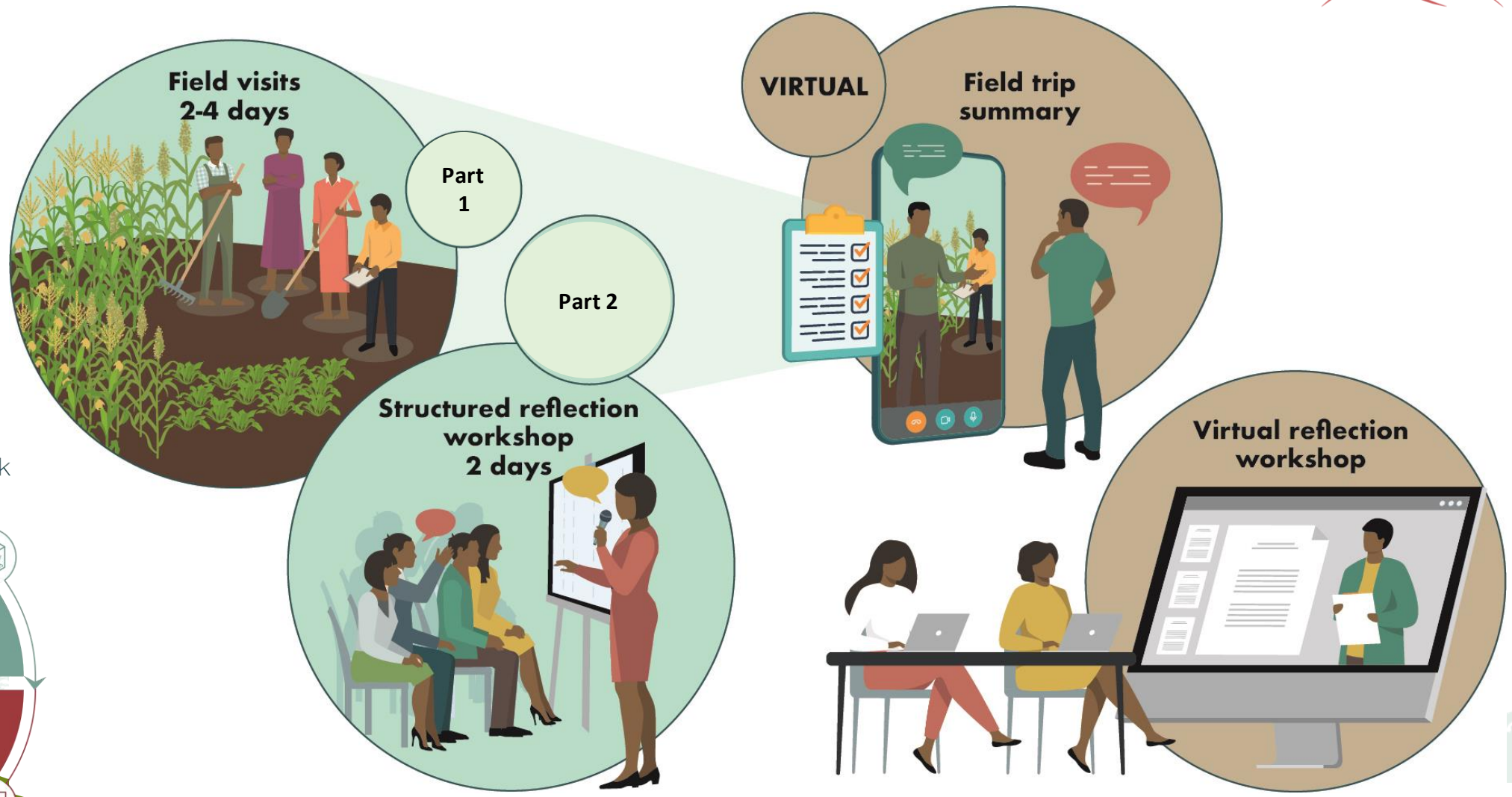


Leçons clé

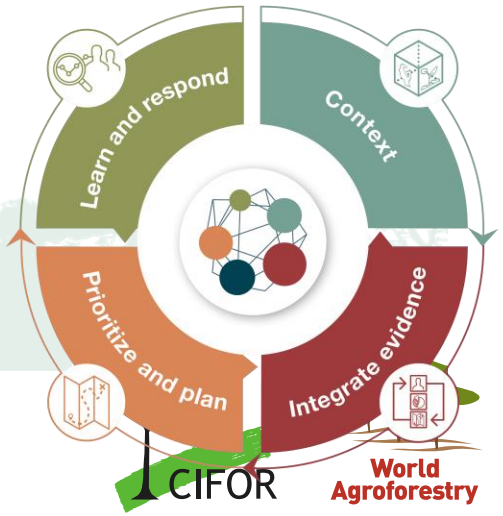
4. **Aucun plan ne survit le contact avec la réalité: adaptation constante.**


Regreening Africa
Home
Rwanda
Ghana
Senegal
Kenya
Ethiopia
Welcome to the Regreening Africa Restoration Hub
Reversing land degradation across 1 million hectares in 8 countries in sub-Saharan Africa
Data-driven overview of project-level evidence and lessons learnt
Tree planting by country
Number of trees
Number of farmers
Regreening Africa works towards...
Reduced land degradation and improved land health
Climate change mitigation
More diverse ecosystems
More diverse livelihood options
With an estimated 2 billion hectares that are in need of land restoration globally, there is a significant global momentum to address this pressing challenge. The return on investing in land restoration makes economic, social and moral sense in light of accelerating loss of biodiversity
