

1. INTRODUCTION.

Paddy or rice (Oryza sativa L.) is one of the most important cereal crops in the world, being, according to Copeland (20), probably the staple food of the greatest number of people. Grist (32) estimates that in 1947 the population of the rice consuming countries of Asia alone was approximately 1,150,000,000 and calls rice "the staple food of half the world", while Hunter and Leake (38) refer to rice as the most important source of human food. That these opinions are not exaggerated is shown by the fact that in 1948 the total area under rice in the world, excluding the U.S.S.R., has been estimated at 216,750,000 acres producing 145,400,000 metric tons of paddy. (Appendix I.)

In spite of the large area devoted to rice growing, and the steady increase of world production, as shown by the figures in Appendix I, most of the rice eating peoples of the world do not get enough rice for adequate nutrition. This statement is borne out by figures showing rice consumption levels and daily rice rations per person for certain specified countries. (Appendix II). As one authority on rice puts it, "The world shortage of rice is reflected in the seriously reduced per caput consumption levels in the major importing countries. Domestic production in the rice deficit countries of Asia has for decades failed to keep pace with a population increase of nearly 1.5 per cent annually." (6). But it is not only from the point of view of food that rice production is so important. The cultivation of rice forms the backbone of the economy of many tropical countries. For example, it has been estimated that 75 per cent of the cultivated land in Burma is under rice and that 70 per cent of the population is engaged directly or indirectly in rice cultivation and the rice trade. (30).