# INTRODUCTION.

## The Fertility of Tropical Soils.

A fertile soil provides favourable environment for the development and nutrition of the roots of plants and thus ensures plant growth. Partly because agronomists and soil scientists devoted their early attention almost exclusively to the soils of temperate lands, modern scientific views on the fertility of tropical soils have moved from one extreme to another.

In the last century, the presence of giant luxurious forests gave planters an exaggerated view of the fertility of tropical soils. Chenery (1949), says, inter alia, "Judging from the vast area of abandoned or semi - derelict land in Trinidad, the luxuriance of the forest must have misled planters into believing that the soil was correspondingly fertile - which was very far from true. In fact the most luxuriant forests (Mora) in the island actually grow in soils almost devoid of plant nutrients. The mora trees owe their being to lack of competition, a low mineral nutrient requirement and high rainfall."

This discovery, of the comparative infertility of some tropical forest soils led to the later view that tropical soils were generally infertile and poor. Again this was untrue for many tropical soils support large and prolonged growth of crops over long periods of time very often without any form of fertilisation. H. Vine (1956), writes, "I feel that an unprejudiced traveller through many parts of Nigeria, noticing the vigorous growth of crops and knowing that only in small exceptional areas was any fertiliser applied, would have the impression that the soils were moderately fertile. Investigations show that, on the whole, this is the case."

Modern scholarship has therefore swung round to the view that tropical soils, while having their own special characteristics and problems, brought about by the high temperature, the often intense precipitation, the absence of glacial influences in Pleistocene times, the age of the parent materials that is often greater than in temperate soils,

the lack of planned husbandry in the past - are generally neither luxuriantly fertile nor barren. Their fertility is therefore subject to the normal factors that affect soil Fertility.