

## Concerns for Extreme Climate Conditions and Their Implications in Southwest Nigeria

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**Abstract :** Extreme climate conditions are deviation from the norms and are capable of causing upsets in many important environmental parameter including disruption of water balance and air temperature balance. Studies have shown that extreme climate conditions can foretell disaster in regions with inadequate early warning systems. In this paper, we combined geographical information systems, statistics and social surveys to evaluate the physiologic indices [(Dewpoint Temperature (Td), Effective Temperature Index (ETI) and Relative Strain Index (RSI)] and extreme climate conditions in different parts of southwest Nigeria. This was with the view to assessing the nature and the impact of the conditions on the people and their coping strategies. The results indicate that minimum, mean and maximum temperatures were higher in 1960-1990 than 1991-2013 periods at most areas, and more than 80% of the people adapt to thermal stress by changing wear type or cloth, installing air conditioner and fan at home and/or work place and sleeping outside at certain period of the night and day. With respect to livelihoods, about 52% of the interviewed farmers indicated that too early rainfall, late rainfall, prolonged dryness after an initial rainfall, excessive rainfall and windstorms caused low crop yields. Main (76%) coping strategies were changing of planting dates, diversification of crops, and practices of mulching and intercropping. Government or institutional support was less than 20%.

**Keywords :** coping strategies, extreme climate, livelihoods, physiologic comfort

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