

**FARMER'S AWARENESS AND ADAPTATION ON
CLIMATE CHANGE IN IRRIGABLE AREAS OF
TRINCOMALEE DISTRICT**



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ABSTRACT

Climate is changing world wide, and the science community in Sri Lanka have come up with ample evidence to suggest that the country's climate has already changed. Agriculture is most livelihood option in Sri Lanka. Therefore, farmers have many impacts due to climate change. Any way better adaptation strategies are needed against climate change impacts. Adaptation to climate change involves changes in agricultural management practices in response to changes in climatic conditions. It often involves a combination of various individual responses at the farm-level and assumes that farmers have access to alternative practices and technologies available in the region.

This study examined the awareness and adaptation to climate change among farmers in the irrigable areas of Trincomalee District. The irrigable areas are irrigated by Kantale tank. Purposive, stratified random sampling techniques have been employed as the major methods of sampling during data collection. The selection of sample population for the household interview was carried out through two stage stratified sampling followed by the random sampling technique. A total of, 150 farmers were selected from GN divisions.

Pre-tested, structured questionnaires were used to collect primary data from farmers. Questionnaires were designed to collect data about the study on farmer's awareness and adaptation on climate change in irrigable areas of Trincomalee District. Secondary data were collected from irrigation Department, Department of Agriculture, Meteorological Department, Agrarian department, District Secretariat of

Trincomalee, the Agriculture instructors who are working in the region, census and statistical report and published literatures. Both quantitative and qualitative research methods were used in the data analysis. The results showed most of the respondents aware about flood and drought as the impact of climate change. Climate change impact is highly causing poverty and reduced the productivity. Most of the respondents were adapted new methods of rice cultivation.

Major constraints that militated against the use of adaptation measures include inadequate financial resource, unavailability of weather information, and inadequate of knowledge about adaptation technologies. It is concluded that the awareness on recent climate change impacts on productivity among the people residing in the study area is inadequate and the agronomical adaptation percentage of the farmers were less compare to the increased trend of climate change. Therefore, conducting awareness programme by the respective authority will create some awareness on climate change and adaptation techniques among those people.

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