

Moving the Great Green Wall

Lars Laestadius
Consultant to FAO

How big is the Great Green Wall?

GGW Geographic Cover

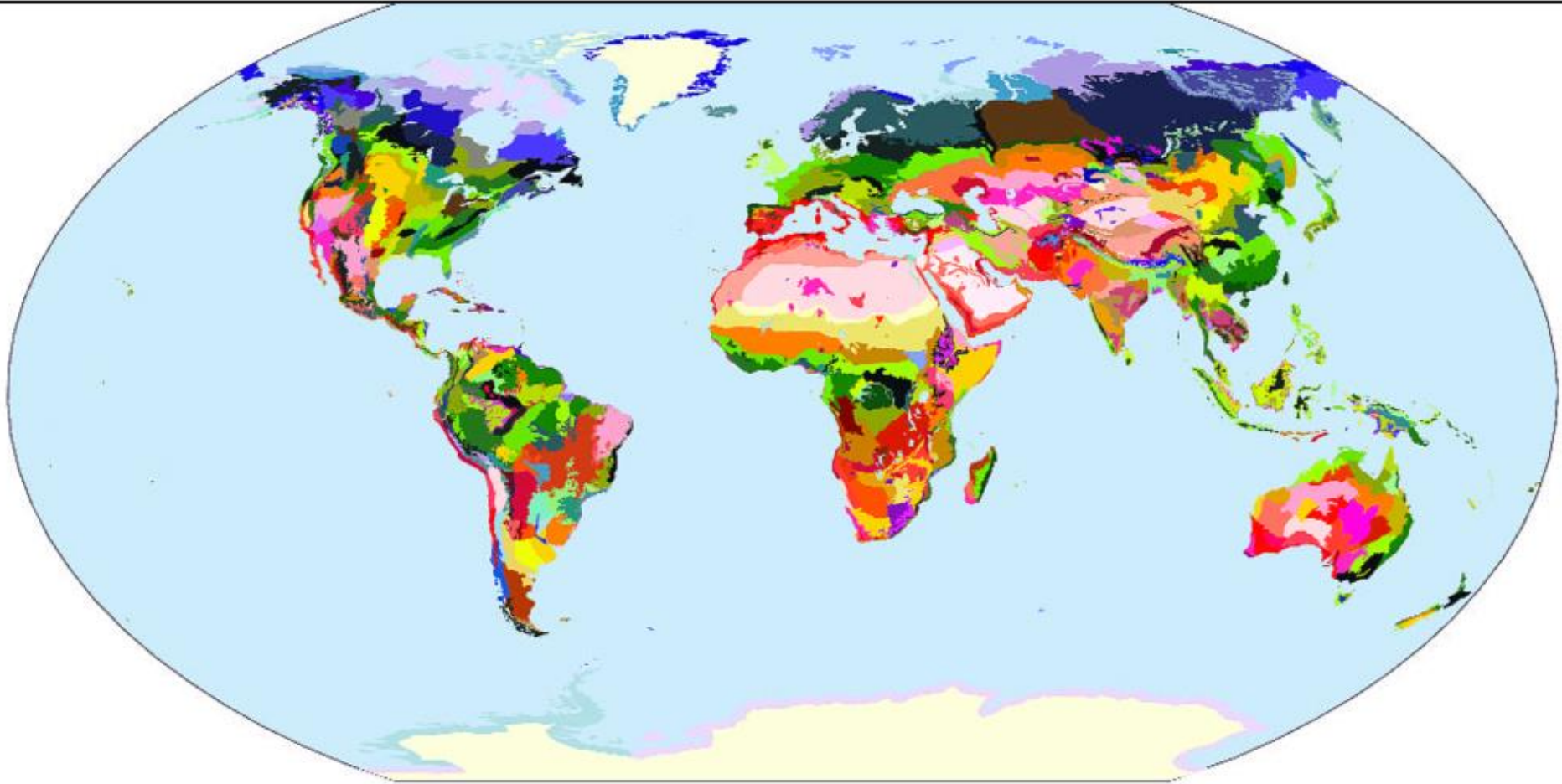


Harmonised regional strategy for implementation of the “Great Green Wall Initiative of the Sahara and the Sahel”. 2013.



