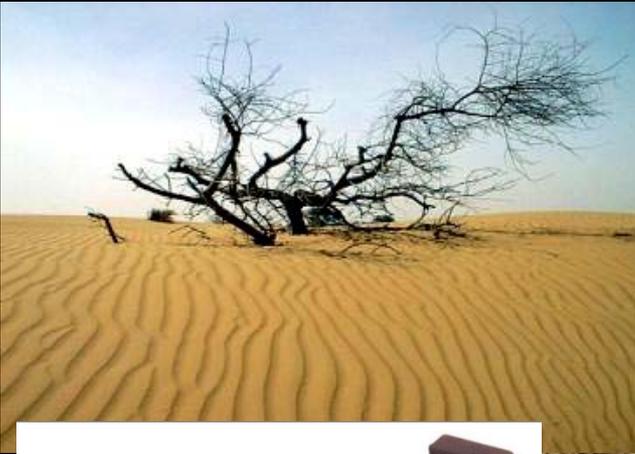
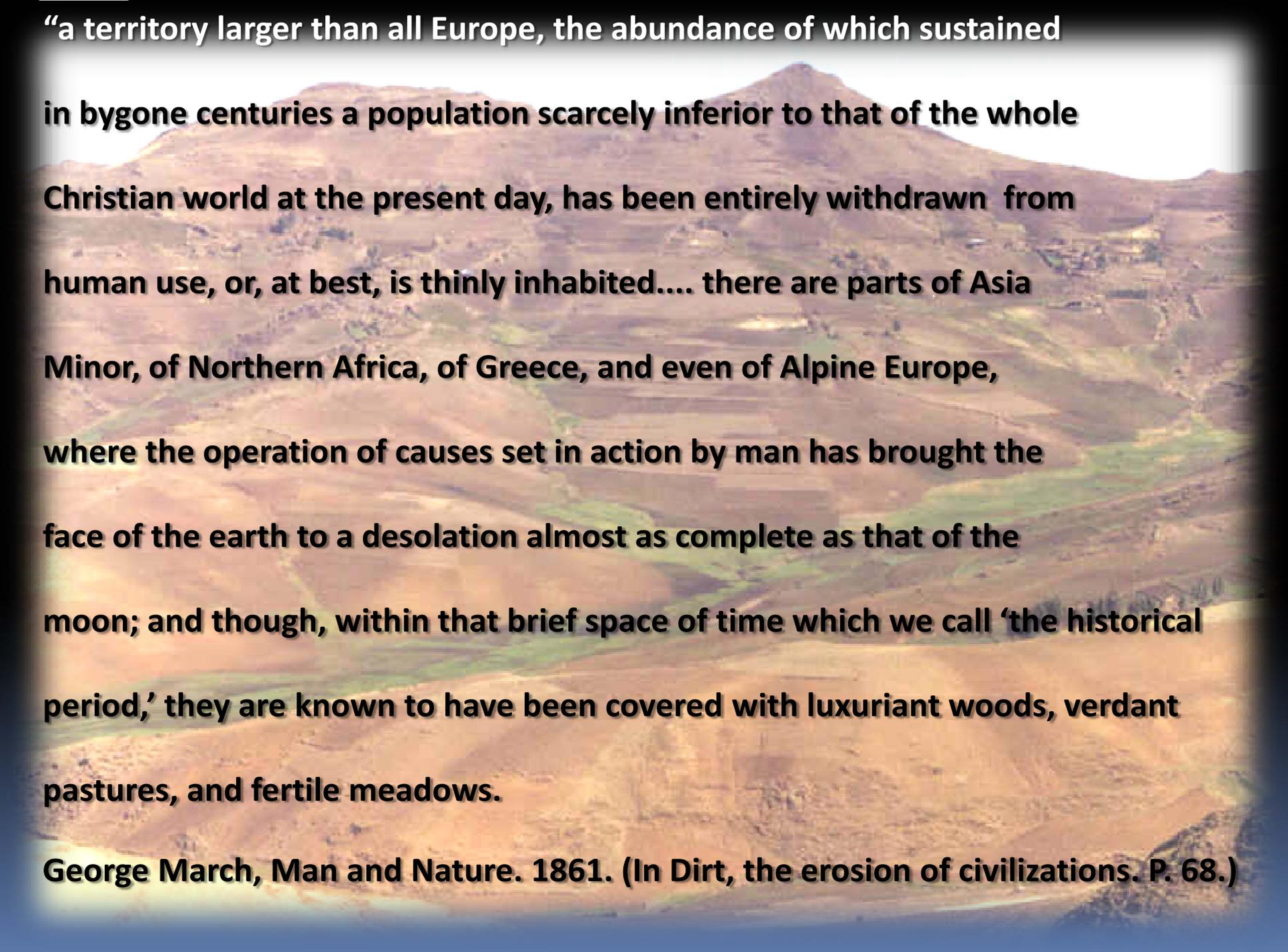


