

Present Situation of Intercropping in Potato Cultivation in Nuwara Eliya and Badulla Areas

A.T. Shanadi^{1,*}, G.C Samaraweera² D.L Wathugala³, W.A Indika¹, M.K.S Madushika¹ and M.K.D.K Piyaratne⁴

^{1*}*Department of Computer Science, Faculty of Science, University of Ruhuna, Matara, Sri Lanka*

²*Department of Agricultural Economics,*

³*Department of Crop Science,*

⁴*Computer Unit Faculty of Agriculture, University of Ruhuna, Mapalana, Kamburupitiya, Sri Lanka*

Intercropping is one of the methods of increasing crop productivity. It has proved to achieve many advantages. However, with the increasing demand for local potatoes, intercropping with potato cultivation in Sri Lanka is still an open research challenge which is needed to be addressed. On the other hand, Potato is extensively cultivated in Nuwara Eliya and Badulla districts in Sri Lanka. Therefore, this study examined the present status of intercropping in potato cultivation in Nuwara Eliya and Badulla areas to determine the farmer's knowledge and awareness on intercropping in potato cultivation. The study was based on primary data gathered through questionnaires from 100 potato farmers selected through the snowball technique. Out of 100 farmers, 48 farmers were selected in Nuwara Eliya district and others were selected in the Badulla district. The results obtained were analysed using descriptive statistics. Results indicated that 58% of farmers were aware of the intercropping. However, among them, due to the lack of knowledge and ignorance of the benefits of intercropping 30% of farmers were not practicing it. The other 28% of farmers did practice intercropping with short term vegetable crops such as beans, radish, and leaks, etc. They gained extra income from intercropping at a low cost of production by proper land use and maximum utilization of natural resources such as water and nutrient. The rest of the farmers (42%) were not aware of intercropping with potato and its benefits. Meanwhile, 54% of farmers claimed that they did not have vital information such as crop choices, cropping patterns, and amount of potential harvest, etc. Therefore, the study has brought out the urgency of the appropriate knowledge delivery method to disseminate the right knowledge on intercropping with potato and to create the awareness to encourage intercropping in potato cultivation which ensures food security, poverty reduction, and sustainable utilization of natural resources.

Keywords: Intercropping, Food security, Potato cultivation

Acknowledgment: This research was supported by the Accelerating Higher Education Expansion and Development (AHEAD) Operation of the Ministry of Higher Education funded by the World Bank.