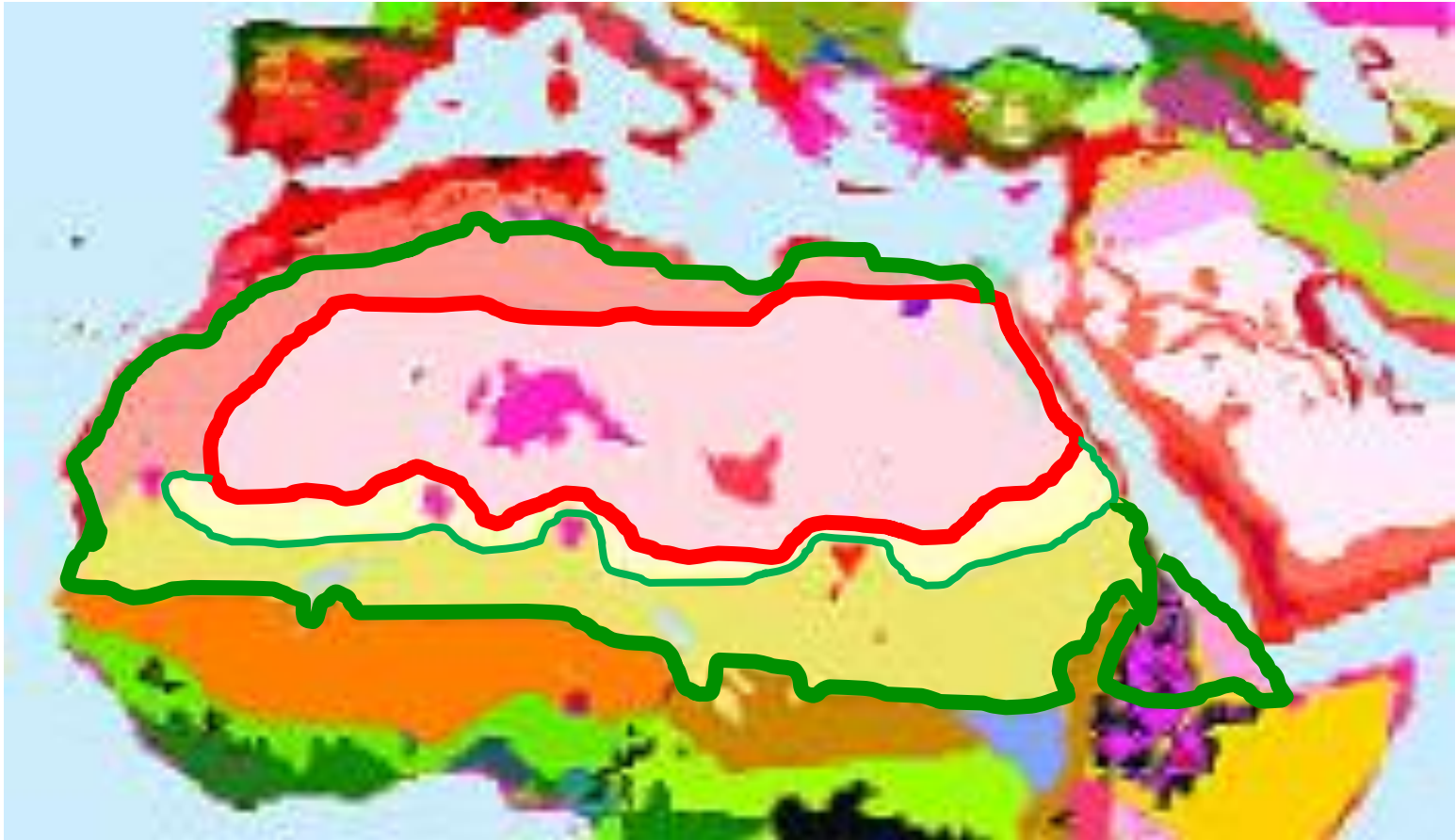
- Covers the vulnerable geographic areas of **all the countries surrounding the Sahara**, in the South but also in the North
- Priority will be given to the belt defined by the isohyetal lines **under 400 mm**. Some countries could need to go beyond this area.
- The initiative is part of NPACD implementation and should therefore **cover a specific region rather than the whole national territory**.

Terrestrial ecoregions



Source: Olson et al, 2001.

