Eastern Chad: rangeland restoration

It’s not as hard as you think

The Problem:

- Sudden influx of IDPs into refugee zone
- Conflict and rain failure combined to exacerbate traditional tensions between pastoralists and agro-pastoralists, especially on riverbanks
- 3 distinct peoples with separate needs and agendas
- Profound dependence on animal systems for survival, with loss of most animals other than donkeys
- Massive, rapid deforestation, erosion and pasture failure

Community identified need

- Fuel/construction timber
- Food
- Cash flow
- Water
- Grazing
- Flock restocking

Government Priority: money

- Resisted approving the implementation of activities not directly providing money and drugs to support local vet services

- OXFAM, ICRC and Veterinaires Sans Frontieres gave out free drugs and livestock in the initial period, to facilitate other interventions, and maintained free vet services ONLY in Refugee camps, leaving IDP and local populations out

Forestry, Pasture and Erosion

- 3 pronged approach:
  - Met with local, refugee and IDP communities to identify most severely damaged areas and set priorities
  - Met with transhumant groups to understand their corridors, water resources and priorities
  - Joined with local government and other (including local) NGOs in the area to outline who does what with whom, and how

Transhumance corridor improvement

- Islamic Relief tasked to GPS, mark and map traditional transhumance corridors working with elders from all communities and Local Government
- IR to build water points for transhumance corridors every 15 km
- IR and ICRC to create vaccination park and slaughter facilities close to market centers
- Government to gazette corridors against farming and wood cutting

World Concern

- Focus on animal nutrition
  - Pasture designation and regeneration
  - Natural forest restoration
  - Erosion control
  - Donkey health improvement through CAHW facilitated to begin small scale dispensing and fodder/salt lick creation
  - No non-native varieties

Nomad Botanical Knowledge

- Swiss Aid and a local partner worked with the Goran to compile a book of botanical fodder species across the entire transhumance
- “Conaissances des Gorans” became an important resource for selecting species for relevant regeneration
- Nomads were already involved in collecting seed during migration, and spreading it in degraded areas.
- They became trainers to local sedentary communities and provided some seed for locally lost species
- Other seed was sourced from farmers in southern and central Chad based on nomad recommendation

Cash for Work

- Large-scale interventions resulted in thousands being trained in practical pasture restoration and salt fodder making
- Workers drawn from all three sedentary communities
- Increased cash flow and empowered households through market fair systems that led to commercial markets being established or resumed in several outlying communities
- Reduced domestic violence and inter-community conflict over resources

Major tree species

- Acacia senegalensis, nilotica
- Faidherbia Albeda
- Zizyphus Mauritanius
- Balanites Aegyptus
- Borassus

Major grass species

- Chloris Barbata
- Panicum turgidum
- Fonio
- Anthropogon
- Desert bamboo

Outcomes

- 10,000 individuals trained in rock lines, contours and natural forest
- 4000 individuals trained in reseeding and fodder making
- Advocacy for nomads taken up by government officials leading to conventions between farm and pastoralist groups
- Farmers using contour techniques and station planting, berms and rock lines in their own

Protection of naturally occurring seedlings and added plants. Demi lunes and native trees

Acacia seedling with drip irrigation, year 1

Farmer managed area of the forestry site, year 2

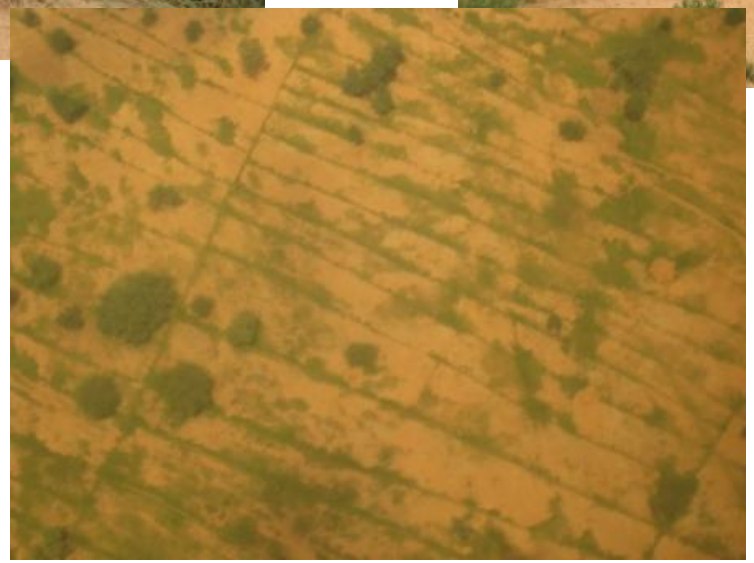
Acacia improved degraded land significantly, allowing farmers to plant between the trees with better production results

Improved yields

Rocklines on degraded pasturage at the foot of hills

Simple is effective and sustainable!

Self seeding by local grasses along rocklines



Combined self- & re-seeded area

Silage from harvested native grasses

Simple storage systems

Secondary effect: erosion control and naturally resulting sand deposition filled in ravines on roads