



## **Climate change adaptation in agricultural farming; a case study from Neththipalagama Grama Niladhari Division.**

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### **Abstract**

The major challenge posed before the entire world today is Climate Change (CC) or global warming. CC phenomena have been widely reported over the past few decades. Farmers have been gradually adapting to agricultural patterns since the beginning of human civilization. This study focuses on how farmers have adapted to CC in Sri Lanka. The Neththipalagama Grama Niladhari Division (GND) of the Mahawa Divisional Secretariat in the Kurunegala District was selected as the study area for this research. Primary and secondary data were used for this research. Primary data were collected using questionnaires, focus group discussion, and field observation while secondary data was collected reports, magazines, books, and the internet. The survey was done 30 selected individuals under the simple random sampling method. Data analysis was completed using quantitative and qualitative methods. Analyze data were displayed using tables, charts, and maps. The study showed that the total land area of farming lessened from 65% to 40% from the year 2000 to 2018. Also, the annual rainfall has decreased from 2000 mm to 1800mm by the above period. The 55% of farmers engaged in the agricultural sector in the study area, 40% of them used various agricultural adaptations methods, such as short-term crops, new seeds and substitute crops. To minimize this situation, it is ultimately possible to identify different methods of irrigation, generate new seeds using innovative methods and distribute new seeds and introduce a new market for crops that can alter farmers' incomes.

*Keywords: climate change, adaptation, crops.*

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