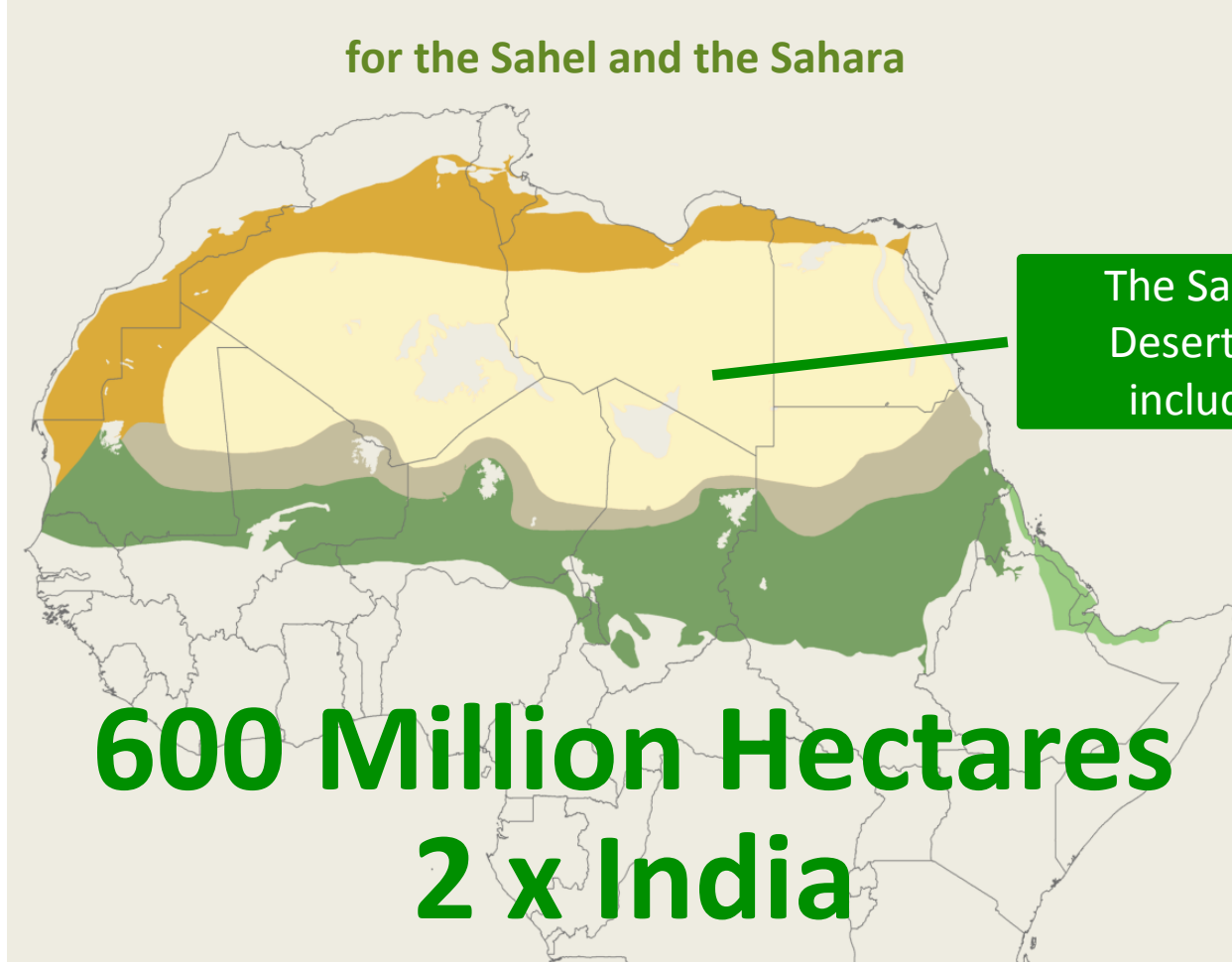
Ecoregions in the Great Green Wall



Source: Olson et al, 2001.

