

E1-34 Analysis of climatic parameters at the Central Highland of Sri Lanka

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The climatic condition in the central highland of Sri Lanka is very important with regard to the comfortable livelihood and agricultural production. Since most of the rivers are originating from these central highland areas, the climatic parameters play a vital role to determine the agricultural economy of the country and the environmental balance. These parameters such as rainfall, pan evaporation, wind speed, maximum and minimum temperatures and relative humidity at 0830 and 1530 LST are analysed for 2 slopes of the central highland such as western and eastern slopes respectively. These slopes cover the areas starting from Matale to Nuwara Eliya through Peradeniya and Talawakele and from Nuwara Eliya to Girandurukotte through Bandarawela and Passara.

According to the analysis of these climatic parameters, the rivers starting from the western slope, have a considerable amount of water throughout the year, due to the high rainfall and low pan evaporation. Since the eastern slope experiences low rainfall and high pan evaporation, the water level of these rivers are normally low specially during July. The wind speed normally increased with increasing altitude but a different situation has been observed during January at mid elevation areas of the western slope.

Though the maximum and minimum temperatures normally decrease with increasing altitudes, the situation was quite specific during the month of April at Nuwara Eliya. Further the relative humidity was low during the month of April in comparison with other months at Nuwara Eliya. These structures form an ideal condition for human livelihood during this month at Nuwara Eliya. All these positive factors contributed to the selection of Nuwara Eliya for the Summer festival in April. Further necessary and sufficient steps should be taken to remedy the problems arising from the low water level in the rivers of eastern slope which have an impact on agricultural production of the eastern and south eastern parts of Sri Lanka during the South-West monsoon period.