Restoration of degraded land for food security and poverty reduction in East Africa and the Sahel: taking successes in land restoration to scale

Project Goal:
To reduce food insecurity and improve livelihoods of poor people living in African drylands by restoring degraded land, and returning it to effective and sustainable tree, crop and livestock production, thereby increasing land profitability and landscape and livelihood resilience.

Target Groups:
The ultimate target groups are small-scale farmers and agro-pastoralists in Africa’s drylands who are vulnerable to environmental and economic shocks as a result of land degradation and desertification. Testing of options during the life of the project will involve around 45,000 households.

Project Outputs:

Output 1: Ingredients of success and gaps in knowledge of land restoration techniques and approaches identified.

Output 2: Tools for targeting up-scaling land restoration activities, e.g., to select appropriate land restoration options and match options to sites and farmer circumstances.

Output 3: Enhanced understanding about what land restoration approaches work, by how much, where and for whom.

Output 4: Tools for targeting out-scaling land restoration activities and options.

Output 5: Nested communities of practice with refined tools, methods and guidelines for taking land restoration to scale.

Project Activities:
* Critical review of land restoration approaches: analysis of past success and failures from literature and experience, as well as the acquisition of local knowledge.
* Participatory identification of improved management technologies using options by context for for up-scaling.
* Action research (field trialling of restoration approaches) and monitoring farmer adoption.
* Formation of communities of practice to implement action research in a co-learning cycle.
* Participatory planning for out-scaling.
* Synthesis of project experience and consolidating impact.

Quick facts
Recipient: World Agroforestry Centre (ICRAF)
Benefiting Countries: Kenya, Ethiopia, Niger, Mali, Tanzania
Total Programme Costs:
IFAD Grant: USD 1.5 Million
EU Grant: Euro 3.9 Million
Timeline: March 2015-March 2020
CGIAR Partners:
International Center for Agricultural Research in Dry Areas (ICARDA)
International Livestock Research Institute (ILRI)
International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)
Local Partners:
Niger: REGIS-ER, REFORME, INRAN, University of Maradi, University of Niamey, AGRYMET, YANA-YI
Mali: SahelEco, IER, DryDev
Kenya: World Vision, ADRA, CARITAS, County Gov’t, DryDev, South Rift Assoc of Land Owners
Ethiopia: REST, World Vision, DryDev, Amhara Bureau of Agriculture, CARE, OSHO

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Collaboration with IFAD Country Loan Programmes:

Kenya  
Kenya Cereal Enhancement Programme - Climate Resilient Agricultural Livelihoods Window (KCEP-CRAL)

Ethiopia  
Community-based Integrated Natural Resources Management Project (CBINReMP)

Mali  
Projet d’Adaptation de la Petite Agriculture Paysanne aux Changements Climatiques au Mali/Adaptation for Smallholder Agriculture Programme (PAPAM/ASAP)

Niger  
Programme de Développement de l’agriculture familiale (ProDAF)

Project Website:  

Project Brochure on Land Restoration Options:  

Over 6,000 farming households are engaging in various land restoration options in Niger, Mali, Ethiopia & Kenya.

Monitoring of land restoration impacts on livelihoods, food security, gender equity are on-going.

In Niger, millet gain yields increased 2.5 times with intercropping, manure and microdosing of NPK within Farmer Managed Natural Regeneration (FMNR) fields (see photo below)

In Kenya, maize, cow pea, common beans and green gram yields increased up to two to three times when planted in planting basins with manure compared to farmer practice.

Activities such as digging planting basins can increase women’s autonomy to carry out farming activities that usually require male assistance, however they take time and labor.

In Kenya, over 15,000 trees were planted in farmers’ fields and are successfully growing. Tree seedlings planted in 2016 are already yielding fruits and medicine.

Planting fruit trees brings benefits for both men and women farmers, without significant issues relating to labor or timing, however water availability is a constraining factor.

In Ethiopia, over 2000 trees are successfully growing and farmers are recognizing their timber and nutritional benefits.

In Ethiopia and Kenya, rangeland health, including increased ground cover has increased by 50% with direct beneficiaries of 3,948 in Amhara; 2,619 in Borana; 2,700 in Kajiado; 2,347 in Wajir.

In Mali, over 1600 households planted 16,000 trees in 2017 and 6,000 in 2018. Over 300 households are implementing soil water conservation measures to restore 1050 ha.

In Mali, Farmer Managed Natural Regeneration (FMNR), enriched through in situ grafting of indigenous fruit trees is currently on going with over 238 farmers in 24 villages.

Nested Communities of Practice are active in each country and are a key co-learning platform across farming communities, government agencies, NGOs and researchers.

Abdrahamane Hayo of Niger showing his millet harvest with manure/FMNR.

Mulu Tufa proud of her planted papaya in Ethiopia.

Community-based rangeland management in Kenya and Ethiopia. Photo showing the planned comparison on short-duration resting. Photo above shows the two-month resting effects in Kenya.