General Ecological Extent of Africa's Great Green Wall

for the Sahel and the Sahara

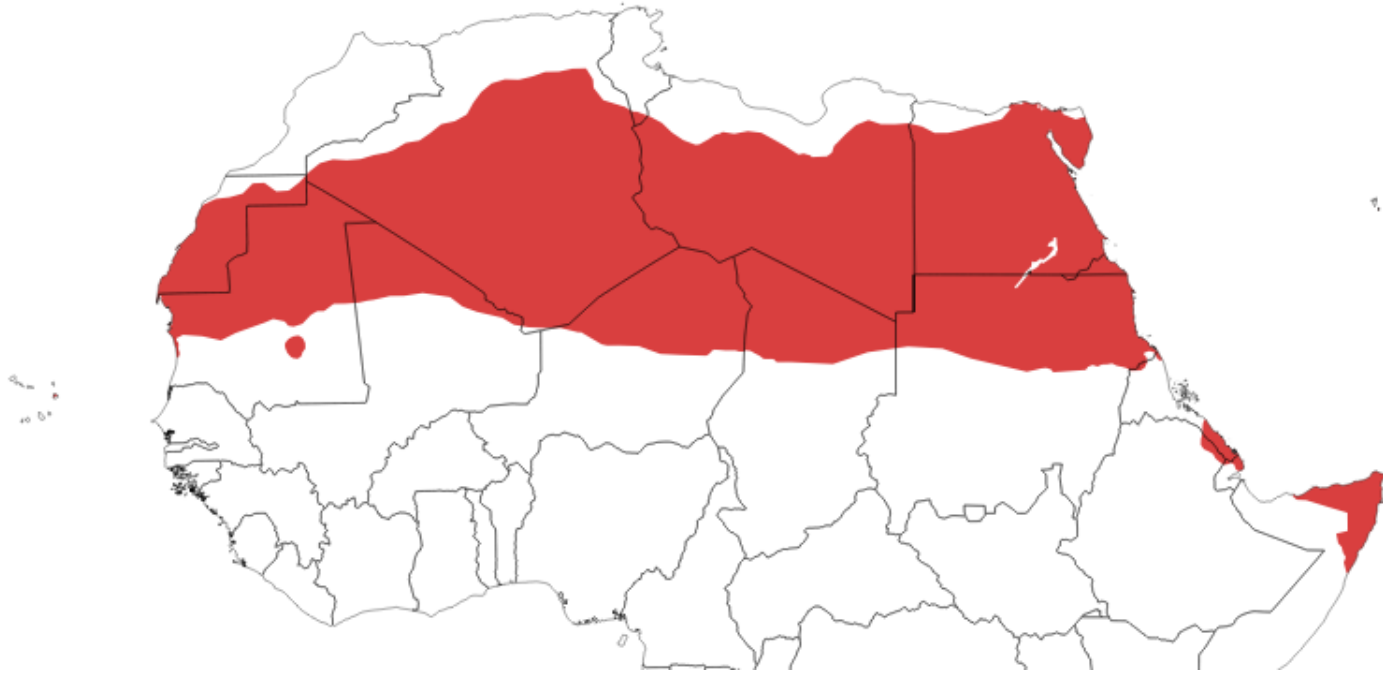


The Sahara
Desert not
included

600 Million Hectares
2 x India

Delineation: Dr Moctar Sacande, FAO

Hyperarid

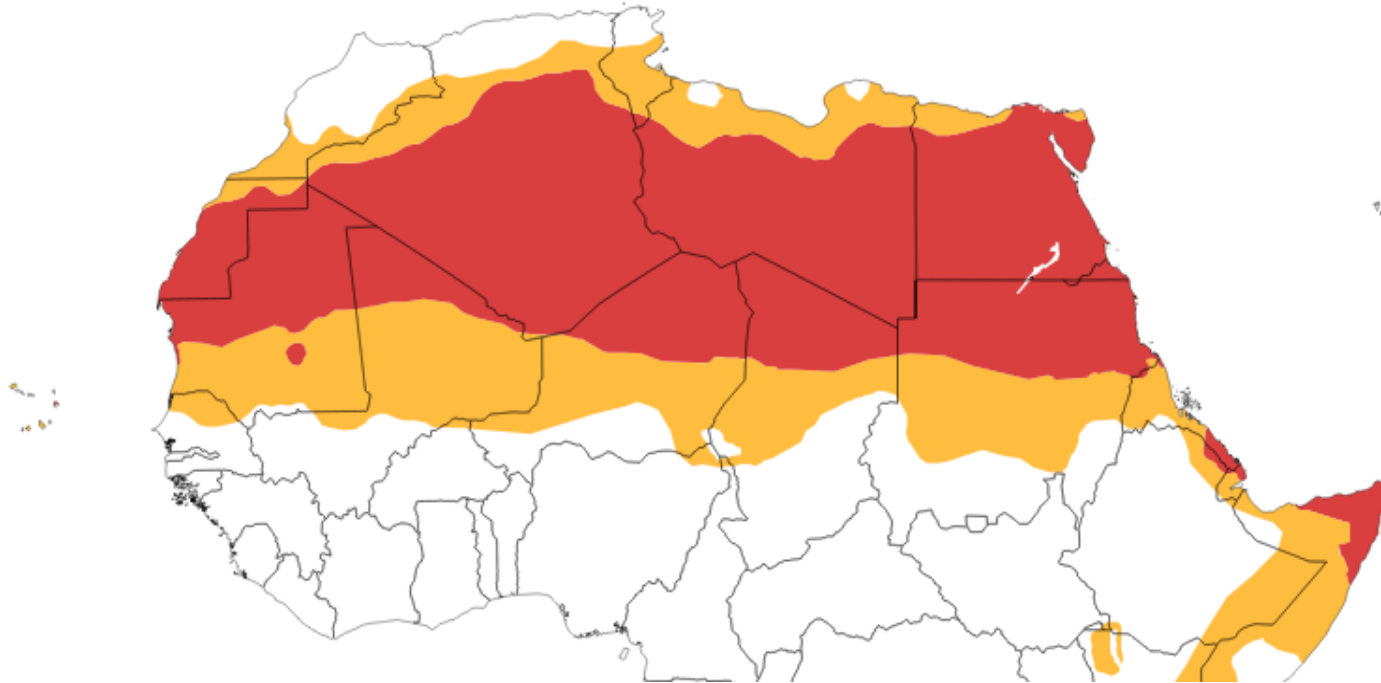


Aridity zones *

■ Hyperarid

($P/PET < 0.05$)

