

INTRODUCTION

It is an unfortunate fact that soil erosion in any country does not impinge upon the public imagination until, by its visible and economic manifestations, it has reached a stage when a conservation programme is rendered both expensive and difficult and the damage done is beyond repair. Trinidad can fairly be quoted as a case in point. A luxuriant lastro and a characteristic resistance to gulleying in the Northern Range mask the continuous soil loss. On the alluvial flats, sheet erosion, the least spectacular of erosion forms, must account for tremendous annual losses, but again the decline is so gradual as to appear at first unimportant.

There is little published data on soil erosion in Trinidad, but two papers, one by Cater (1939) on Deforestation and Soil Erosion in the Northern Range, and another by Hardy (1942) who demonstrates the island-wide character of erosion, should both dispel any doubts as to the urgency of the problem.

The expense that a properly-conducted anti-erosion programme entails is often a reason for shelving the problem, but the classic Tennessee Valley project has demonstrated that a well-conducted programme after the initial expenditure should not be regarded as an annual drain on the finances of a country, but rather as an integral part of the country's economy.

This paper, owing to the short time at the disposal of the writer is intended as an introduction to the problem by investigating some of the causes of erosion in a small area of the Northern Range. The data is presented under various headings some of which have only an indirect application but are none the less important.

The survey covers the area to the north of Tunapuna village and the St. Augustine residential area bounded by the watershed of the Tunapuna river and the limits of the mountain savanna to

the west of the watershed. The hills (the base of which lies near the 100 ft. contour) ascend steeply to the dominating ridge to the north, the highest point of which is 2197 ft. The whole area is intersected by valleys and ravines which have a north-to-south trend, and the biggest of which is the valley of the Tunapuna dry river. The valleys and ravines have very steep sides, and in general the whole area is precipitous and quite unsuited to farming.

In spite of the inaccessible nature of portions of the terrain little but secondary vegetation is now present, the primary forest (which, according to Cater, consisted of tropical evergreen forest with a few deciduous and semi-deciduous species) having been destroyed by human interference. The aboriginal population is likely to have preferred the forested hills for reasons of defence and also because of the malarious nature of the lowlands. The advent of the Spaniards and the clearing of forest for the planting of cocoa in the lower lands probably accounted for the first real inroads into the natural forest. Later, in early plantation days, planters were made responsible for the feeding of their slave labour and it was the practice, later secured by law, to allocate to slaves small areas for the production of provisions. Sugar being a very profitable crop grown on the flats, it is understandable that the planters found it more convenient to allocate land in the inaccessible hills.