Abstract

The influence of the environment on agricultural business in Guyana is very high. There is great farmer-dependency upon seasonal rainfall which is critical to the operations, production and economical viability of agri-businesses. Any situation or combination of situations that disrupt this dependency can result in loss of income and other market changes in the economy. Changing weather conditions, particularly increases in the rainfall Guyana contributes a negative impact to the agricultural environment much to the detriment of the operations of the agribusiness. The sugarcane, rice and non-traditional crops industries are the main sources of revenue in Guyanese agriculture. Since Guyana’s economy is heavily based upon agriculture and agriculture contributes as much as 33% of GDP, environmental changes in the form of weather patterns disrupting production and operations can constrain the economic returns for the country.

This paper maps rainfall patterns over a ten (10) year period and identifies trends of precipitation and compares these with ‘normal’ rainfall patterns. It further outlines that there is increased rainfall and the distinct dry and rainy seasons are disrupted. During these increase rainfall periods, there are more chances of flooding as the original drainage networks on the coast are ill equipped to perform adequate watershed functions, thus flooding ensues. Floods and increased levels of moisture in soils result and these issues negatively influence production and productivity – the disruption of traditional husbandry and other practices, the creation of price hikes and shortages, and ultimately socio-economic losses. As a result of these uncontrollable events farmers and other agribusiness operators have instituted changes to adapt and mitigate their operations to cope with the effects of the environmental changes. The paper further highlights the economic lag effect of increased prices on selected non-traditional crops while identifying major adaptability changes in operations the sugar and rice industries.

Keywords: weather, flooding, environment, change, loss of production, increased prices.