

Promoting use of underutilized spp. for improved nutrition and livelihood strategies for Sri Lanka

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Sri Lanka a biodiversity hotspot, owns over 5300 cereal accessions, 2500 vegetable accessions and 400 fruit accessions, where only a handful of commercialized crops are utilized predominantly, majority are presently under-utilized. These species once were used for its promising characters as food, fibre, fodder, oil or medicinal properties; but utilization has been lost over time due to modernized agricultural practices, commercialization and lack of knowledge on the value-added attributes including nutritional, medical values and diminishing use of traditional knowledge. The per capita consumption of fruits in Sri Lanka falls far behind the required average daily intake of 40g; despite owing over 60 varieties of under-utilized fruit crops which have numerous under exploited attributes which with proper mainstreaming and promotion could contribute to attaining food security, balanced nutrition, health, income generation and environmental services. The Biodiversity for Food and Nutrition project funded by GEF, with the goal of mainstreaming biodiversity conservation and sustainable use for improved human nutrition and well-being, has carried out several awareness programs in this regard to raise awareness and up-scale utilization of agrobiodiversity at selected pilot sites and nationally; including establishment of school home gardens and diversity fairs. At the national level several activities are underway; to promote the utilization of food biodiversity for human nutrition and establish marketing strategies for nutrient rich, under-utilized, traditional crop varieties including local root & tuber crops; the development of demonstration model plots; traditional knowledge documentation and dissemination; production and marketing of novel value added products. Other related activities include; empowerment and self-employment programmes for women to popularize the use of under-utilized herbal food and beverages; festivals of under-utilized fruits; increasing local fruit and vegetable consumption of Sri Lankans through *helabojun* sales centers; and development of a model urban home gardens with re-introduction of the under-utilized species. Addressing the knowledge gap existing and awareness on the nutritional value; BFN has collected existing data and under taking composition analysis of 58 varieties of 28 priority, local, agricultural biodiversity species for generation of a complete nutrition profile including; proximates, carbohydrates, water soluble vitamins, fat soluble vitamins, carotenoids, total phenolic content, antioxidant efficacy, minerals and complete fatty acid profile, in collaboration with two partner Universities & the Department of Agriculture.

Keywords: under-utilized, nutrition profile, agrobiodiversity, awareness, value-added.