

**Great Green Wall** for the Sahara and the Sahel initiative

# Africa's Great Green Wall Initiative

**A model for restoration success**

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## Outline

1. The GGWSSI: Why ?
2. The GGWSSI: How ?
3. GGWSSI Restoration model:
  - FAO Guidelines on drylands restoration
  - Transboundary model project led by Kew
4. Way Forward

# 1.The GGWSSI: Why ?



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- Environmental challenges
- Socio-economic challenges
- Drylands : not just problems but opportunities
- Building on experiences and current community initiatives

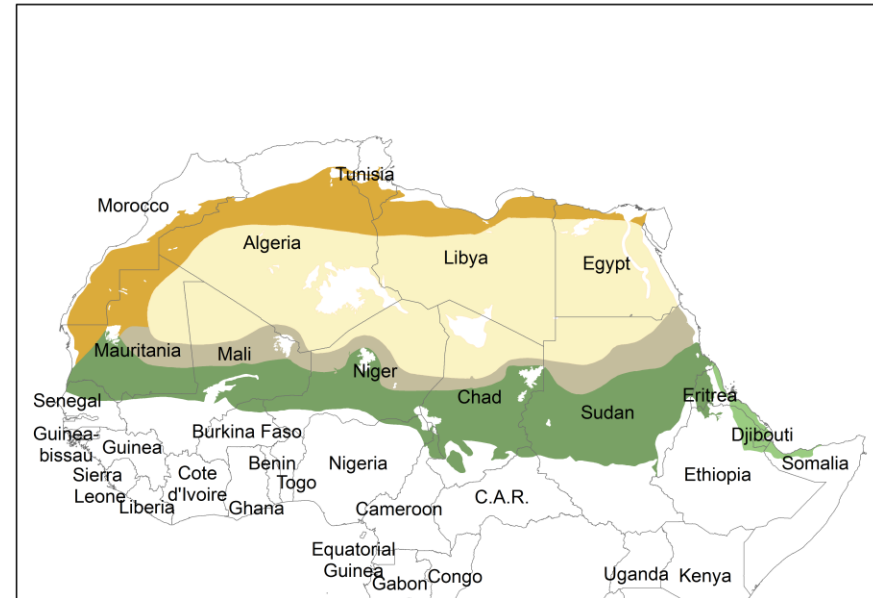
## The Rio triplets and synergy



Source: Cari / Drynet

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- Coordinated by the African Union Commission
- Over 20 countries around the Sahara
- Drylands' development issues
- Resilience of human and natural systems to Climate Change extreme events (Drought, floods)
- Long term solutions



Map from Olson et al, 2001 – illustrates GGWSSI approximate geographical scope

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## 2. The GGWSSI: How?



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More than a physical wall of trees, the GGWSSI is a metaphor:

- **A people-centred** approach:  
sustainable land management  
- dynamic linkages in the  
**landscape**
- **Mosaic of solidarity** (e.g.  
countries, farmers,  
pastoralists, women, youth,  
movements, technicians,  
experts, scientists)





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A **mosaic** of sustainable land use practices improving resilience of landscapes & communities

*Ability of a system - human or natural - to absorb, accommodate or recover from the effects of a shock or stress*

- Sustainable management and restoration of forests, agroforestry systems and rangelands
- Diversified production & safety nets
- Alternative or additional employment





## 3. The GGWSSI Restoration model

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## Restoration : one of intervention priorities in GGWSSI

- 11 national GGW Action Plans validated: Burkina Faso, Djibouti, Egypt, Eritrea, Ethiopia, Gambia, Mali, Niger, Nigeria, Senegal, Chad
- 3 other national GGW Action plans under finalization: Algeria, Mauritania, Sudan



***Restoration of dryland forests & agrosilvopastoral landscapes: one of major priority interventions defined in GGW action plans***

# FAO Guidelines for restoration of forest landscapes and degraded lands

## *Enabling environment to address the root causes of forest degradation and desertification*

- Supportive policies and governance mechanisms
- Inter-sectoral collaboration
- Capacity development and education
- Sustainable livelihoods and access to markets
- Sustainable financing

### BUILDING RESILIENCE IN DRYLANDS

Global guidelines for restoration of forest landscapes and degraded lands

Forests play crucial ecological, social and economic roles in drylands, but in many regions they have become degraded. Worldwide, millions of hectares of dryland forest landscapes need to be restored to help tackle global challenges such as poverty, climate change, soil erosion and desertification. In collaboration with its partners, FAO has therefore developed global guidelines for restoration of forest landscapes and degraded lands to build resilience in drylands. This brochure describes the main elements of the guidelines.



