Understanding the Food Consumption Pattern of Marginalized Agricultural Communities Living in Mahaweli River Basin

*Hewage, S.

Environmental and Water Resources Management Division, Hector Kobbekaduwa Agrarian Research and Training Institute, Colombo, Sri lanka *Corresponding E-mail: <u>ashanthah@gmail.com</u>

Food security has been recognized as one of the major areas which is adversely affected by the impacts of changing climate, particularly on the vulnerable segments of the agricultural communities in the tropics and subtropical zones. The recent extreme events, specially prolonged dry spells and droughts caused by erratic weather conditions owing to adverse impacts of climate change have been reported to have significantly affected on food consumption of farming households in many areas of dry and intermediate zones of Sri Lanka. In this background, the said study was carried out with the objective of understanding the status of food consumption of vulnerable agricultural communities in the face of changing climate. The study locations of this research were Medirigiriya and Lankapura Divisional Secretariat divisions in Polonnaruwa district and Walapane DS division in Nuwaraeliya district representing dry and intermediate zones respectively on the middle and lower Mahaweli river basin. A structured guestionnaire survey was administered to collect data and information from a list of 1129 randomly selected farm households (HH) who engaged crop cultivation under minor irrigation and rainfed conditions. The HH survey was conducted using face-to-face method during January–March period in 2016 to complete the total sample of 1129 HHs. In this study, (a) the Food Consumption Score (FCS); an acceptable proxy indicator to measure caloric intake and diet quality at household level, and a composite score based on dietary diversity, food frequency, and relative nutritional importance of different food groups and (b) the Household Dietary Diversity Score (HDDS); a proxy measure for HH food access and ranges from 0-12, developed by World Food Program (WFP) were used to analyze the HH food consumption. The study found that HHs in both locations are having an acceptable level of food consumption at 94.7 % and 75.5 % FCSs are reported from the study areas in Polonnaruwa and Nuwaraeliya districts respectively. As far as the HDDS is concerned, the access to the variety of food items consumed in HHs in Polonnaruwa is higher than that of Nuwaraeliya respectively having 86.9% and 81.6% of HHs with more than HHDS of 6. The timing of the survey conducted during the Maha season where finance level of HHs is at satisfactory level enabling them to have more access for food could be attributed to this situation. Therefore, it is recommended to have similar surveys at the beginning and the end of two cropping seasons; Yala and Maha.

Keywords: Food consumption, Dietary diversity, Farm households