Arid and Hyperarid



Aridity zones *

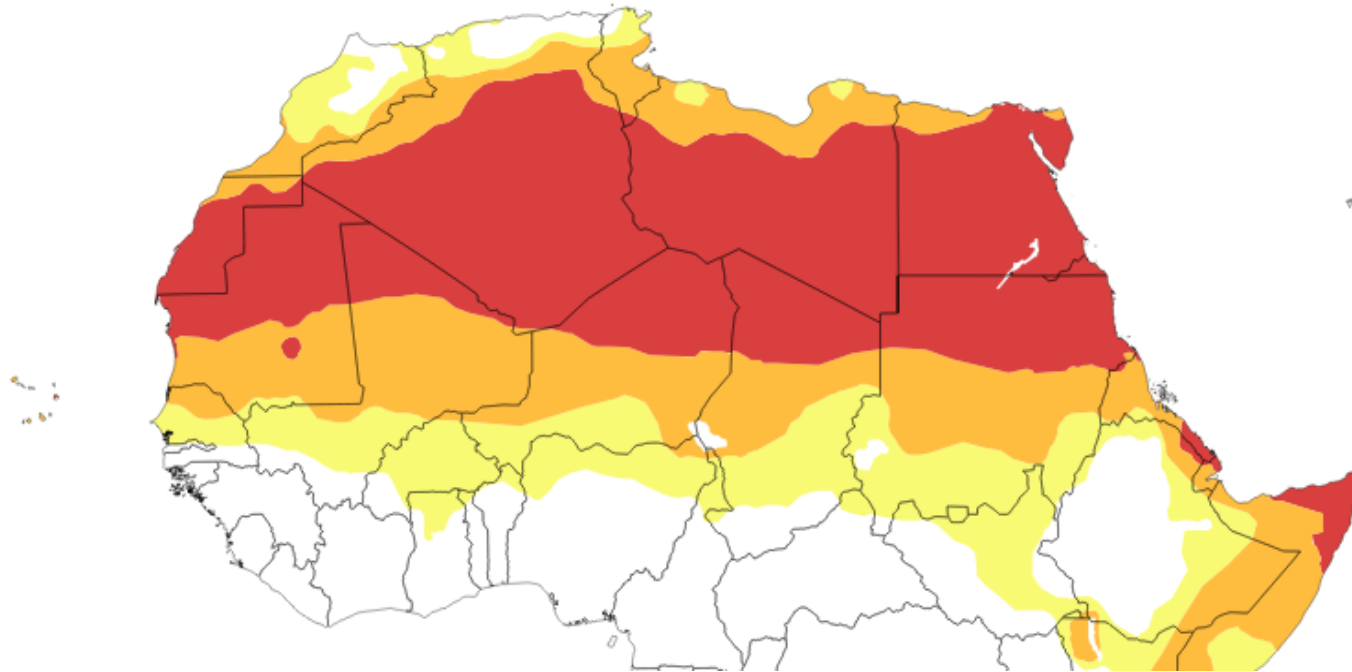
Hyperarid

($P/PET < 0.05$)

Arid

($P/PET = 0.05 - 0.20$)

Semiarid, Arid, and Hyperarid



Aridity zones *

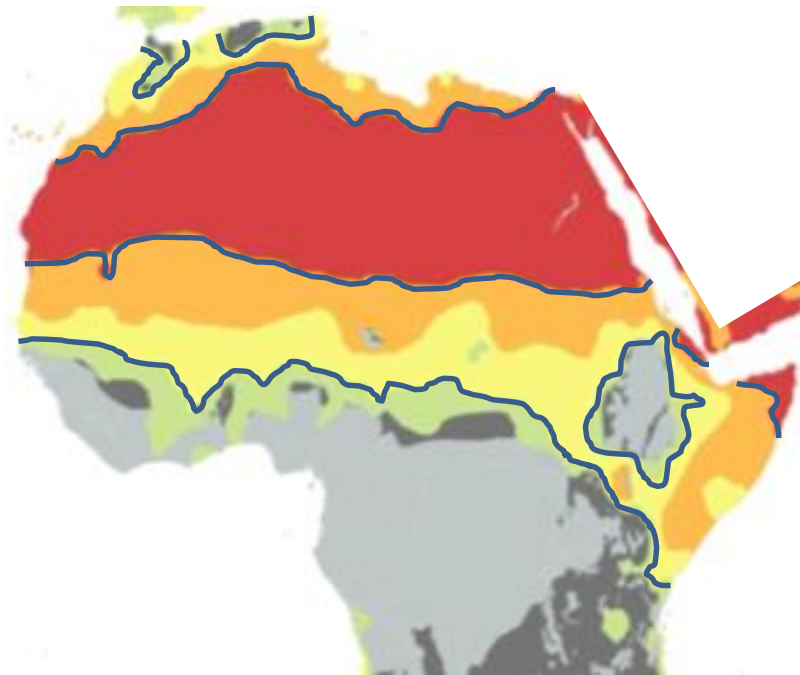
- Hyperarid
- Arid
- Semiarid

($P/PET < 0.05$)

($P/PET = 0.05 - 0.20$)

($P/PET = 0.20 - 0.50$)

Where is the Wall?



