

## Climate Change and Global Warming: Indigenous adaptations to climatic variations in relation to agricultural activities: a case study in dry zone of Sri Lanka - T M S P K Thennakoon and Thisara Kandambige - University of Sri Jayewardenepura, Sri Lanka

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### Abstract

Climate change is a natural phenomenon that people are not able to control. But there is a possibility of mitigating its impacts by adapting suitable strategies. In mitigating impacts the modern techniques are too much problematic and inappropriate. Indigenous knowledge is an accumulation of a lot of experiences that farmers gained from a long term practices living with the nature. The prime significance of such knowledge is its possibility of enhancing the feasibility to win over the nature while living in harmony with the changes in the environment. However, today the traditional knowledge is overpowered with modern scientific knowledge. There is lack of interest among the young generation to take forward the traditional know how due to the popularity of modern technology. Indigenous adaptations to climatic variations in agricultural activities not documented and neglected without adaptation has been largely lost. There are still some indigenous adaptation used by the farmers in Sri Lanka in such a way that they forecast weather patterns through the behavior of animals and many other environmental indicators. However, most of adaptations are not popular or not have been given attention by planners. Therefore, these indigenous methods have a significance in the mitigation of climatic variation induced impacts occurred in the current scenarios. Although indigenous adaptations are very much significant for current societies, there is dearth of research in relating to agricultural activities in Sri Lanka. Therefore, this research was geared; to identify climatic variations in the relevant area; to identify and prepare an inventory of indigenous adaptations used by farmers in the dry zone; to prepare indigenous adaptation methods used by the farmers to identify climate variation and to analyze the scientific reality of the adaptations in order to understand their effectiveness. This was undertaken mainly based on field data collected in the selected

two districts in dry zone of Sri Lanka and on recoded information collected by review of literatures where climatic and weather incidents were recorded in the past. The study ascertained that the most of indigenous adaptations strategies were depended on the last generation of community in Anuradhapura and Monaragala districts. When end of this generation the wide range of indigenous knowledge will comes to end. Most of adaptation strategies had been changed as a result of change natural environment and the collapse of the traditional socio economic values of the society. Monaragala and Anuradhapura districts have some similarities and spatial differences in adaptations strategies. The study further explored that some indigenous adaptations in fact have a scientific reality. Such knowledge has to powerful advantages over outside knowledge it has little or no cost and it is readily available. There are situations in which modern science is not appropriate and use of simpler technologies and procedures are required to solve problems. Thus, indigenous knowledge provides basis for problem solving strategies in local communities, especially the poor.

This work is partly presented at 3rd World Summit on Climate Change and Global Warming, February 27-28, 2019 | Prague, Czech Republic

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