Regreening Africa
Senegal
Data-driven overview of country-level evidence and lessons learnt
Locations of trees planted on farm
Most common tree species on farm based on project baseline surveys
Most common species planted
Local, actionable information to monitor progress and inform future investments/ actions
Erosion
SOC

Gestion adaptative



SHARED framework



Joint reflective learning missions

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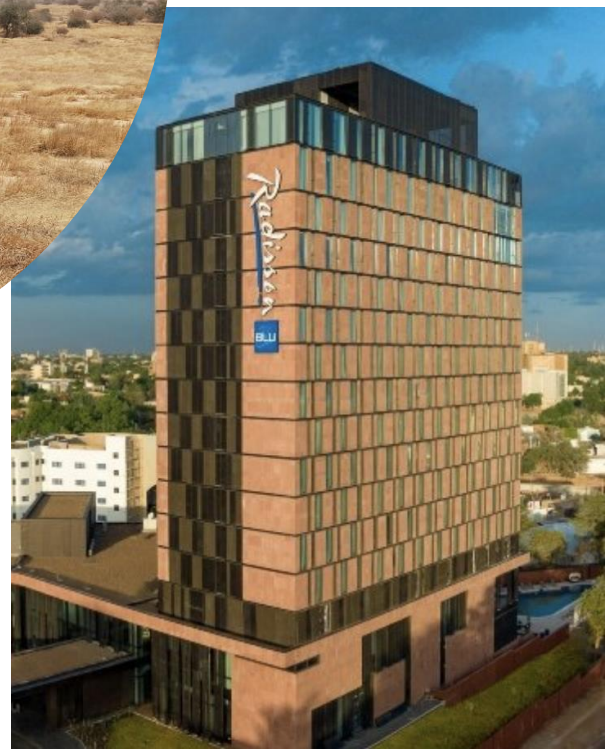
Leçons clé

5. L’argent fait tourner le monde.

Niger: d’aliments honnis… à aliments de luxe



Boscia senegalensis…

- Regeneration facile
- Bonne production même en sécheresse
- Souvent l’unique source de cash pour les femmes.

