

“அம்பாறை மாவட்டத்தின் மழைவீழ்ச்சி,
வெப்பநிலைப் போக்கும்
நெற் பயிர்ச் செய்கையில் அதன் தாக்கமும்”

Rainfall and Temperature Trends in Ampara District and It Impact on Paddy Crop

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Abstract

Rainfall and temperature extremes have adverse impacts on the society and environment of Srilanka. Mainly rainfall and temperature are impact on agriculture. This research describes about Rainfall and temperature trends that impact on paddy cultivation in ampara district.the objectives of the research are finding the Rainfall trend in ampara district, the temperature trend in ampara district and Rainfall and temperature impacts on paddy crop in ampara. in this research using monthly Rainfall and temperature date were collected at the 2 rainfall stations po department of meteorology, Srilanka. Paddy cultivation date were collected at department of census and statistics. This research identifies temporal trends of Rainfall and temperature during year, seasons, and months. During the period 1985 – 2014 and Rainfall and temperature are impact on paddy cultivation in maha and yala seasons. Mean deviation, 3 year and 5 year moving average, and Pearson correlation had been analyzed by using SPSS, Excel and Geographical information technique (GIS) softwere's. The study finds annual rainfall trend is increase since 1986. in fist inter monsoon period rainfall trend has increased in two stations. at the some time south west monsoon period trend has decreased in ampara station except the poththuvil stations. While second inter monsoon period trend has increased in two stations. As well as north east monsoon period trend has increased in poththuvil station except for the ampara station. Annual temperature trend is increasing in ampara district. Seasonal temperature trend in fist inter monsoon period has decreased, while south west monsoon period and second inter monsoon has increased. in other hand both north east monsoon period has decreased. in the research acreage dry zoon and wet zoon are alternately featured as the some time dryness is influenced in rainy season also.so, obviously there were changes in paddy production trend. Finally according to this research, final conculsion is that Rainfall and temperature are impatcs on paddy cultivation in ampara district.