The Domino Effect.

The birth and spread of an International Re-greening movement.



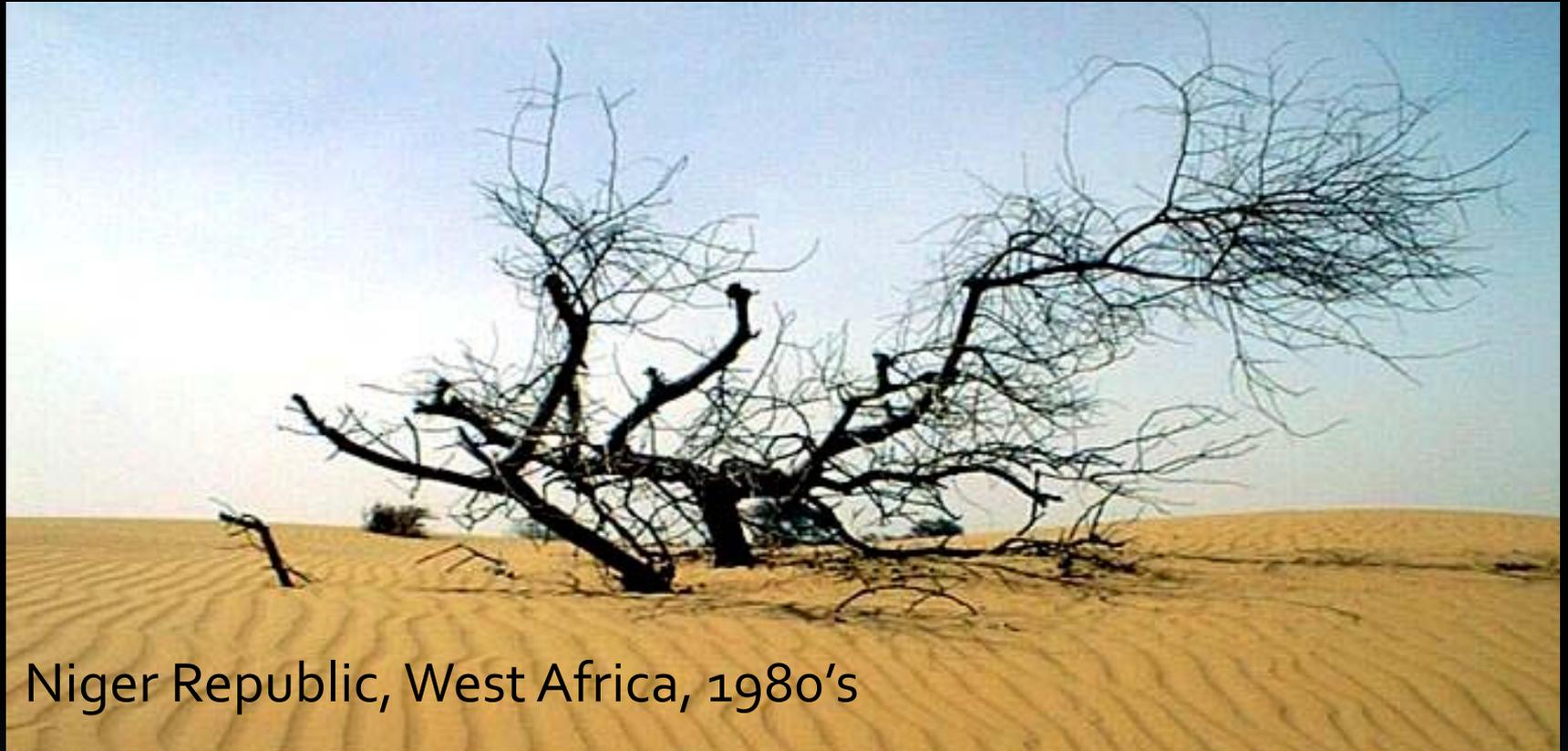
Tony Rinaudo
R & D Advisor,
Natural Resources,
World Vision Australia.



