CHAPTER I

INTRODUCTION

The unique role of Indian agriculture in the growth of its economy cannot be overemphasized as it contributes over 45.00 per cent to our Gross National Product (G.N.P.). It is the agriculture that determines the overall rate of growth of our economy by supplying food to its large population, providing raw materials to its industry, employing a large pool of labour force and by raising foreign exchange earnings through exports. The stark reality is that 89.00 per cent of our population depend directly or indirectly on agriculture, 82.00 per cent of the total population live in rural areas and three-fourths working in rural areas depend on agricultural activities or occupation for their livelihood.

Increasing agricultural production is visibly a challenging task in view of the rapid population growth. The population of this country in 2000 A.D. would go up to 972 million (Planning Commission, 1985) and the requirement of foodgrains is estimated at 239-240 million tonnes (Planning Commission, 1989). This means an addition of 5 million tonnes of foodgrains per year over the next decade. In order to meet this requirement, the annual growth rate required for cereals, pulses, vegetables and fruits is a little over 3.00 per cent except in oil seeds where it is 4.46 per cent. Required annual growth rate for animal products is less than 3.00 per cent while in case of fish
production, it is 3.86 per cent (Prasad, 1989). In view of the past experiences, the aforesaid annual growth rate is seemingly within reach. Even the level of achievement is both feasible and desirable if the time horizon is extended further to 2050 A.D. when the requirement of foodgrains will be 550 million tonnes (Kapoor, 1988). Obviously, the country has the capability of producing much more than what is required in coming decades if the agricultural production system is supported by a proper mix of appropriate policies.

With possibilities of increasing net-sown area is extremely limited, the bulk of the growth of agricultural production has inevitably to come from per hectare yield of crop through the use of all technologies to the fullest extent on the farm. The exploitation of the potentialities at all levels can inevitably increase the present level of production substantially by removing or reducing the existing yield gap. Of the estimated additional production need of over 75 million tonnes of food to sustain self-sufficiency by 2000 A.D., the share of rice would be no less than 30 million tonnes. With no more scope for expansion of area under rice, a vertical yield improvement from the present 1.75 to 2.50 tonnes/ha, is the only way to achieve the targeted production.

The farming population in the State of Manipur is constituted by a substantial proportion of schedule tribes, scheduled castes and other socially underprivileged classes who can not contribute to the wealth of the State as per expectations and
remain where they were. Salim (1986) was of the opinion that caste factor still plays its own unique role in technological change and adoption of agricultural innovations. Since farming constitutes the primary source of income for these sections of people, the incorporation and application of production recommendations in their farming systems will act as prime mover to their economic growth and development.

It is, therefore, high time to pay attention to such socially isolated sections of the society through systematic studies about their occupational growth and examine whether these people have responded as per expectations with regard to the acceptance and application of the scientific production technologies and techniques in their farming systems. Such a study will enable to highlight the various personal and social factors which act as constraints and problems in the way of their acceptance and application resulting to lower yield. The study will also be of great value and paramount importance to the planners in their formulation of socio-economic programmes, to the extension workers in discharging their duties and responsibilities and finally to the management for an effective and efficient extension service for these clients. Keeping these views in mind, the present study was undertaken to investigate "The Extent of Adoption of Improved Rice Practices by the Scheduled Caste Farmers of Manipur" with the following specific objectives:
1. To examine the personal, socio-economic, psychological and communication characteristics of the farmers;

2. To assess the extent of adoption of improved rice practices and analyse its relationship with personal, socio-economic, psychological and communication characteristics of the farmers;

3. To determine the technological gap in selected rice practices and its relationship with characteristics of the farmers; and

4. To analyse the various constraints experienced by the farmers in the adoption of the improved rice practices.

Basic assumptions

1. That the extent of adoption of improved rice practices among scheduled caste farmers of Manipur is low and is less than the general farmers.

2. That the level of adoption is determined by a set of personal, socio-economic, psychological and communication characteristics of the farmers.