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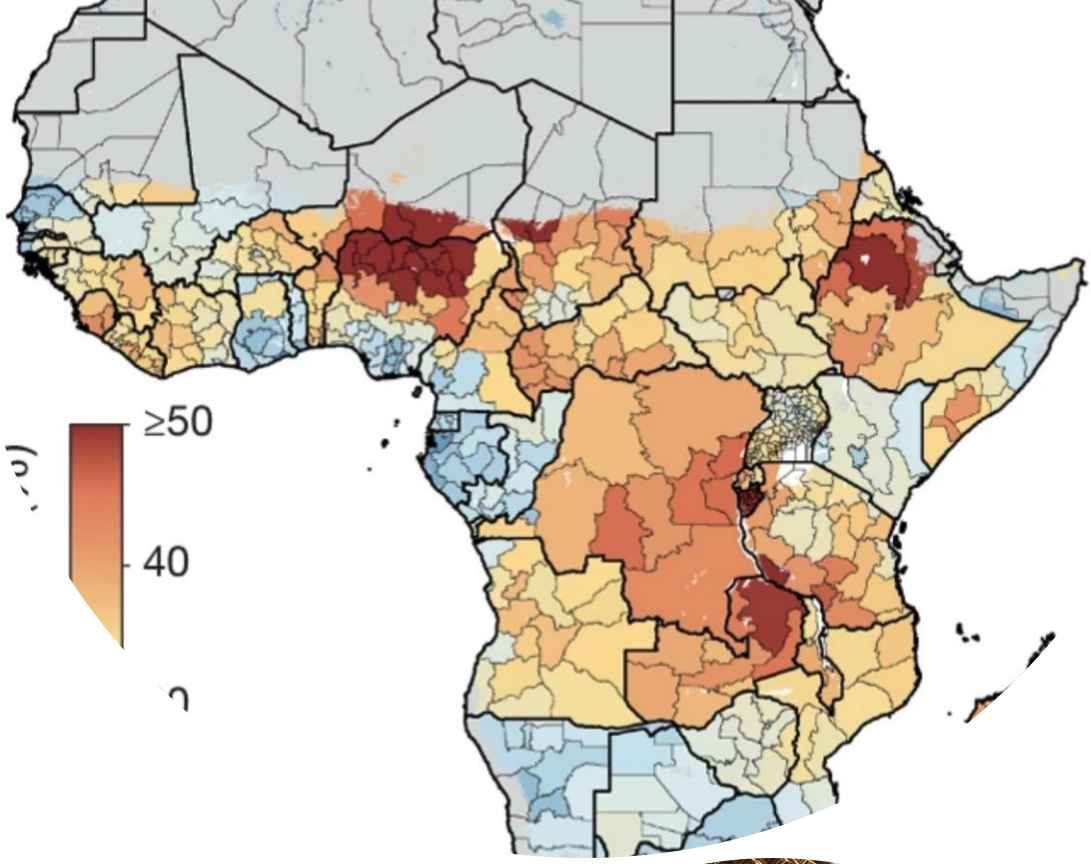
Mapping child growth failure across low-and middle-income countries. *Nature*, *577*(7789), p.231.



Autres incitants?

Les arbres combattent la malnutrition

Les enfants habitant moins de 3 km d'une fôret ont une plus grande diversité alimentaire

Rasolofoson, R.A., Hanauer, M.M., Pappinen, A., Fisher, B. and Ricketts, T.H., 2018. Impacts of forests on children's diet in rural areas across 27 developing countries. *Science advances*, *4*(8), p.eaat2853.

