

## Local root and tuber crops: For improved nutrition, wellbeing and community development

W.L.G. Samarasinghe<sup>1</sup>, S.H.M.R.N.P. Samaradiwakara<sup>1</sup>, D. Godamulla<sup>2</sup>, K.G.T.A.K.  
Abeywickrama<sup>1</sup>, A.B. Sartaj<sup>1</sup> and D. Hunter<sup>3</sup>

### Abstract

Sri Lanka is a biodiversity hot spot possessing many endemic plant species which can be successfully promoted for its use towards wellbeing of livelihoods. Local yams which are highly nutritious with added medicinal benefits have been an important component in Sri Lankan diets due to their promising characters but currently are being underutilized. Community Development Centre (CDC) was established in Aranayake to promote local root and tubers among rural communities in the area. The objective of this work was to disseminate knowledge, create awareness of nutrition and improve home gardens ensuring conservation and sustainable use of agro biodiversity. Collection of information on traditional knowledge associated with local root and tubers was initiated. Inputs as organic manure, cultivation tools, water conservation systems, safety nets, and soil conservation tactics gathered as the next step. Cultivation of local root and tubers at the CDC, in Aranayake as a model garden proceeded. Trainings and workshops were conducted for 70 selected households to disseminate knowledge on cultivation and to produce novel value added products from the tubers harvested. Marketing of the harvest was done in regional hospitals, village fairs and the market outlet of CDC "Poshana Mandapaya". Households were monitored continuously through an appointed community leader. Progress meetings and field inspections were conducted monthly. Log books were maintained to monitor income and expenditure of households. Higher income generation and increased household consumption levels were observed after the evaluation. Revitalizing cultivation undertaken by BFN Project together with CDC has enriched the livelihoods with food security and income levels. Cultivation of yams to produce value added products as well as planting materials have promoted sustainable cultivation, popularized consumption as well as awareness among the village community. The CDC has also intervened in identifying market niches for value added products thus ensuring a stable income generation pathway for the households. Proper mainstreaming and promotion of local yams have contributed to attain food security among the community uplifting the livelihoods for a better future.

**Keywords:** *Agro biodiversity, Food security, Mainstreaming, Root & tubers, Underutilized*

---

<sup>1</sup> *Biodiversity for Food & Nutrition project, Plant Genetic Resources Centre, Gannoruwa, Peradeniya, Sri Lanka. Corresponding author's email: bfnprojectsrilanka@gmail.com*

<sup>2</sup> *Community Development Centre, Aranayake.*

<sup>3</sup> *Bioversity International, viadei Tre Denari, 472/a, 0057 Maccarese, Rome, Italy.*