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Underutilised Crops: Diversity and Distribution in Moneragala District, Sri Lanka Jayaweera C.S.

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Abstract

Human being mainly depends on a very limited number of major crops to meet their needs giving their less attention to minor crops. Those minor crop species are categorised as underutilised crop species (UUCs) in which potential to improve livelihoods, as well as food security and sovereignty is not being fully recognised and many of the plant species that are cultivated across the world are underutilised. Therefore, it was needed to identify the importance that village farmers have paid for these crops. This study was carried out to assess their diversity and identify the priority species in Moneragala district of Sri Lanka. Uva and Eastern provinces in Sri Lanka are popularised for backyard underutilised crop cultivation. Moneragala district which belongs to Uva province of Sri Lanka was purposively selected as the study area, since higher number of UUC farmers are recorded and could be observed in this region of the country. For the district to be sufficiently covered and for an exhaustive species inventory, 3 DS divisions were purposively selected with the help of officers from Department of Agriculture working in the area and through field observations. For the DS division to be covered enough, 3 GN divisions were selected in each DS division accordingly. Following that procedure, Thenegallanda, Kahambana and Nakkala GNs from Moneragala DS, Kahakurullanpelessa, Mahawewa and Bodagama GNs from Thanamalwila DS and Adawelayaya, Nugayaya and Buduruwagala GNs from Wellawaya were selected. 10 farmers from each GN division were interviewed using snowball sampling method by first meeting the president of the farmers' association in each GN division. Accordingly, the sample size was 90. Through the interview some key information was recorded on each of the species identified. Local vernacular names of the crops each farmer consider as importance to them among the crops they are involved in were recorded. They were asked to cite the crops based on the extent of the crops, extent of the consumption, degree of consumption, perceived nutritional value, cultural importance, medicinal properties, market use, market value, and contribution to household income. Data were analysed using descriptive statistics. The study revealed that 38 underutilised crop species including cereals (18.42%), vegetables (15.79%), leafy vegetables (13.16%), legumes (7.89%), oil crops (5.26%), root and tuber crops (7.89%), fruit crops (18.42%) and herbal crops (13.17%). Among them 4 species were identified as of priority based on two main criteria among which included their growing severity within the whole district and degree of distribution. Accordingly, Moneragala district of Sri Lanka has a great diversity of underutilised crops species. Vigna unguiculata, Vigna radiata, Arachis hypogaea, Eleusine coracana and Citrus aurantifolia appeared as the most widely grown species within the whole district. Unfortunately, the distribution of most of the crops were not at a satisfactory level. Vigna unguiculata, Vigna radiata, Solanum melongena and A. hypogea were appeared as prioritised corps which are commonly grown and evenly distributed within the district. For the promotion of these underutilised crop species in Moneragala district, it will be important to put in place a national and special research and development programme under the joint umbrella of the ministries of agriculture and scientific research sponsored by the government involving all possible actors including researchers, developers and producers.

Keywords: Underutilised crops, Diversity, Livelihoods, Food security, Consumption