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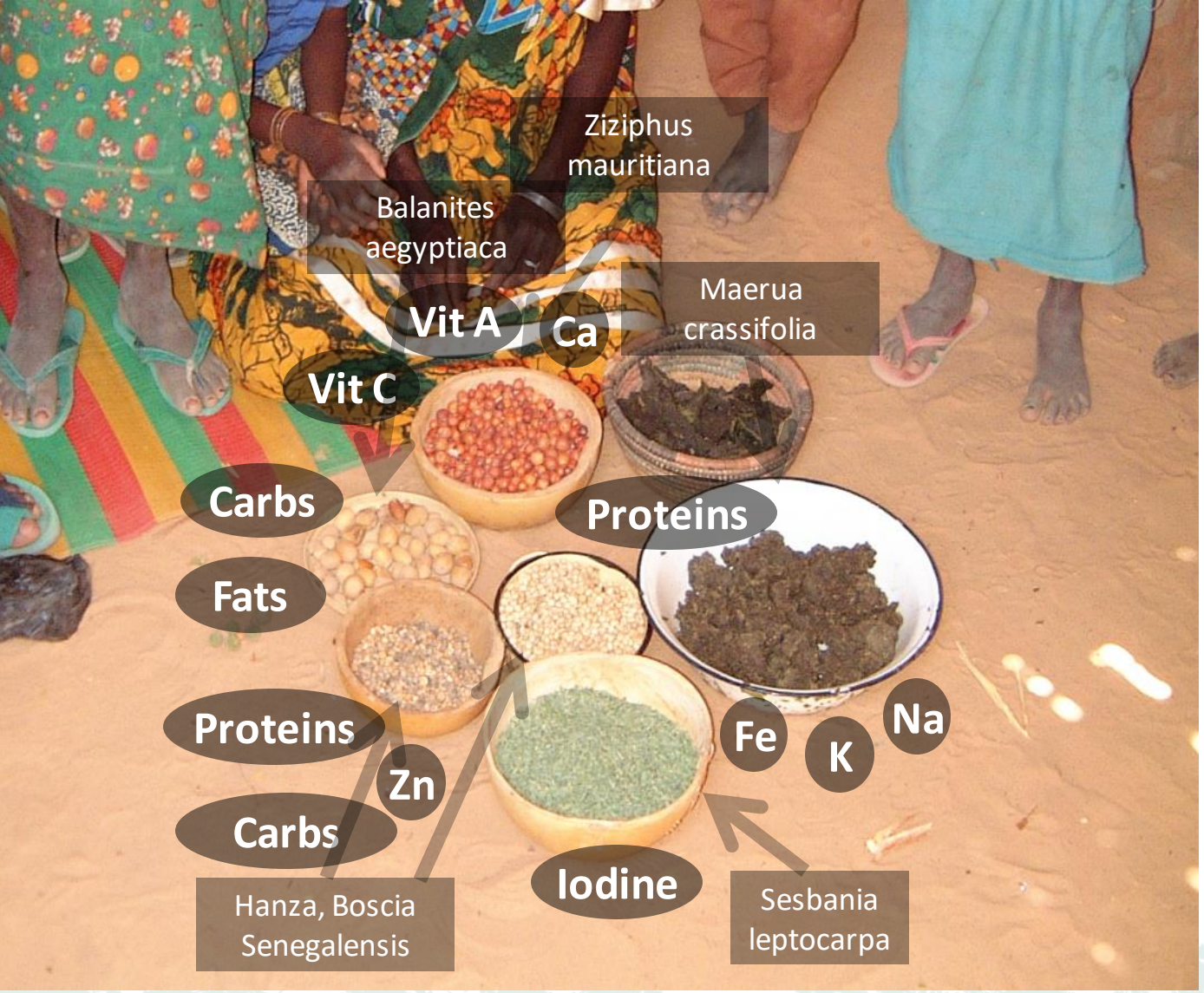

Photo: J. Garvi

Boscia senegalensis

protéines	20,62 to 24,34 %
Glucides	45,29 to 49,67 %

Bonne source de lysine, calcium, potassium et magnesium

Rendement : 1,000 kg / ha

Rendement années sèches: similaire

Mil

Protéines	9,93 to 11,3%
Glucides	63 to 75%
Rendement :	400 kg / ha
Rendement années sèches :	0