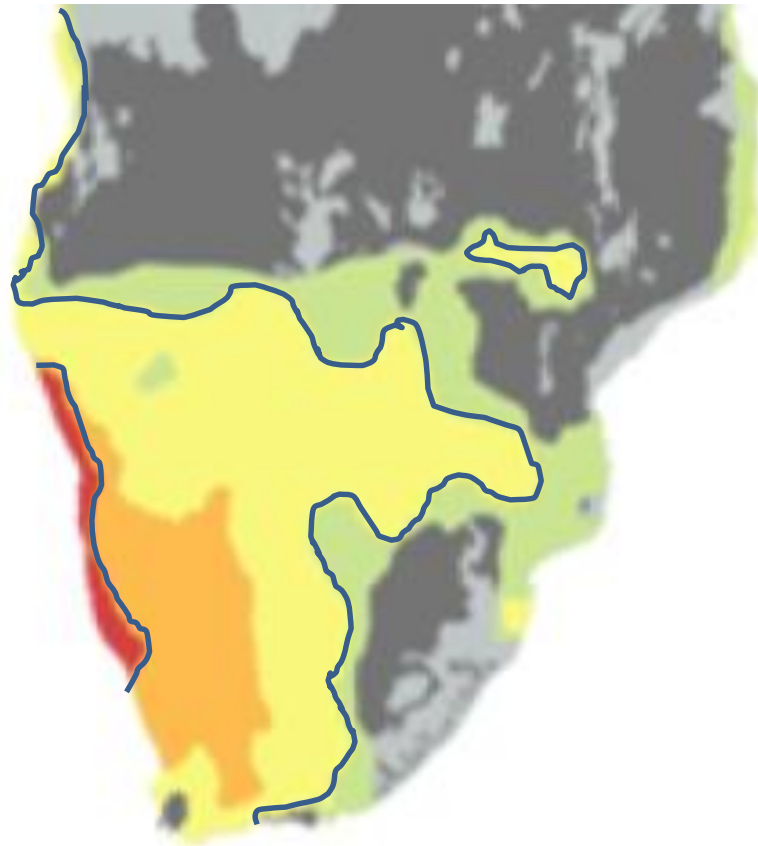
Aridity zones *

- Hyperarid (P/PET < 0.05)
- Arid (P/PET = 0.05 - 0.20)
- Semiarid (P/PET = 0.20 - 0.50)
- Dry subhumid (P/PET = 0.5 - 0.65)
- presumed drylands

How big is the Wall?

| Zone | Million ha |
|--------------|------------|
| Arid | 442 |
| Semiarid | 336 |
| Total | 778 |

Where is the Wall?



Aridity zones *

- Hyperarid (P/PET < 0.05)
- Arid (P/PET = 0.05 - 0.20)
- Semiarid (P/PET = 0.20 - 0.50)
- Dry subhumid (P/PET = 0.5 - 0.65)
- presumed drylands

How big is the Wall?

| Zone | Million ha |
|--------------|------------|
