

Climate change-related constraints for home gardening of women-headed families in Cheddikulam, Sri Lanka

Senarathna S.A.S.R.¹, Ginigaddara G.A.S.^{1*}, Kodithuwakku A.N.¹ and Vimaladhas V.²

¹*Department of Agricultural Systems, Faculty of Agriculture, Rajarata University of Sri Lanka, Anuradhapura, Sri Lanka*

²*Community Seed Bank, 2nd farm, Muhanthankulam, Cheddikulam, Sri Lanka*

Home gardening (HG) was introduced to ensure the sustainable income generation and food security of people in Cheddikulam after ending the civil war of the country in 2011. Even though HG is satisfactorily practiced for 7 years, climate change has impacted on HG severely. This study was conducted to identify the climate change-related constraints for HG for the last seven years in the area and to suggest effective strategies to address climate change for the home gardeners. Hundred home gardeners of women-headed families in the Cheddikulam Divisional Secretariat Division were selected and key person interviews and group discussions were conducted for data collection. Results revealed that wild animal attacks on crops (63%), severe drought conditions (100%), contagious livestock diseases (88%), lack of feed availability for the animals (85%), unexpected floods (100%) as main climate change-related constraints in home gardening. The entire study population was victimized from floods that occurred in 2012 and 2014 and their home garden cultivations were destroyed. The prolonged drought occurred in 2015 reduced their livestock populations drastically mainly due to the emergence of contagious livestock diseases (88%), lack of feed availability and malnutrition of livestock (85%). Water scarcity was found (80%) to be the main limitation for HG and reducing their cultivation extents was identified as the only adaptation strategy practiced by the home gardeners. The contribution of HG to the family monthly income was found to be 24%. Hence there is a mandatory requirement for introducing climate change adaptation strategies such as climate-smart agriculture, drought-resistant varieties, efficient water management strategies, rainwater harvesting systems and crop diversification in home gardening to improve the rural wellbeing of the women-headed families in Cheddikulam, Sri Lanka.

Keywords: climate change, climate-smart agriculture, home gardening and women-headed families

*Corresponding author: sanjeewanieg@gmail.com