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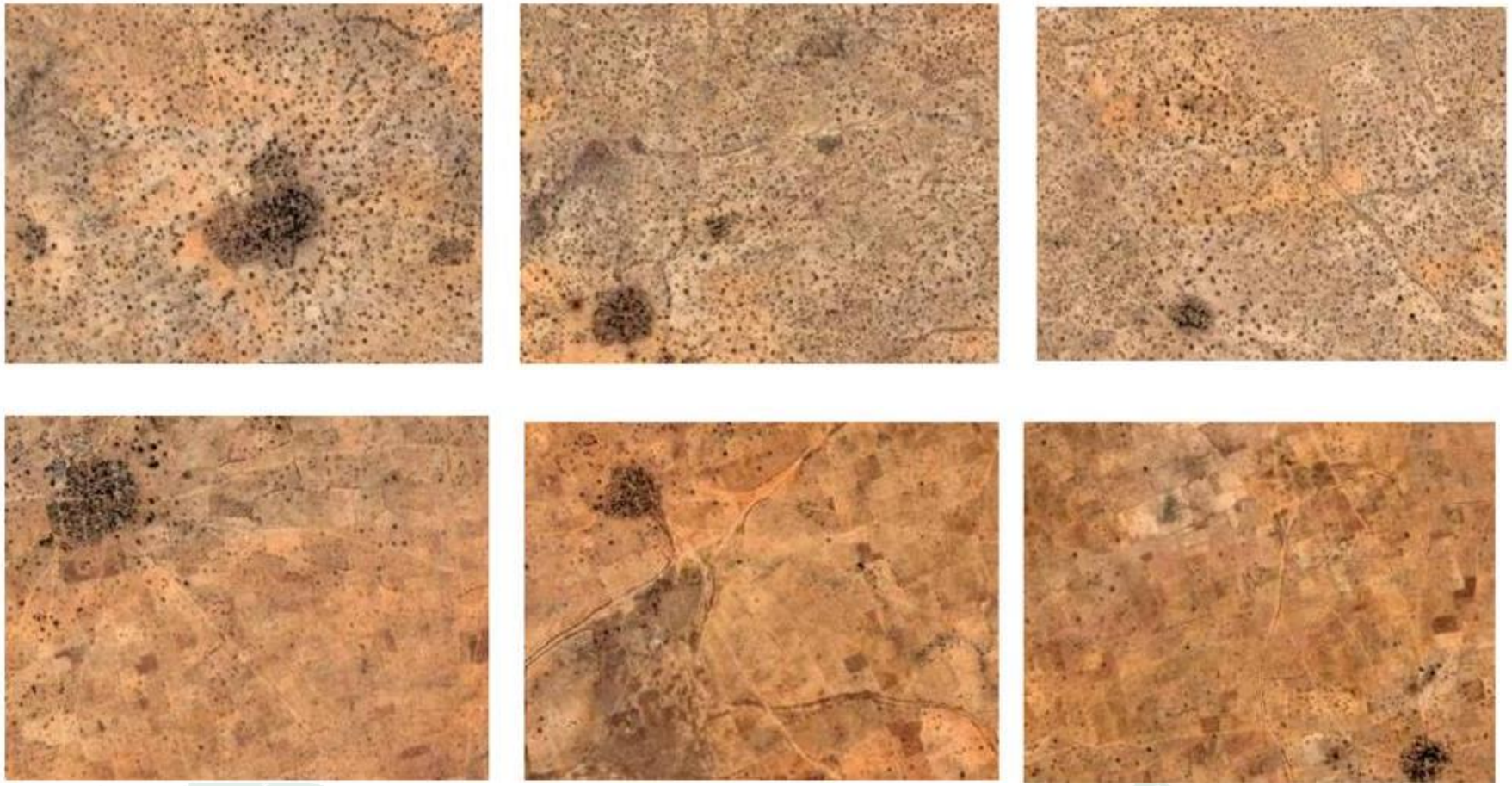
Leçons clé

6. La clé est la gouvernance. Toujours.



Niger

Nigeria

Transects by Grey Tappan, US Geological Survey

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Créer un environnement de collaboration

- Gouvernance locale et communautaire
- Gérer et réduire les barrières régulatoires
- Inclure les femmes et les jeunes
- Partenariats a toutes les échelles
- Poursuite d’objectifs nationaux
- Aprentissages entre les pays
- Créer des mouvements qui incluent tous les partenaires

La suite?

