

Agrometeorological Bulletins – The Case of St. Lucia

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Introduction

The island of St. Lucia is situated at latitude 13° 53' North and longitude 60° 68' West. It forms part of the chain of islands called the Windward Islands. The island covers an area of 618sq km (238 square miles). The general topography of the island is mountainous.

St. Lucia falls within the northeast trade wind belt and is normally under an easterly flow of moist warm air. The island's location in the Atlantic Ocean/Caribbean Sea means that the ambient sea surface temperature average is about 26.7 degrees Celsius at any time.

The island's weather is influenced by synoptic weather systems, such as the Atlantic high-pressure system (Bermuda and Azores), surface, mid and upper level troughs/lows, the Inter-Tropical Convergence Zone, tropical waves and cyclones and the occasional frontal system. Mesoscale and microscale weather features also affect the island. The rainfall regime of the island can be defined into two seasons, a wet season from June to November and a dry season from January to May.

Agriculture is the main source of export earnings in St Lucia. The importance of the agricultural sector is significant not only from the foreign exchange point of view but also for the island's employment generation capacity. Banana production, the island's most important agricultural produce has been on the decline recently. However, some farmers have started to diversify into non-banana crops and other sectors such as livestock and cut flowers.

Though it is an accepted fact that climatic factors are integrally important to agricultural production, for some reason the farmer population of St. Lucia has not been sensitized to understand these relationships.

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Status of Agrometeorological Bulletins

A Hydrometeorological Unit (agrometeorology and hydrology) section forms part of the Agricultural Engineering Services Division of the Ministry of Agriculture. Technicians without any formal training in agrometeorology man this unit. The major focus of this unit as it relates to agrometeorology, is data collection as this unit is also responsible for the hydrometeorological network of St Lucia. This hydrometeorological network consists of six meteorological stations. Two of these stations are managed by the National Meteorological Services, two by private agricultural research agencies and one along with twenty-eight (28) rainfall stations, by the Hydrometeorological Unit of the Ministry of Agriculture.

The monthly and annual publication of agrometeorological bulletins began in 1991 and ended in 1999. These bulletins were made available, among others, to extension officers, agricultural agencies, research officers and the National Water and Sewerage Company. The bulletins were made available to the users by means of mail and hand delivery

A number of constraints appeared during the years of publication as, late submission of summaries and weather outlook provided by the National Meteorological Services, unreliable data from observers, software problems and inadequate office equipment (photocopies, computer). For example, the software for rainfall data logger was not Year 2000 compliant.

It is hoped therefore, that the new knowledge acquired from this workshop becomes a meaningful contribution towards the continuation of an improved agrometeorological bulletin for St Lucia. Thanks are expressed towards the organizers to have given the opportunity to a representative from St. Lucia to participate in this important workshop.