Plant Genetic Resources Research Institute, Ghana

Fig.2: Members of the Bambara Germplasm User Group at Naransaag in the Upper East Region of Ghana weeding Bambara trial plots established with accessions from the Ghana Genebank

Genebank at a Glance

Full name	Plant Genetic Resources Research Institute, Council for Scientific and Industrial Research (CSIR)
Acronym	CSIR-PGRRI
Country	Ghana
Year established	1964
Conservation methods and facilities	Seed, *in vitro*, field collection
Number of staff	125
Total number of accessions	12,150
Number of accessions distributed annually	1,000

Fig. 1: Plant regeneration from embryo explants of the West Africa tall variety of coconut (***Cocos nucifera***) at the in vitro laboratory of the Ghana Genebank

Recent Highlights

- As part of The Seeds for Resilience project, the genebank is involved in agromorphological characterization and regeneration of cowpea, eggplant, maize and rice as well as virus indexing and in vitro back-up of its cassava collection.

- Participatory varietal evaluation and selection are being conducted with farmers and researchers in three agro-ecological zones of Ghana. Through facilitated engagements, farmers in the Ashanti, Northern, and Upper East regions have identified five promising accessions each of indigenous leafy vegetables, Hibiscus, and Bambara groundnut with traits suited to their local farming, domestic use, and market contexts (Fig. 2).

- Other activities include the development of micro- and macro-propagation protocols for its tree crop (Fig. 1), medicinal plant, and spice collection. Also, the genebank evaluates germplasm for end-user traits and against biotic and abiotic stresses, including rot-inducing fungi in sweet potato and taro, seed-borne fungi in cowpea, salt tolerance at the seedling stage in rice, tolerance of pepper accessions to tobamoviruses, tolerance of cowpea accessions to drought, and maize accessions' tolerance to maize weevil and stem borer infestations.

- The digitization of germplasm records and publication of information on 9,822 accessions on Genesys, coupled with the creation of a website, enables germplasm users from across the world to remotely request for seeds. These developments have given local and global visibility to the collection and enhanced prospects for its use in building resilience and enhancing food and nutrition security.

CROP TRUST

www.pgrri.csir.org.gh

Seeds for Resilience Project Partner