| Arid | 57 |
| Semiarid | 171 |
| Total | 228 |

GGW North in numbers

How big is the area?

General GGW extent

- 700 million ha

Intervention area (options)

- 5% - 35 million ha
- 10% - 70 million ha
- 20% - 140 million ha

How far have we come?

???

How fast do we need to go?

Target

- 35 mio ha
- 70 mio ha
- 140 mio ha

GGW South in numbers

How big is the area?

General GGW extent

- 200 million ha

Intervention area (options)

- 5% - 10 million ha
- 10% - 20 million ha
- 20% - 40 million ha

How far have we come?

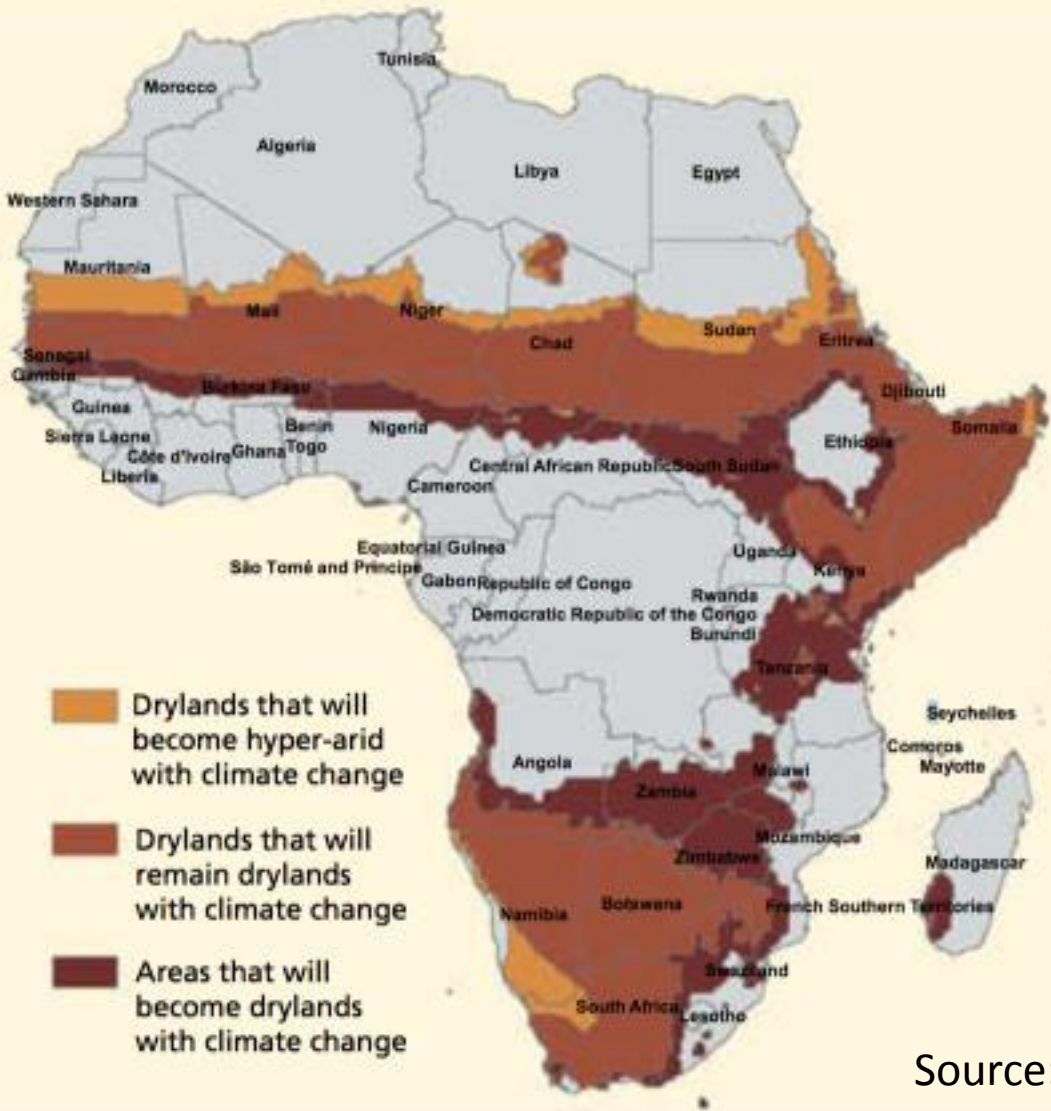
???

