PREFACE

Any practicable project for developing the sericulture sector needs to be based on well thought out strategies and such strategies in turn work well only under salubrious responsive policy climate. For historical reasons, the activity of sericulture started and flourished in parts of Andhra Pradesh bordering Karnataka. From there it spread into the bordering districts of Anantapur and Chittoor of Andhra Pradesh.

In the last few years, India has witnessed significant technological change in the sericulture sector. Technological change ensures avenue for the use and adoption of new and improved factors, techniques, methods, and know-how for more production of mulberry and cocoon yield in place of old methods of mulberry cultivation and silkworm rearing. Technology therefore plays a vital role in the form of increasing production as well as reducing cost and ultimately lowering the price per unit.

Many improved technologies were developed in sericulture at fast pace in the last three decades. But the adoption of technologies occurred desired pace only in case of few new technologies. There have been some constraints in the adoption of some technologies by the farmers. Similarly, it has been observed that wide gap exist between the performance of the new technologies at the research stations and at the farmer’s field. Though some farmers are able to achieve high yields with the help of new technologies, they seldom reach the levels attained at experiment stations attributing to constraints factors. The yield gaps have two components namely, yield gap I and yield gap II. The difference between the experimental station yield and potential farm yield is known as yield gap I. This is mainly due to the factors, which generally not transferable such as the environmental conditions and some built in component of technologies available at research stations. This component of the gaps, therefore, cannot be narrowed or is not exploitable. The second component of the yield gap or gap II corresponds to the difference between the potential farmers yield and actual farm yield, which is mainly due to differences in management practices. This gap exists as farmers use sub optimal doses of inputs and cultural practices. Gap II
is manageable and can be narrowed by deploying more efforts in research and extension services as well as governments appropriate intervention particularly on the institutional issues.

It is known that the full adoption of recommended technologies or practices or both would enhance yield and earnings of farmers to a great extent. However, many a time, farmers either do not adopt some technologies fully or prefer to adopt them partially due to various reasons. In the present investigation an attempt has been made to find out levels of adoption of some selected technologies of mulberry and silkworm rearing and also farmers perceptions for non-adoption of such technologies on the filed. The study therefore, also had the objectives to assess the extent of adoption of new technologies by farmers, to identify the major constraints for non-adoption of recommended mulberry and silkworm rearing technologies and to draw suggestions for policy perspectives for improving the rate of adoption to increase yield and income in the study region.

The strategy around the technology is in the farm of a package of programmes woven around High Yielding Varieties (HYVs) and other supporting inputs such as adequate irrigation, chemical fertilizers, plant protection chemicals in mulberry cultivation and disinfection and hygiene, egg incubation, chawki rearing, late age shoot rearing, new mountages etc, in silkworm rearing. The whole idea is to demonstrate how productivity can be raised without increasing the area under mulberry cultivation. Present investigation was carried out to assess the impact of new technologies on a few parameters with the identified farmers in the study area.

The stability and sustainability of agriculture enterprise highly depends on its economic viability vis-a-vis other competing crops. In Anantapur district agriculture is practiced by a large number of farmers along with the major agriculture and horticulture crops such as, groundnut, sunflower, sugarcane, paddy, mango, pomegranate in the area. As the major crops cultivated in the area are of annual in nature unlike mulberry, farmers followed different crops and crop rotations depending on the prevailing market rate of the produce, water availability, soil type, season and family requirement. Hence, the net income
earned by the farmers was worked for different crops and compared with sericulture.

Present investigation results are presented in four chapters. Chapter I deal with the details of cocoon production and its economics. Chapter II deal with the technology gaps and constraints in adoption of new technologies. Chapter III concerned with the analysis of impact of new technologies on mulberry and cocoon yield and chapter IV deal with the comparative economics of agriculture vis-a-vis other commercial crops.

Under the above circumstances, the present investigation is envisaged to study the present level of mulberry and rearing practices in Anantpur district of Andhra Pradesh. The study also helpful in understanding the levels of yield gaps in mulberry and cocoon production, adoption level of different new technologies, reasons for non-adoption of new technologies and the comparative economics of agriculture vis-à-vis other competitive crops. Hence, the present investigation great importance and will be highly helpful in increasing productivity of mulberry and silk cocoons in the study area in particular and in Andhra Pradesh in general.