



THE PROBLEM

Ecological crises influence mixed-migration, and migrants in turn alter landscapes. This year alone, heightened vulnerability and exposure to sudden-onset hazards resulted in 17.2 million new disaster displacements in 144 countries and territories.



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LAND RESTORATION (DISPLACEMENT CAMP TO VILLAGES)

DRC is training country teams across the region to change how they see resources around them, and how they engage with local communities to address climate extremes.

Landscape Level: DRC is training technical teams to do large scale water harvesting by structuring landscapes with contour-based earthworks and stoneworks to harvest stormwater and nutrient run off. This is done through largescale swales and earthworks using heavy equipment (i.e., excavators) where possible or through small scale, hand-dug earthworks and stoneworks.

Ecological Design for Rainwater Harvesting in Infrastructure:

Protecting economic infrastructure and investments by harvesting and mitigating wild energies to support biodiversity regeneration.

Northern Uganda Resilience Initiative about to kick-off (NURI): (DANIDA) Roads as Rainwater Harvesting Structures that direct water in to agriculture production or biodiversity regeneration.

AGROFORESTRY (DISPLACEMENT CAMP TO VILLAGES)

DRC is working with refugees, IDPs and host communities to support agro-biodiversity including forestry to meet needs of Food, Fodder, Fiber, Fuel and Fertility, blending indigenous species with locally responsible market-oriented tree crops. Efforts have been focused on:

- **Thinking at the watershed level:** Focus on governance, hydrology, culture, biodiversity.
- **Farmer Managed Natural Regeneration (FMNR):** Training trees for fast and high-quality growth.
- **Design for West Proofing:** Using trees to mitigate extreme temperatures, winds and evaporation rates.
- **Planting techniques:** Building soil fertility with local materials and water harvesting structures for trees.
- **Urban ecology for livelihoods in camps:**
 1. Reduce Heat Island Effect and public health risks due to extreme heat.
 2. Food forest: Increase biodiversity for food, fodder, fibre, fuel and fertility.
- **Alley Cropping in farms:** Using perennial trees and shrubs, with landscape water harvesting to create micro-climates to hydrate soils and support annual crops.
- **Chop and Drop:** Expediting natural forest behavior to build soil organic carbon in support of perennials and annuals crops.

THINGS TO BUILD ON

- Traditional communities remember a holistic and healthier ecological past and have trust in the process.
- **Partner with science and watersheds:** NGOs need to engage with research organizations, hydrologists, soil microbiologists, foresters, and botanists.
- **Knowledge is the main input:** Regenerating ecosystems does not require huge financial resources; can be done with community mobilization and input of technical support.
- **Impact can be quick and visible:** Large water harvesting swales fill with just a few rains and can quickly demonstrate increased health, size and color of trees.
- Agroecology is the only viable approach for climate action: healing landscapes while creating abundant and diverse crop yields.

THINGS TO OVERCOME

- **NGOs must become scientists:** Agencies are not focussed on interconnectedness required for ecosystem restoration at the watershed level.
- **There is no economy without ecology:** Financiers don't know where to invest because they don't know how to restore landscapes.
- **Human Governance is the biggest challenge:** Behavior change in deforestation and grazing is key –it requires viable alternatives.
- **Protection of seed stocks** for biodiversity should be prioritized.
- **People are planting trees without contour water harvesting:** Trees should all be planted along water harvesting structures. Tree people need to learn more about design.
- Reforestation efforts miss the boat on indigenous species (i.e. Burundi planting Eucalyptus, Grevillea and Pine only).

