

## THE MAKING AND USE OF ORGANIC MANURE IN THE TROPICS

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INTRODUCTION

1. The methods in use in the tropical world for the manufacture of organic manures and their use form the main subject of this paper but an attempt has been made to deal with a number of related facts about the role of soil organic matter, the conditions necessary for converting organic matter into humus and other products which can be utilised by plants and the general principles involved in the formation of compost and farm yard manure.

2. In the ordinary processes of crop production it behoves the farmer to concern himself with the maintenance of soil fertility if he is to build up a permanent system of agriculture. The fertile condition of the soil steadily deteriorates during continued cropping (of the soil) unless something is done by means of soil management and manuring to restore fertility. In undeveloped areas under natural forests, vegetation is luxuriant and conditions are maintained at an equilibrium. The growth of several years returns to the soil after the death of the plants; nothing is taken away or lost. Thus stores of organic matter accumulate. The entry of man into these virgin lands has been followed by exploitation of the forests which were cleared for the cultivation of his crops and the production of food and raw materials required by the great world markets. The richness of the virgin lands thus exposed to the destructive influence of man could not even at its best, last for more than a limited number of years and soon the soils showed signs of exhaustion and their productiveness rapidly decreased. In the western system of agriculture the use of artificial manures has been resorted to. To supply needed quantities of combined nitrogen many sources have been utilised but never has there been attempts to stress utilisation of the large quantities of straw and other vegetable wastes for keeping up the store of organic matter in the soil.