“a territory larger than all Europe, the abundance of which sustained in bygone centuries a population scarcely inferior to that of the whole Christian world at the present day, has been entirely withdrawn from human use, or, at best, is thinly inhabited.... there are parts of Asia Minor, of Northern Africa, of Greece, and even of Alpine Europe, where the operation of causes set in action by man has brought the face of the earth to a desolation almost as complete as that of the moon; and though, within that brief space of time which we call ‘the historical period,’ they are known to have been covered with luxuriant woods, verdant pastures, and fertile meadows.

George March, Man and Nature. 1861. (In Dirt, the erosion of civilizations. P. 68.)



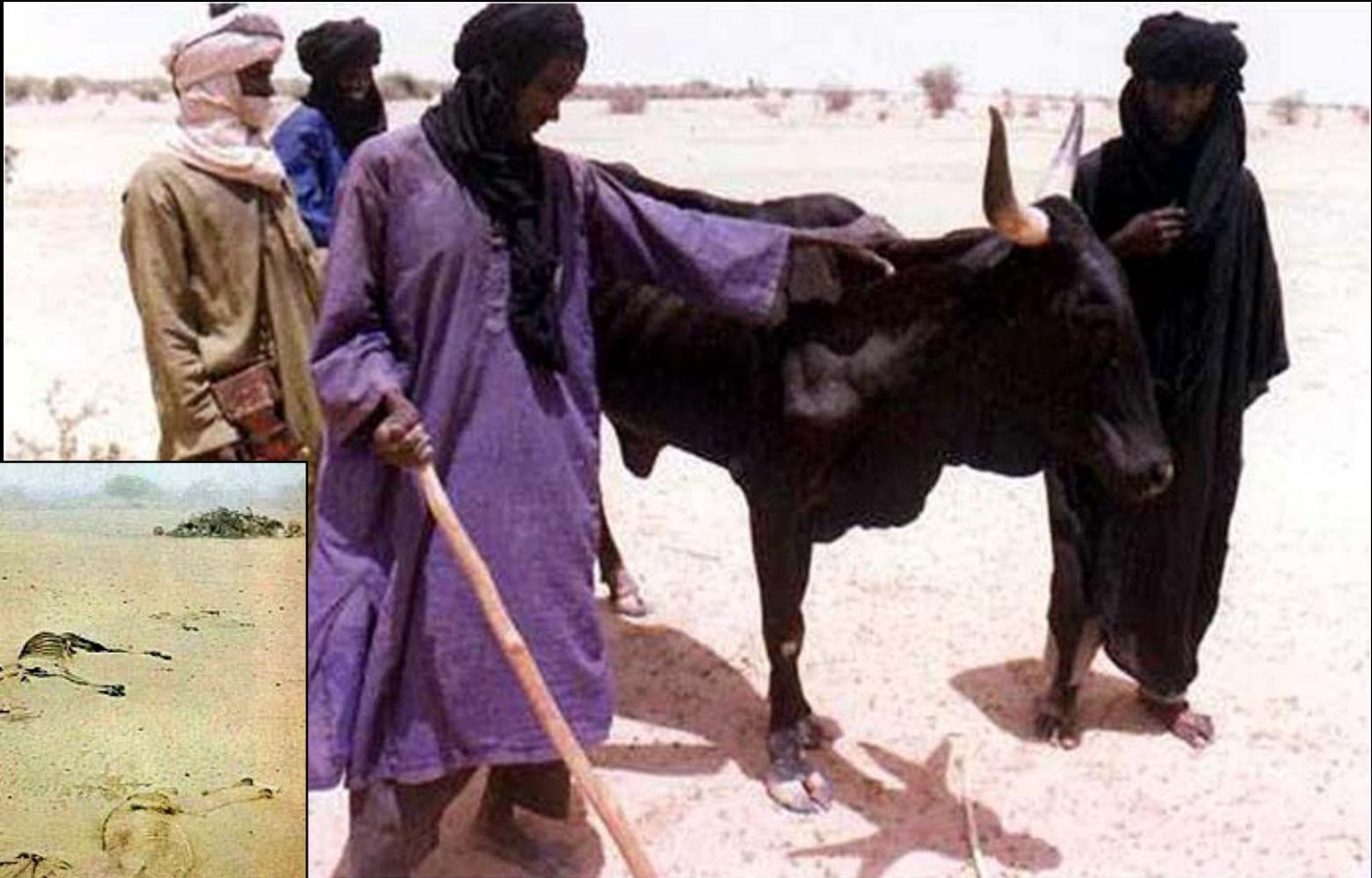


Niger Republic, West Africa, 1980's









Niger Republic, 1984 famine





Futile tree planting efforts



The underground forest revealed.





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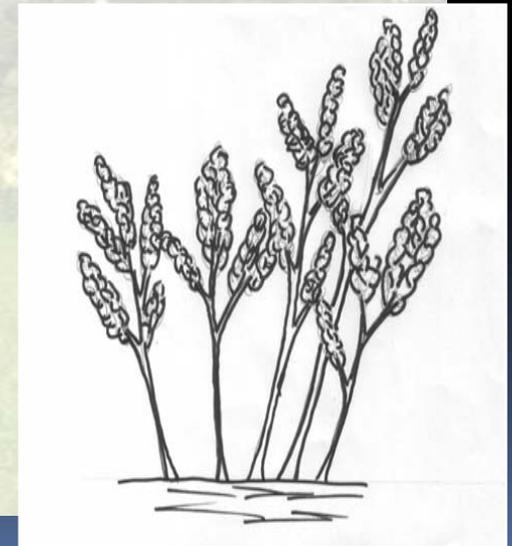
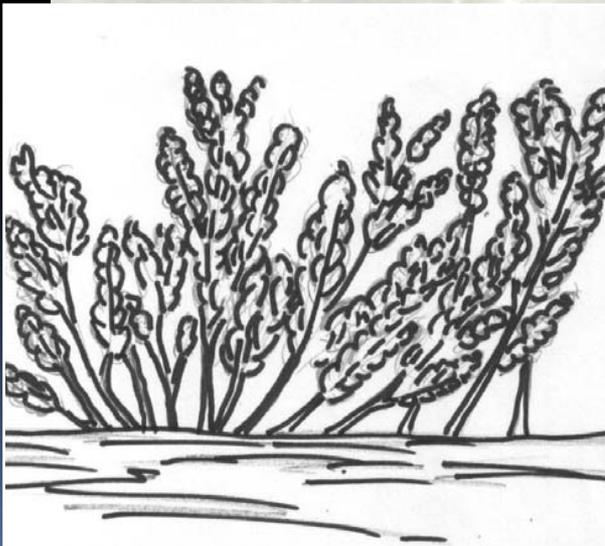


FMNR: Systematic regeneration of trees from living tree stumps and seedlings

Select desired tree stumps and for each stump, choose number of (tallest and straightest stems to leave

Remove unwanted stems and side branches

Cull emerging new stems and **prune** side branches from time to time









Regeneration of trees
from existing stumps

1st
year

2 to 4 years regrowth



From small beginnings Wood Markets 'sprung up'









