

# Can communication help speed up the greening of Africa's drylands?

Keynote

speech summary

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## Abstract

In Africa's drylands food security is facing serious challenges. With the current population growth in, for example Niger, the population is estimated to have doubled in the last 20 years. Unsustainable land management practices, the effects of climate change and a growing population pressure are causing soil degradation at an unprecedented scale. National governments of African countries have set ambitious goals to restore degraded land. However, given current rates of demographic growth these targets are not ambitious enough. The pace of re-greening needs to be speeded up, as soon as possible. One very promising initiative is re-greening of Africa's drylands. Since the mid 1980s a growing number of innovative farmers and local communities in Mali, Burkina Faso, Niger have started to practice simple, low-cost farmer-managed natural regeneration on their field. Farmers in densely-populated parts of Niger have done so at scale (5 million ha), but much more needs to be done. A communication strategy is extremely important, to speed up the scale of re-greening successes and reverse the trends of soil degradation and desertification.

## Summary

To respond to the serious problems, confronting rural populations in the Sahel, reforestation, i.e. planting trees, often proposed by NGOs and national governments, is often put forward as the solution to fight desertification. However, tree planting is expensive, but survival rates of planted trees are often low. In the current situation, deforestation is expanding faster than reforestation in all Sahel countries.

Luckily there are also positive trends in the battle against soil degradation. An example are African re-greening initiatives, driven by farmers and communities in for example Mali, Burkina Faso, and Niger, in which farmers change the way they use their lands and start to increase the numbers of trees on their fields. One of the (simple and inexpensive) techniques to bring about re-greening is the already mentioned *farmer managed natural regeneration (FMNR)*. This consists of protecting and managing woody species, which emerge spontaneously on cultivated land. FMNR as a local farmer innovation is now spreading to various African countries. Re-greening has already led to a

considerable increase in food production, because on-farm trees reduce wind speed and help maintain or improve soil organic matter. FMNR is low cost for farmers (mostly subsistence farmers who live from only one or two dollars per day). It does require investments of labor, but not the procurement of external inputs on the market

Apart from helping to reverse soil degradation, re-greening has many other positive effects. It leads, for example, to improved soil fertility, but it also increases the water holding capacity of soils.

By pruning the trees, the branches can be used as a source of energy in the kitchen and the leaves can be used as fodder or as fertilizer. The first benefits of re-greening can already be perceived by local farmers after 1-2 years, which is quicker than previously assumed by recent studies. The practice of farmer managed natural regeneration and its large scale success have remained under the radar for a long time. Apparently researchers and practitioners do not always monitor or evaluate the innovative work of poor rural farmers, when this is not part of a (donor-funded) development project.

A communication strategy is extremely important to accelerate the spread knowledge about re-greening techniques and its multiple impacts among millions of smallholder farmers. Communication can be done, for example by organizing farmer-to-farmer visits and letting farmers discuss and share information face to face. That is very impactful, but expensive, and far too slow. Mass media such as rural radio can be of great help. Farmers' success stories about re-greening can be shared on the radio. Local testimonials are far more trustful and therefore more convincing, than the voice of any foreign expert.

Various communication initiatives can be linked to achieve almost national coverage. Context-aware ICT systems using what is already there (simple mobile phones, radio) can be deployed for maximum rural reach and scale of information, communication. Mass media can be used to communicate and increase the scale of re-greening successes. Communication is the key to scaling re-greening and achieving ambitious restoration targets.