1. INTRODUCTION

The economy of nearly all the colonies in the British Empire depends on their agriculture, and a successful agriculture is in turn dependent on correct land use. One of the greatest problems today in the tropics is to find the most suitable crops for the various soils and, especially on hillsides, those crops which can be grown without undue risk of erosion. Closely tied up with this question is that of the agricultural system; whether it is better for a country to have its agricultural lands divided up into large estates or into many small holdings farmed by a peasantry. Estates have the advantage usually of financial backing, can plan ahead, spend on soil conservation and generally practise a high standard of management; the peasant, on the other hand, has no such advantages, is often illiterate and usually conservative in his practise, but it is commonly the case that a landless labour is dangerous politically whereas a well-established peasantry confers a certain stability of political thought on a country and that the land, so farmed, will support a larger population than it would as estates.

The object of this survey has been to study the existing agricultural systems and general background of an area in the Northern foothills and to try to find which systems and crops are best suited to the slopes. Every peasant holding visited had a varied mixture of all the common crops of Trinidad and it has proved almost impossible to distinguish the effects of any single crop either in promoting erosion or in its prevention, but the differences between types of farming could be indicated although there was insufficient time for their exact assessment.
It is hoped, however, that certain points might be raised which could be studied more deeply and exactly by future surveys. The main problem has been to assess the amount and severity of any soil erosion, to define its causes and to deduce control measures.

II THE AREA

(a) Position and Topography

The area studied is approximately 1200 acres in extent, consisting of the Southern slopes of Mount Tabor. It is bounded on the North by half the horseshoe shaped ridge of which Mount Tabor is the highest peak, on the East by the Tunapuna river which flows southwards from the ridge, on the South by the foot of the hills, more easily defined by Gordon Street, and, on the West, by the shoulder running South-west from Mount Tabor to St. Joseph village.

The steep slopes of the foothills give out onto the detrital shelf at an altitude of about 50 ft. while Mount Tabor rises to 2197 ft., and the whole area is intersected by steep-sided valleys, running generally from North to South, but they are crossed by two valleys at right angles to form isolated hillocks, and a third, crescent-shaped valley running behind the shoulder on which is built the Monastery of St. Benedict. The whole area, except the valley bottoms, slopes steeply and the average angle of slope is about 30 degrees. The dissection of this area is explained by its geology since the whole area is really the end of a spur from the main fold of the Northern Range formed of metamorphic rocks in the Jurassic and Cretaceous periods of the secondary (Mesozoic) era. Further complication is caused by the secondary folding parallel with the first which took place at a later date and formed two lesser ridges across the foothills of the main range. The two ridges have been deeply dissected by the consequent streams from the main ridge of the primary fold forming gorges at intervals of approximately two to three miles, and also by some streams from the primary spur, like the Tunapuna river. The primary streams from the secondary folds form the many small valleys running North to South in the area. Further indications may be seen from the maps.