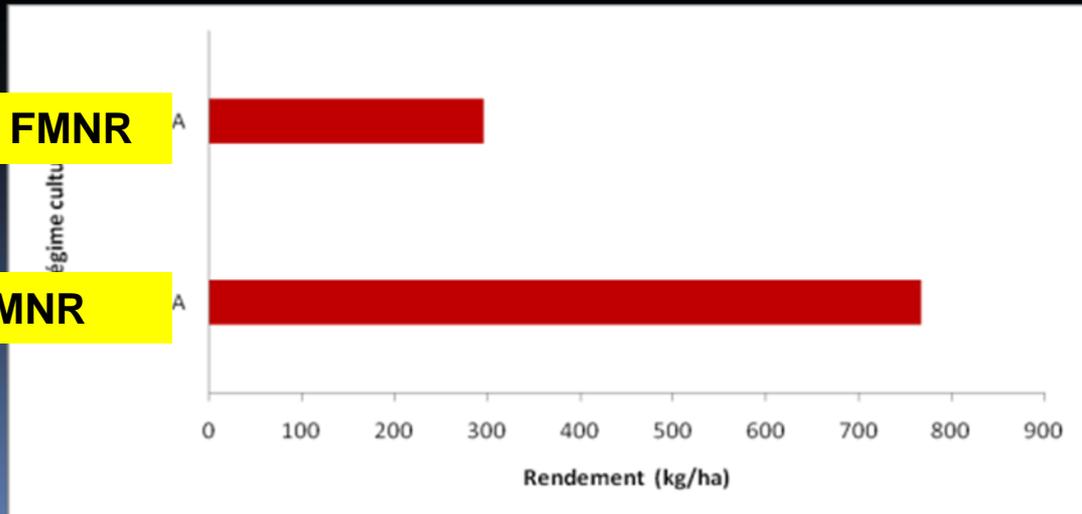
Greater crop resilience to drought.

Increased availability of fodder.



Crop yield: No FMNR

Crop yield: with FMNR



Crop yields doubled

Crop yields and livestock production increased



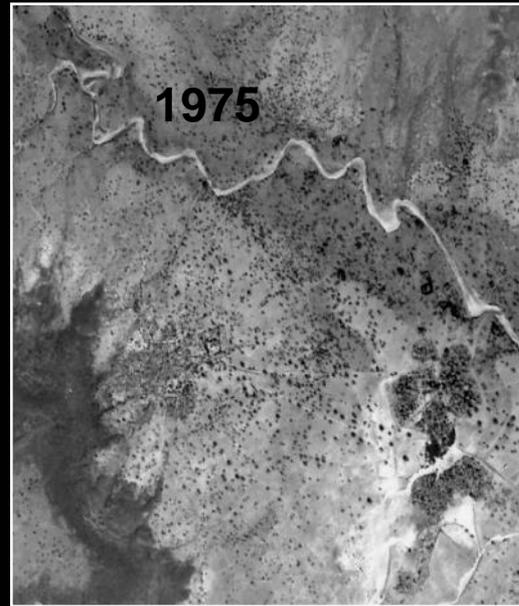


Biodiversity returned





Galma, Niger Republic in 1975 and 2003



5 million hectares in a 20 year period =
250,000 ha/yr

= only country in Africa experiencing net afforestation.

Occurring almost totally with no government or NGO assistance.

Impact of FMNR

Impact on climate change mitigation:

Over the past 10 years the utilization of FMNR in Niger has resulted in the sequestration of ~ 100-200 million tonnes of CO₂-e.

Impact on climate change adaptation:

- **Income** ~ \$200/year additional income/HH =
- Maradi district alone ~US \$17 – 23 million p.a.
- **Food** - additional 500,000 tons of grain/year = requirements of 2.5 million people

