

Role of Kandyan home gardens in enhancing livelihoods in Purijjala, Mathale District in Sri Lanka

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Abstract

Kandyan Home Gardens (KHGs) can be considered as a land use system with analog forest component. It can be used as an artifact of combining socio-economic relationships with ecological roles. This study was conducted to identify factors such as the actual contribution of KHGs and socio-economic status that put forward to improve the livelihood through maintaining KHGs and possible strategies that can be implemented to conserve indigenous genetic composition and knowledge. KHGs can act as ex-situ conservation source for variety of plant species. Data were collected through surveying 31 households using structured questionnaire as well as by field observations in Purijjala GN Division in Mathale District. Collected data were analyzed with descriptive statistics. It was found that the average size of the KHGs in the study area was ranging from 60 to 160 perches and there was an equal contribution of females and males in maintaining KHGs. Nutmeg (*Myristica fragrans*), pepper (*Piper nigrum*), and garcinia (*Garcinia gummi-gutta*) were the main income generating minor export crop species. Annual income from KHGs ranged from Rs.10,000-375,000/=. Indigenous and wild varieties such as indigenous yam varieties which have important traits can be grown along with economically important species, as a deviation from focusing on a few number of species. This can be useful to generate income when main sources are scanty. These lands are ideal places for the production of compost fertilizer as high rate of natural recycling occur. This has not been implemented in the income generating point of view yet. Despite the benefits, market issues as fluctuation of selling price, problem of addressing diseases and lack of enough labor were the main constraints people faced in the particular area. KHGs in the study area were mainly maintained for income generation purposes. There is a potential in this area to improve its status by introducing more diverse plant community which will support ecological and livelihood balance as they are now confined to several species. The overall 56% of contribution from the KHGs to family income suggests that it can be further improved by creating proper market for their crop products with advice from experts in the field.

Keywords: *Ex-situ conservation, Indigenous, Kandyan home gardens, Livelihood, Socio-economic*

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