

## NIGER

### Reducing malnutrition and land degradation



At least 62% of 2,100 farmers interviewed in 57 villages within four regions in Niger (Maradi, Zinder, Dosso and Tahoua) acknowledge the ecosystem services of trees in cropping systems and the need for adoption of Farmer Managed Natural Regeneration (FMNR) technology for rehabilitating degraded lands.

The [Bio-reclamation of Degraded Lands](#) (BDL) is a system developed by ICRISAT that enhances the conversion of degraded crusted soils into productive lands by combining indigenous or improved water harvesting technologies (micro-catchments, planting pits, half-moon and trenches), the application of animal and plant residues and plantation of high-value nutritious fruit trees – moringa (*Moringa olifera*), the Pomme du Sahel tree (*Ziziphus jujuba*) and annual indigenous nutritious vegetables – e.g. okra (*Abelmoschus esculentus*), roselle (*Hibiscus sabdariffa*) and sicklepod (*Senna obtusifolia*).

- **10,770 farmers in 170 villages** were reached over five years in partnership with Catholic Relief Services through the Development Food Aid Program (DFAP);
- **141 ha of degraded land was rehabilitated;**
- **US\$ 500-800 potential gain per woman** from a 0.02 ha rehabilitated plot. The gain includes **food diversification** through the use of leafy vegetables.

Vincent B. Bado and A. Bationo (2018). [Integrated Management of Soil Fertility and Land Resources in Sub-Saharan Africa: Involving Local Communities](#). *Advances in Agronomy*, Volume 150: 1-33.  
<https://doi.org/10.1016/bs.agron.2018.02.001>

### **Promising cultivars of pearl millet**

- Two hybrids, ICMH 177111 and ICMH 157222, yield advantage of 35% over improved varieties were developed and ready for release in WCA.
- More than 5,000 demonstrations were conducted with improved, newly-released millet varieties and pipeline hybrids.

Accessions distributed to NARS scientists, farmers organizations and agro-dealers in WCA countries:

- Pearl millet: 263 accessions
- Groundnut: 121 accessions
- Pigeonpea: 63
- Sorghum: 19
- Total: 466 accessions distributed for utilization in crops improvement and production increase