CONTRIBUTION OF TRADITIONAL STRATEGIES TO ENHANCE THE FOOD AND NUTRITION SECURITY IN *PALUGASWEWA* CASCADE SYSTEM, SRI LANKA

G.P.W.S. Anuradha¹, N.M.K.C. Premarathne¹, G.A.S. Ginigaddara¹, and A. Wewaldeniya²

Department of Agricultural Systems, Faculty of Agriculture, Rajarata
University of Sri Lanka, Anuradhapura, Sri Lanka.

Janathakshan (GTE) Ltd, No.05, Lionel Edirisinghe Mawatha, Colombo 05,
Sri Lanka.

Use of traditional knowledge in food production has started to die off in Sri Lanka at present. In the meantime, adverse impacts of climate change have resulted significant losses in the food production. However, the ancient dry zone cascade system produced enough food utilizing traditional knowledge. This research was carried out with four objectives to support the food security in the dry zone, accordingly, to determine the adoption levels of traditional knowledge in food production, to identify the constraints related to the use of local farming practices, to identify the women's role in ensuring the food security at present and to evaluate factors affecting household food security. A sample of 120 farmers was randomly selected from Palugaswewa cascade system in Anuradhapura district. A pretested questionnaire and four key personal interviews were administered for data collection. Results revealed that 52% of the respondents use traditional practices for food production, processing, storing and preservation. Meantime, 48% of respondents do not use traditional practices due to less popularity (33%), limited access to the traditional seeds and equipment (29%) and limited knowledge (21%). Further, 58% of female respondents engaged in agricultural activities on average $(1-5\pm1.34)$ hours per day). In this regard all most all female respondents spend at least one hour for activities such as food processing (65%), keeping food stocks (40%) and searching foods (59%). Generalized linear model results revealed that, food security score of households is impacted by age, marital status, household size, household income, land area, home gardening and traditional knowledge use at $(p \le 0.05)$. Based on the results, the strategies based on traditional knowledge play a vital role in food security enhancement in Palugaswewa cascade system, Sri Lanka insisting that traditional knowledge still should be promoted.

Keywords: Food production, Food security, Traditional knowledge