L'initiative MOSAIC pour la GMV

En s'appuyant sur les **efforts de décentralisation**, les **gouvernements** peuvent déclarer des **zones de régénération**, où les **parties prenantes** (y compris les communautés, les entreprises locales et les ONG, les donateurs et les agences gouvernementales) **collaborent pour régénérer les paysages à grande échelle en *responsabilisant les communautés locales*.**

Autonomiser et soutenir les petits exploitants

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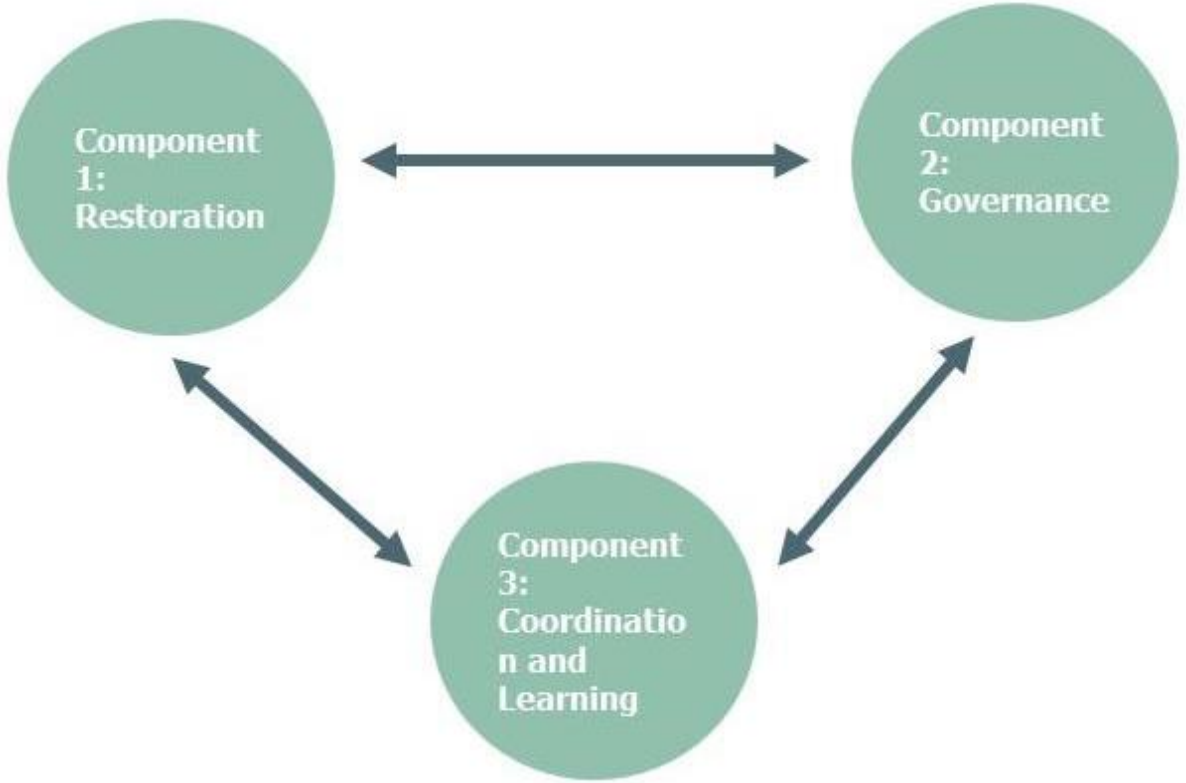
Equip and support CSOs to undertake 3m hectares of land restoration, develop value chains and build climate resilience in their local communities



Engage government to identify, develop and empower through pioneering Special Regeneration Zones, as the focus areas for CSO work and governance engagement

Coordination, monitoring, learning, reflection and adaptation within and across Special Regreneration Zones and countries.