Vulnerable women and households, Niger

©FAO/Barier Saugou



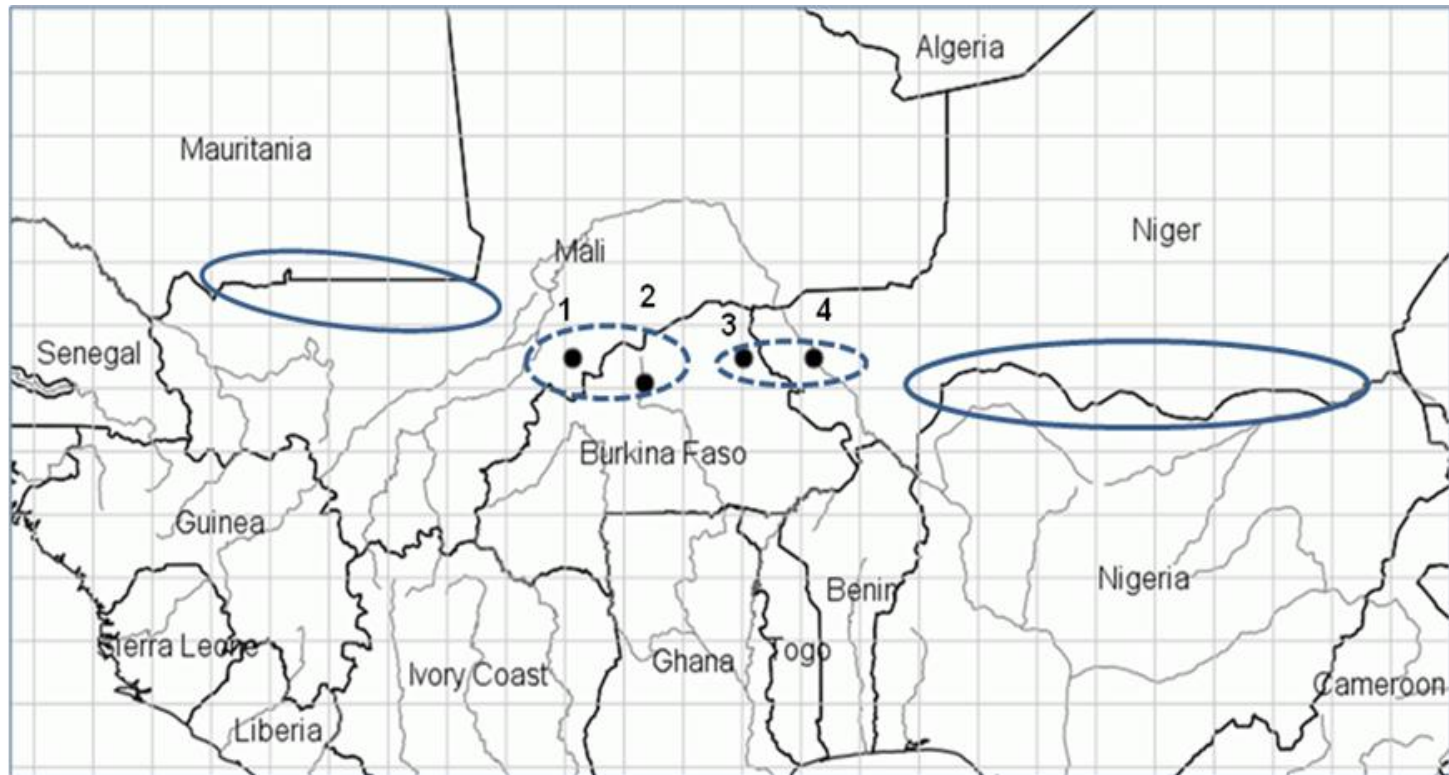
# FAO Guidelines for restoration of forest landscapes and degraded lands

## *At field level: technical capacity*

- Landscape planning
- Assisted natural regeneration
- Right species in the right place
- Quality of reproductive material and high genetic diversity
- Protection and management: water, soil, fire, grazing
- Monitoring & evaluation for adaptive management



# GGW cross-border restoration project: creating technical capacity on the ground



Beneficiary Communities in the trans-frontier Regions:

- **Bankass**, South-east Mali (1 on the map)
- **Djibo**, North-west Burkina (2)
- **Dori**, North-east Burkina (3)
- **Tera**, West Niger (4)