3. That the level of technological gap is high for all scheduled caste farmers of Manipur. That their low production can be attributed to their technological gap.
4. That the farmers encounter certain constraints in the adoption of improved rice practices.

Basic postulates

1. Accelerating the level of adoption of improved agricultural practices by the farmers is of vital importance in order to augment agricultural productivity and production so as to meet the present challenging demand arising from the rapid growth of population. The study of such factors influencing their adoption, the constraints hindering in their adoption and the technological gap are, therefore, imperative.

2. Since family continues to be the basic unit of production in rural India, and the key decision-maker in the family is the head of the family, such studies should be based on the families as units of study and the head of the family as the respondent of the investigation.

3. What a farmer required for his increased production is motivation, guidance and appropriate technology. Hence the significance lies in searching of problems and solutions to make the technologies suited for them so that they can be motivated through timely guidance to act in the desired direction.
Derivation of hypotheses

1. There is no difference in personal, socio-economic, psychological and communication characteristics among the three categories of farmers included in the study.

2. There is no difference in the adoption level of improved rice practices among them.

3. There is no relationship between the farmers' selected personal, socio-economic and psychological characteristics and the adoption of improved rice technology.

4. There is high level of adoption in all the three categories of farmers.

5. There is low level of technological gap for all the categories of farmers.

6. There is no relationship between the technological gap and the selected characteristics of the farmers.

7. There are constraints in the adoption of rice technology, which however, differ in their magnitude among them.

8. Farmers with large holding size have higher level of adoption than small and marginal farmers, since scientific agriculture involves heavy investment and risk.
Significance of the study

The study will reveal the real situation of the scheduled caste farmers in Manipur in relation to the adoption of improved rice technology and also will provide valuable information on the personal, socio-economic, psychological and communication characteristics responsible for the adoption and technological gap. The various constraints and problems that act as hindrances in the way of their adoption also assume another significance of the study. So the study will be of great value to scholars and researchers, planners, administrators and extension workers engaged in agriculture and rural development especially in Manipur.

Limitation of the study

The present study takes into account of only one important crop, namely rice crop thereby leaving other food crops. Although rice is the main crop, other crops are also factors of socio-economic development of the farmers. Moreover, the present study was confined to only one district, namely Imphal district. So the findings emanating from the study would be valid and applicable in areas where similar agro-climatic and socio-economic conditions prevail. Considerable care and thought have been exercised in making the variables as objective as possible. The information presented here were based on the views and opinions of the selected 200 scheduled caste farmers. The investigation heavily relies on these responses to be honest and true.
Organisation of the thesis

The dissertation has been divided into five chapters. The first chapter deals with the introduction, problem, objectives, basic assumptions, postulates, hypotheses, significance and limitation of the study. The second chapter is devoted to review of literature. The third chapter deals with research methodology. Findings and discussion of the study are presented in the fourth chapter. The last, that is, the fifth chapter consists of summary and conclusion of the study with suggestions for further research.

Definition of terms used in the study

Agricultural technology : Any improved practice(s) associated with cultivation of high yielding/improved varieties and cultivation of the variety itself.

Appropriate technology : It refers that the technology transferred adapts well to the local environment - socially and culturally.

Constraints : Any difficulty or problem experienced by the farmers while adopting or trying to adopt an improved practice(s) of rice cultivation resulting to non-adoptions or discontinuation of that practice.
Improved rice practices: It refers to the cultivation of HYV/improved varieties of rice and its associated package of practices.

Innovation: Any new idea/recommended practice associated with rice cultivation.

Recommended rice technology: The package of practices of rice cultivation as recommended by the State Department of Agriculture, Manipur, to farmers. It is used as a synonym of improved rice practices.

Scientific agriculture: This is used as a synonym of modern agricultural technology.

Technological change: This refers to a change in cultivation by the use of recommended technique(s) or innovation over traditional cultivation.

Technological gap: This refers to the gap between the recommended practice and its actual adoption.

Traditional agriculture: That type of agriculture where productivity is low and farmers use most of what they produce and the marketable surplus is negligible, if there is any.