Accelerating restoration in the Great Green Wall – lessons from large scale regreening in Niger

With rapid demographic growth and rural poverty, accelerating the rate of restoration in GGW countries is more urgent than ever. But this requires a shift in focus – a reset indeed – from tree planting to farmer managed natural regeneration, and from project led to farmer-led regreening. Governments need to ensure and enforce enabling agricultural policies and forestry legislation that confirm user rights to the trees farmers nurture.

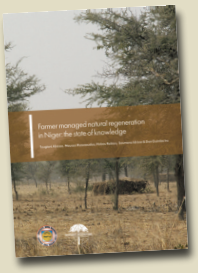
A recent report '**Farmer managed natural regeneration in Niger: the state of knowledge**' written by five national researchers, provides the first comprehensive review of what is possibly the largest positive environmental transformation in Africa. And in one of the world's poorest countries.

Since the mid-1980s, farmers in Niger have recreated more productive and drought-resilient farming systems over an area of six million hectares, by managing the regrowth of at least 250 million trees

This has been achieved mainly in the densely populated parts of Niger not by planting trees, but by farmers protecting and managing woody species that regenerate spontaneously on their land. They select those that improve soil fertility and produce livestock fodder. Projects helped, but it spread as people saw the multiple impacts themselves and started on their own land. Tree cover and stored carbon has been increased without external incentives such as cash or food-for-work. Restoration is happening at scale due to decisions by hundreds of thousands of individual farmers.

FMNR is proven as a low cost, restorative land use management technique with considerable potential for scaling. This should encourage practitioners and policy makers in Africa's drylands to invest in its promotion, and build on existing agroforestry systems and emerging successes. It also requires the development and implementation of scaling strategies, such as the 'six steps to success' (*Scaling up success*, WRI, 2015).

FMNR must form the backbone of landscape restoration initiatives to achieve the ambitious targets of the Great Green Wall and AFR100



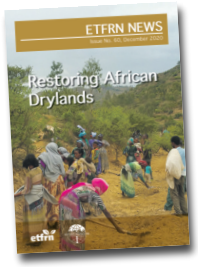
Farmer managed natural regeneration in Niger: the state of knowledge

A new report (also in French) shows the scale and dynamics of FMNR and it quantifies multiple impacts.

Abasse T, Massaoudou M, Rabiou H, Idrissa S, Dan Guimbo I, 2023.
'Farmer managed natural regeneration in Niger: the state of knowledge.'
Tropenbos International, Ede, the Netherlands. 58pp

- ***Crop yields increased*** by 30–350 kg/ha depending on the tree, size and density. An average increase of 100 kg/ha on 6 million ha gives an extra 600,000 tonnes of grain, which feeds 3 million people.
- ***Fodder availability increased*** with more leaves and pods for fodder on which livestock survive for half the year.
- ***Household energy improved*** as all firewood is now produced on farmland by women pruning the trees.
- ***Rural poverty reduced*** by 6–9% for every 10% increase in agricultural production, and research showed that even the poorest farmers are able to earn income by selling firewood.
- ***Resilience to drought rebuilt*** as even in drought years, farmers still produce a harvest, and can supplement income by cutting some trees to sell.
- ***Established tree cover is sustained*** as seen in satellite data for 2005 and 2014 that show on-farm tree densities increasing on 23% of farmland, and decreasing slightly only on 2%.

Given the multiple impacts, it is no surprise that studies indicate that it is economically rational for farmers to invest in FMNR. Costs are modest (no equipment and little labour), benefits are substantial, and it helps farmers adapt to climate change, while sequestering millions of tonnes of carbon for the global good.



See *Restoring African Drylands* – 2020, 25 articles, 280pp (also in French)
See associated restoration briefs (also in French)
Growing the Great Green Wall: speedily, smartly and sustainably
Catalyzing grassroots regreening through concerted communication
The three principle practices for scaling dryland restoration
Ten investment opportunities, for greener and more productive landscapes in Niger
Dealing with a dryland dilemma – where there are too many trees...

Comments and requests for further information much appreciated.
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