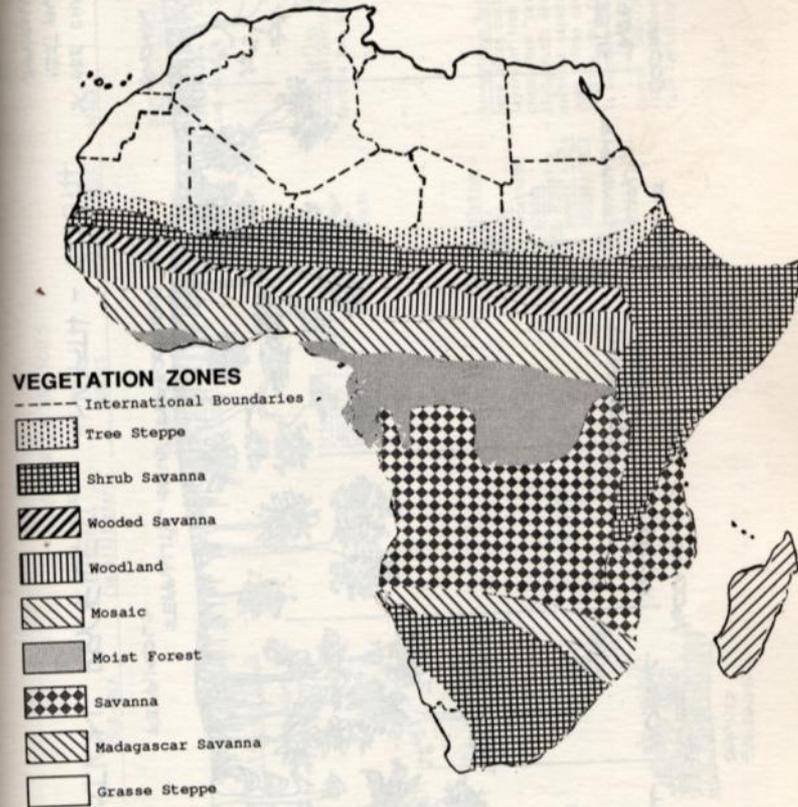
Impact on Resilience/Adaptation

“Despite severe famine, farmers practicing FMNR did not need food assistance [...] (they) were able to meet their own needs through selling firewood and non timber forest products”

Source: WV report 2004



MAP 4
VEGETATION ZONES



Where is the
practice of
FMNR
possible?





“We are too much happy.”



Hailu Tefera with four year old FMNR trees.

S-W Ethiopia

18 Months growth









East Sumba, Indonesia.











- 1. Stop burning**
- 2. Control grazing animals**
- 3. Prune trees**

Where there are no - tree stumps.



1984

1990



2004





Mongolia







**Myanmar – Hill
Zone**







Myanmar Dry Zone



Look for champions /
positive deviance







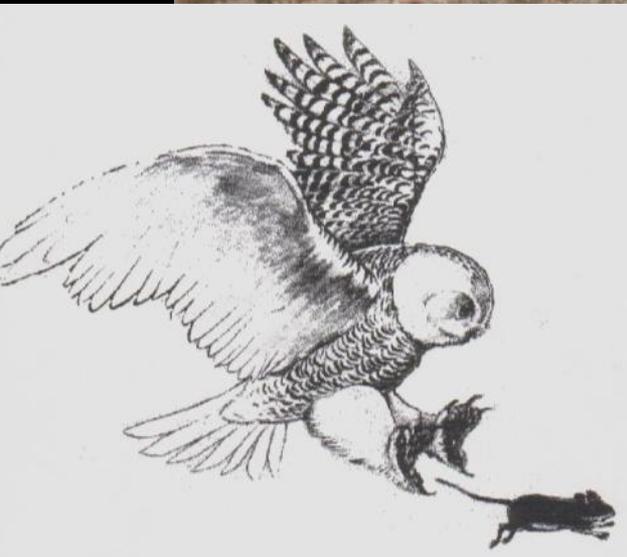
2005: **Leaf hopper** infestations were particularly serious – losses in rice production of ~ 2.8 million tons.

China alone loses ~ a million tons of paddy annually.

Cambodia – unbroken rice fields









This gift of FMNR is from the Almighty God and therefore anywhere you visit you bring life and joy. Chief of Yameriga (Yamdaan Zimbil Longmoare, Northern Ghana)











It used to be a four hour walk just to collect wood. Today a five minute stroll to our own forest is all that is required.

Female lead farmer who went to Niger from Senegal.

*Thousands of projects have come through here but this (FMNR) there is no comparison, if we are the judges. We have nothing but our environment. Since we started working with FMNR we have already started seeing the benefits that we have not seen with any other project. **The type of benefits we see pushes me sometimes to leave my home and just walk through my field to appreciate the trees and environment.** When things get to where they need to be, we will see more yields and the path will be clear. (provided by Carolyn Kabore).*

What is needed to create an FMNR Movement?