How fast do we need to go?

Target

- 10 mio ha
- 20 mio ha
- 40 mio ha

Shift and expansion by 2050 of dryland areas due to climate change



Source: World Bank (2016)

Recommendations

- **Invite countries to set targets**
- **Present commitments at Marrakech**
 - **Targets, or**
 - **Commitment to set a target**

General Area of the GW

| Ecoregion | Area |
|---------------------------------------|-----------------------|
| • Mediterranean dry woodlands, steppe | 29 million ha |
| • North Saharan steppe and woodlands | 167 million ha |
| • South Saharan steppe and woodlands | 110 million ha |
| • Sahel | 305 million ha |
| Total | 611 million ha |

Northern portion

- The **Mediterranean dry woodlands and steppe** is a [Mediterranean forests, woodlands, and scrub ecoregion](#) of [North Africa](#). It occupies interior plateaus and mountain ranges of the [Maghreb](#) region, lying generally between the coastal [Mediterranean woodlands and forests](#) to the north and the [Sahara](#) to the south. It occupies an area of 291,700 square kilometers (**29 million ha**) in [Morocco](#), [Algeria](#), [Tunisia](#).
- The **North Saharan steppe and woodlands** is a [desert](#) ecoregion, in the [Deserts and xeric shrublands biome](#), that forms the northern edge of the Sahara. It extends east and west across Northern Africa, south of the [Mediterranean dry woodlands and steppe](#) ecoregion of the [Maghreb](#) and [Cyrenaica](#), which is part of the [Mediterranean forests, woodlands, and scrub](#) biome. It covers 1,675,300 square kilometers (**167 million ha**) in [Algeria](#), [Egypt](#), [Libya](#), [Mauritania](#), [Morocco](#), [Tunisia](#), and [Western Sahara](#).

Southern portion

- The **South Saharan steppe and woodlands** is a [deserts and xeric shrublands ecoregion](#) of northern [Africa](#). The ecoregion covers 1,101,700 square kilometers (**110 million ha**) in [Algeria](#), [Chad](#), [Mali](#), [Mauritania](#), and [Sudan](#). It extends east and west across the continent in a band, forming a transition between the hyper-arid [Sahara Desert](#) to the north and the [Sahel](#) grasslands and savannas to the south.
- The **Sahel** spans 5,400 km (3,360 mi) from the Atlantic Ocean in the west to the Red Sea in the east, in a belt that varies from several hundred to a thousand kilometers (620 miles) in width, covering an area of 3,053,200 square kilometers (**305 million ha**)