PLENARY PAPERS

Implementing Food Production and Marketing Programmes in a Developing Tourist Economy - Some Agro-Meteorological Considerations

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It is probably true to say that most of the territories within Caricom are looking towards the development of tourism in their overall development proposals. It is also true to say of these territories that each is attempting import substitution, particularly in the food sector. This has led to the total ban of certain food items in some territories, in others a partial ban at specific times, and yet others have imposed no restrictions. These measures have been specifically designed to stimulate local production of the same commodities or food items in some cases, while in others they have been designed to change, by and large, the traditional eating habits.

This is sometimes seen as being in conflict with the development of an expanded tourist economy, since it is felt by some that 'tourists have specific food tastes which should be catered to'. It is also felt by others that many tourists would prefer to partake of the indigenous food of the particular country that they visit. In the absence of reliable information, it is difficult to state which is the correct point of view; a little of each is possibly true.

The prospects of implementing food production and marketing programmes in a developing tourist economy present a distinct challenge in our area, particularly when consideration is given to the traditional 'seasonality of production' of much of the food we eat. During the dry season, fodder is generally scarce, the quality of carcasses deteriorates and there is, because of feed problems, a greater urge to dispose of stock. However, there is an abundance of solar energy which, if systematically utilized, could alter this in that, during the better growing season, attention could be focussed on the production of fodder for conservation and use during the unfavourable dry season. Capital will be required for erection and operation of the drying units but this is not thought to be insurmountable.

Tourists coming from the temperate regions have been accustomed to eating certain kinds of foods, e.g. tomatoes, Irish potatoes, celery, broccoli, sprouts, asparagus and head lettuce among others. Many of these crops grow in the tropics, but often production is by far inferior in quantity and quality to that produced in the temperate regions. More often than not, our tropical production takes place on the lowlands where day temperatures are high and night temperatures are also reasonably high with fairly small variations between the two. In the temperate situation often the day temperatures are considerably higher, but the night temperatures correspondingly very much lower, providing considerable variation between the day and night temperatures (maximum and minimum). Many of these crops are sensitive to night temperatures and are known to have specific or optimum night temperature requirements (tomatoes, Irish potatoes). With others, soil temperature may be the more critical consideration (asparagus).

It is known that for every one thousand feet rise in altitude there is a fall of three degrees fahrenheit in temperature. Bearing this in mind, there appears to be some scope for investigating the possibilities of producing some of these crops with somewhat more specific night temperature requirements in some of the more suitable upland areas; generally, moisture is said to be higher than on the lowlands, and the distribution is reported to be better.

Unfortunately, little attention appears to be given to monitoring such factors as temperature, humidity and rainfall in some of these upland areas, and there is, as a result, little reliable information to go on. It seems necessary, as a first stage, to monitor the weather situation in these upland areas with possible production potential, since it is felt that alternating production between the lowlands and the uplands could possibly result in production of many of the food crops on an all year round basis.

It must, of course, be recognized that as a result of higher humidity and more moisture, plant diseases may be significantly higher generally, which would necessitate better management. This would also involve infrastructural works such as roads, pipe-borne water etc. At a casual glance one sees the necessity to plan properly and adequately all along the way, from the selection of sites and crops, all the way through to marketing. Agrometeorological factors looked at early will assist in determining where these areas could be. Providing proper planning takes place, and adequate infrastructural works are undertaken, there is little reason to doubt that there can be greater success in the implementation of food production and marketing programmes in tourist-oriented territories.