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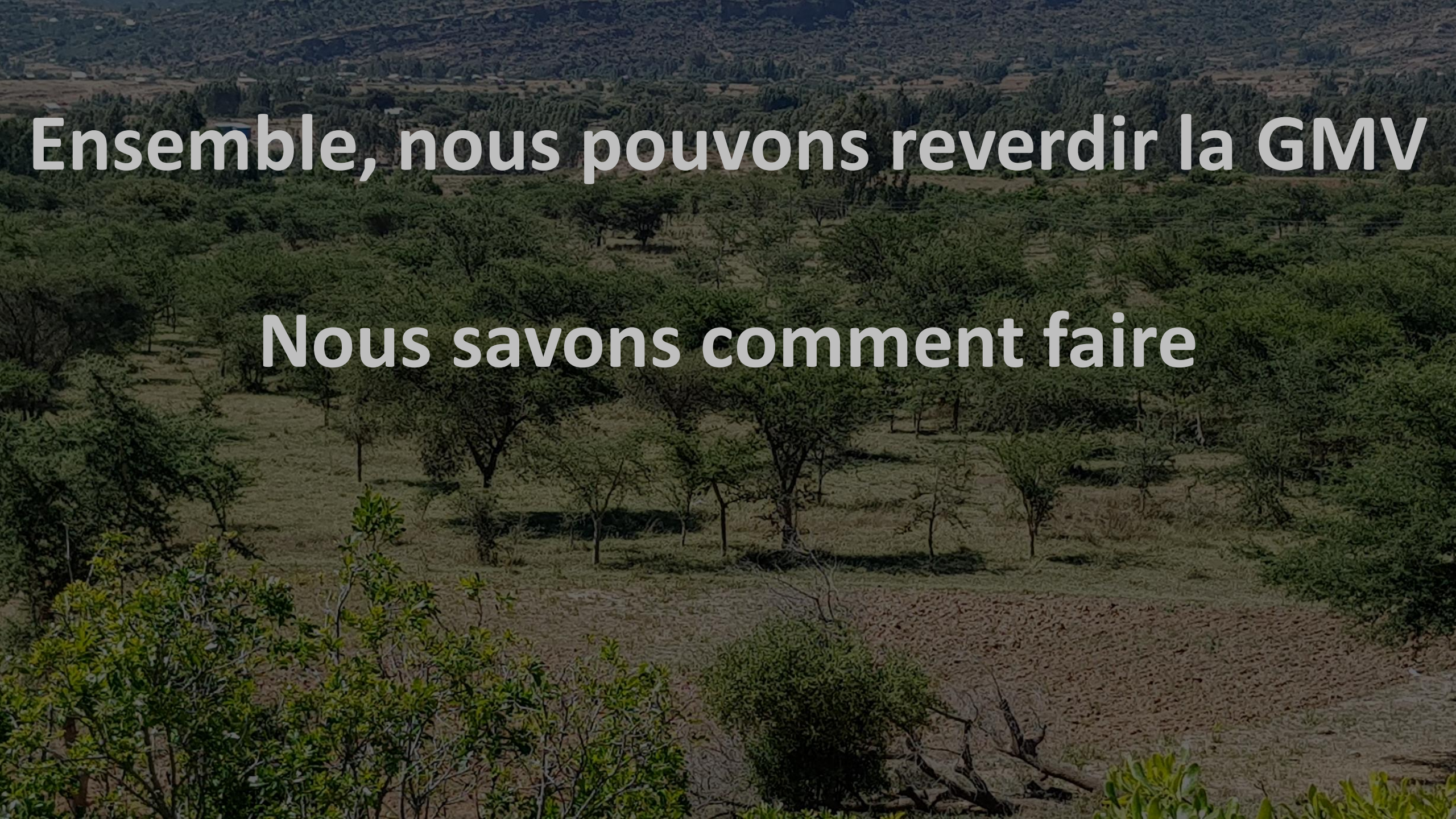
Ensemble, nous pouvons reverdir la GMV
Nous savons comment faire

Thank you

cifor.org | worldagroforestry.org | foreststreesagroforestry.org | globallandscapesforum.org | resilient-landscapes.org

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