Facilitation

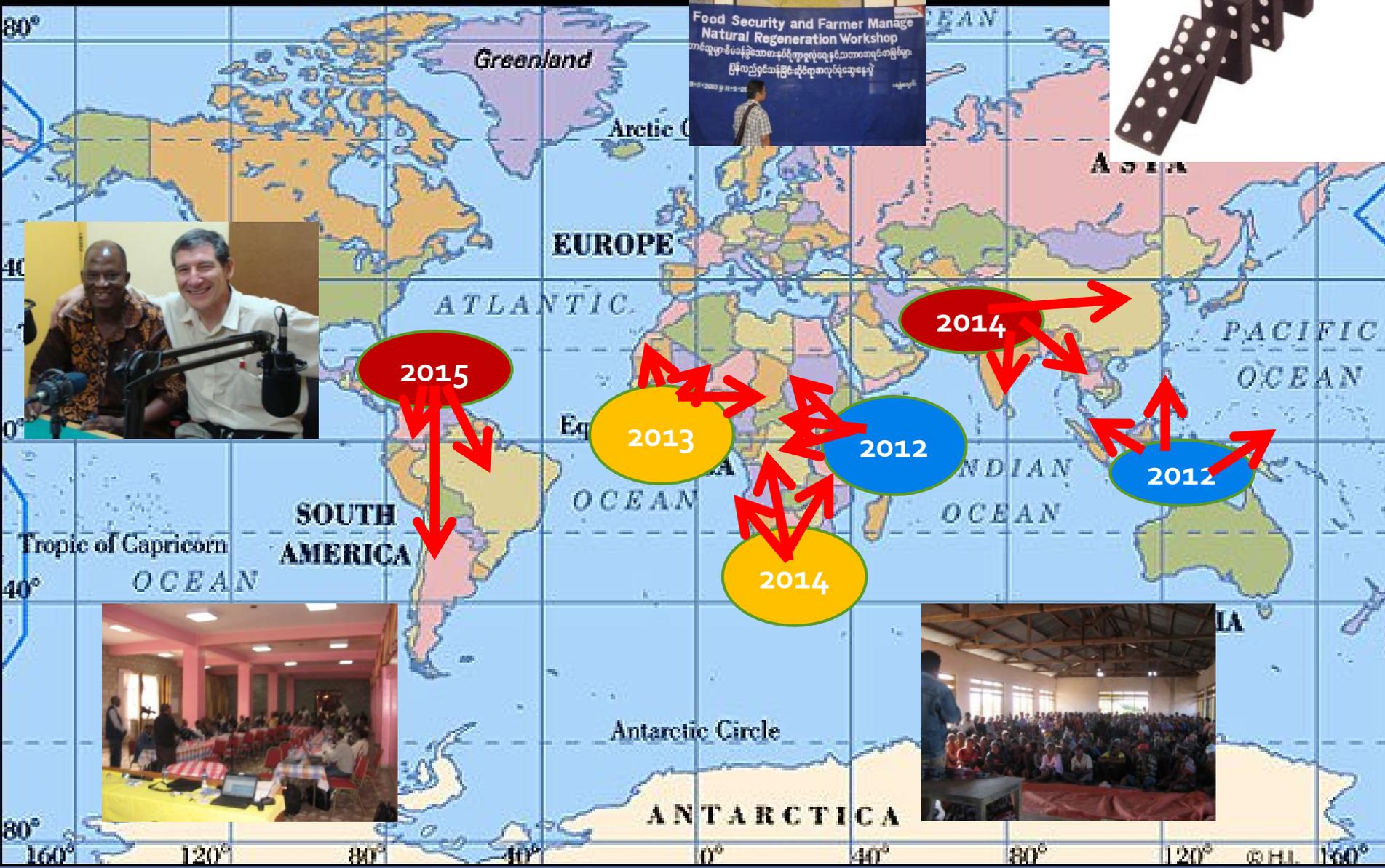
- ✓ Awareness creation
- ✓ Training
- ✓ Fire prevention and control plan
- ✓ Manage grazing animals

Create an enabling environment:

- ✓ **F**reedom to utilize trees
- ✓ **M**ake marketing of wood, charcoal & NTFPs legal
- ✓ **N**ew all-stakeholder FMNR by-laws
- ✓ **R**emodel cooperatives or farmers groups to manage FMNR



Mr. Tony's plan for world domination







A bright future is possible.
What will you do in your capacity to create an enabling environment for this to become reality?



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