

INVESTIGATION INTO THE RELATIVE COSTS OF RICE EXPERIMENTS

BASED ON THE EFFICIENCY OF DESIGNS

INTRODUCTION

Rice (Oryza sativa L.) is one of the cultivated food grains. Its importance to Burma is well known all over the world. Burma has been and is still leading as the largest exporter of rice among the world's rice producing countries, by contributing before the war about 38 per cent. of the total rice that entered into international rice trade (Markets Survey No.9).

In the markets of the world today, Burma rice is facing increasing competition from Siam and Indo-China and also from the Western Hemisphere where the area is expanding rapidly with all modern mechanical aids and high quality rice (Rossiter, et al., 1946). It is but natural therefore that the future prosperity of Burma will depend upon her ability to produce varieties of high yielding quality rices to meet demands by various markets of the world. If Burma is to maintain her position in the world markets, the work of improving her rices in respect of both quality and yielding capacity must be given adequate attention.

In the rice improvement work in Burma, various modern experimental designs have been used for varietal testing but no attempt has been made for determining the relative costs and efficiencies of these designs. In a war-torn country like Burma where economy is to be exercised as far as possible, a knowledge of the relative costs and efficiencies of different methods of experimentations will no doubt assist experimenters in the selection of particular designs from the standpoint of economy and efficiency.

The object of the present investigation is to ascertain the costs of rice experiments with a view to finding out which of the experimental designs would give maximum information with minimum cost. In other words, it is to find out which of the experimental designs would be most suitable in Burma in terms of economy-efficiency. Work

of this nature is indeed one of the greatest needs. Such investigation may be of its own kind. It is hoped that the information thus obtained will be helpful in future planning of designs for yield trials in Burma.

... an increase in efficiency would be possible, effecting a saving in the cost per unit.