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Adaptation of hydroponics technology in Matara district –Case study in Beralapanathara

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Department of Agric Engineering, Faculty of Agriculture, University of Ruhuna commenced an industrialization program of the Hydroponics technology developed by the Department for farmer groups in Beralapanathara along with SEEDS (Sarvodaya Economic Enterprise Development Services) and ITDG (Intermediate Technology Development Group of Sri Lanka) in 2001. Initially 10 farmers were grouped in to a company and technology was transformed to the members in the company by employing a Graduate for a period of one year, and providing necessary inputs, technology, and know how by the project. Present study was conducted from April to May in 2008 to assess the success of the program after seven years of its existence. The main objective of the study was to assess the economy of the Bell pepper and hydroponically grown Cucumber in Beralapanathara green houses. Survey results revealed that, at present total number of green houses in Beralapanathara were increased up to 16 by grouping 15 farmers. About 76.92 % of farmers have tunnel floor area over 1000 sq.ft; 23.08 % of farmers have floor area less than 1000 sq.ft. Majority of the green houses are dent shape and used the technology innovations for the construction. Bell pepper and Cucumber are the dominating vegetable crops that grown hydroponically in Beralapanathara green houses. 38.46 % of farmers grow only Bell pepper due to its high demand and high market price. Olympus, King Arther, Adino, Golden Bell and Twingo are the commonly grown Bell pepper varieties. Among them, King Arther is better adapted for the area and gives a higher yield compare to other varieties. Cucumber, variety Efdal and variety Sakura have better adoption to this area. Results revealed that, hydroponically grown Cucumber and Bell pepper in a 1000 sq.ft tunnel provides more profit compare to tea. Limiting factor for further expansion of Cucumber appears to be the transport problem, even though profit gain from Cucumber is twice that of the Bell pepper.

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