A preliminary survey of the current use of hydroponic agricultural methods in selected areas

R.M.M.N Rathnayake and N.P Dissanayake.

Department of Botany, Faculty of Science, University of Ruhuna

Correspondence: nandapd@mail.ruh.ac.lk

The main objective of this survey was to investigate the current use of hydrophonics in selected areas and the survey was conducted in Bandarawela, Nuwaraeliya and Boralanda areas. Fifty farmers were randomly selected and the details of their current use of hydroponic methods were obtained through field visits and giving a questionnaire. Most of the farmers have got their knowledge and training on hydrophonics from Bindunuwewa & Kahagolla agricultural research centres and therefore those two institutions were also visited.

The information on where they got the knowledge and the initial training about hydrophonics, whether they are supported by any organization, kind of vegetables and fruits planted through the system, the initial capital they need, the problems they faced in implementation of this method were collected, sorted and analyzed.

Tomato, bellpepper and cucumber were the crops grown at a large scale. Strawberry, cabbage, lettuce and flowers were in the free spaces of the tunnels. Grow bag technique and trench or trough technique were the most popular growing systems in the area. Coir dust was the

inert medium applied by most of the users. Coconut fibres and saw dust were moderately used. Some of them have used more than one medium.

According to the survey, it is revealed that the real value of the hydroponic system has still not gone into farmers because most people who are involved in hydrophonic agriculture are not traditional farmers (30%). School teachers (24%), businessman (16%), retired people (14%) and other permanent employees (16%) conduct hydroponics to generate an additional income. However more than 75% of them does not use correct methods even though they have a proper knowledge.

The main barrier for the development of this kind of agriculture to the traditional farmers is the problem to find out initial capital. Although one government institution is helping them to buy material, that is not sufficient. Extending financial supports to the hydroponics is a main door to the development of the country as the products can be used locally or it can even be exported.