# GGW restoration model: technical management team

	<b>Mali (Mopti Region - East)</b>	<b>Burkina (West – Soum Region)</b>	<b>Burkina (Sahel Region - East)</b>	<b>Niger (West – Tillabery Region)</b>
<b>1- National Tree Seed Centres</b>	Leader - IER	Leader – CNSF	Leader – CNSF	Leader – CNSF- N
<b>2- GGW National Focal Points</b>	National Focal Point	National Focal Point	National Focal Point	National Focal Point
<b>3- Local Administrations + Communities’ representatives</b>	Bankass	Djibo	Dori	Tera
<b>4- NGOs Environment &amp; Development</b>	SAHEL ECO	Tree Aid	SOS Sahel	SOS Sahel
<b>5- Forestry Departments</b>	Forestry Service (Bankass District)	Forestry Service (Djibo Province)	Forestry Service (Dori Province)	Forestry Service (Tillabery Region)
<b>6- International facilitating organisations</b>	Leader – Kew FAO; WFP			



# GGW restoration model: the approach

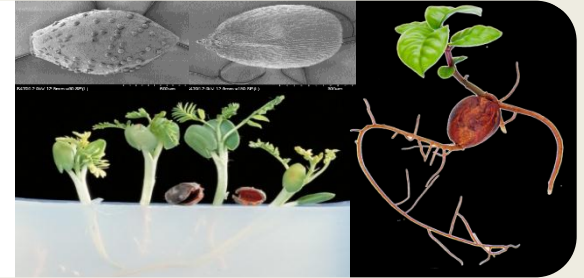
## Communities

- **Consultation & commitment**
- **Needs** and **requirements**
- **Species** and their uses



## Research

- **Knowledge, expertise**
- Quality **material** available
- **Bio-diverse** (trees/shrubs/grass)



## Procedures

- Collecting quality **seeds**
- **Seedling production** and **soil preparation**
- Planting, direct seeding and assisted natural regeneration



## Monitoring

- **Monitor and evaluate field performance**



## Capacity building

- **Plant products, marketing**
- Seed collecting and nursery **techniques**
- Planting, maintenance and **management of plantations**



# Seed mobilisation capacity for the GGW still low !!!

Country	Institution	Capacity (kg)	Species (trees & grasses)
Burkina	Centre National de Semences Forestières (CNSF, BF - OECD)	3,000	50
Mali	Unité de Semences Forestières (USF)	1,000	50
Niger	Centre National de Semences Forestières (CNSF, Niger)	500	20
Senegal	Programme National de Semences Forestières (ProNaSeF)	2,500	20
Kenya	National Tree Seed Centre (KEFRI-NTSC - OECD)	10,000	40
Ethiopia	Forestry Research Centre (EIAR- FRC)	8,000	20
Total	6	25,000	200

# GGW restoration model: achievements so far

Country	Region		2013		2014		
		Villages	Areas (ha)	Species	Villages	Areas (ha)	Species
Burkina	Dori/Djibo	11	200	15	40	1100	20
Mali	Bankass	5	65	10	7	130	25
Niger	Tera	5	55	1	10	75	15
Total	3	21	320	25	57	1305	40

**Top 10 tree species** include: *Acacia nilotica*, *A. tortilis* sbsp *raddiana*, *A. senegal*, *Adansonia digitata*, *Balanites aegyptiaca*, *Bauhinia rifescens*, *Faidherbia albida*, *Khaya senegalensis*, *Lannea microcarpa*, *Prosopis africana* and *Ziziphus mauritiana*

**The top 5 herbaceous species** include: *Andropogon gayanus*, *Cymbopogon giganteus*, *Digitaria horizontalis*, *Panicum laetum* and *Pennisetum pedicellatum*



# GGW restoration model: achievements so far

- 2013 planting: **75% survival**
- 2014 planting: > **500,000 seedlings** (in pots + **100 kg seeds** of herbaceous species for direct sowing) to be planted to cover **1,300 ha** of degraded land; benefiting **57 communities/villages**
- **50 GGW farmers from 2 countries trained together** in seed collecting and nursery techniques



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## 4. Way forward

# Way forward: up-scaling

- **Action Against Desertification** programme: led by FAO, EU-ACP co-funded in 8 ACP countries
- FLEUVE project: led by GM-UNCCD in 5 countries
- Cover other GGW countries
- Support national tree seed programmes





# Thanks

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