

A study on the adoption of improved Sericulture technologies and success of Sericulture in Chittoor and Kadapa districts of Andhra Pradesh, India

M. BeulaPriyadarshini* and N.Vijaya Kumari

*Research Scholar, Department of Sericulture, Sri Padmavathi Mahila University,
Tirupati-517502, Chittoor (dt), AndhraPradesh, India.*

E-mail: dany.beula7@gmail.com, Co author : annievij28@gmail.com

Abstract

New technology development and its proper dissemination play a vital role for the development and success of any agriculture/farm based activity. Sericulture an age old tradition in the rural India has become a successful occupation for higher income at frequent interval since two to three decades. This is because of good number of innovative and highly productive technologies developed by the scientists of both central and state sector research institutes and many of them have reached the field successfully contributing for the success of sericulture not only in traditional state/districts but also in new areas. However, still there is a lacuna in the dissemination and adaptation of improved practices by the farmers who are the end users and is coming in the way of the spread and development of Sericulture both in acreage and in production and productivity besides quality. Hence the study is aimed to know the adoption level of improved sericulture technologies and influence of various socio-economic factors such as farmers education, experience, extension services etc., in two districts of Andhra Pradesh namely Chittoor and Kadapa. The present study revealed that single factor of education level or experience of the farmer or extension methods cannot bring in the desired level of technology adoption and realization of the better income by the farmers. Hence a bi model approach combining different extension strategies needs to be developed separately for traditional and new areas.

Keywords: Adoption, education, experience, Improved technologies, Sericulture

INTRODUCTION

Sericulture is an agro based industry providing lively hood to about seven million of rural people in India. As sericulture activities comprises of both on farm and nonfarm activities it provides immense employment potential for both men and women alike. Of the four major types of silks, namely, Mulberry, Tasar, Eri and Muga produced in India, Mulberry silk occupies the major portion and mainly produced in the three southern states namely Karnataka, Andhra Pradesh and Tamil Nadu and West Bengal in eastern part of the country. Because of new technology development and technology dissemination, number of modern sericulture activities are being implemented at the field level contributing to the higher silk output and in turn betterment of farmer's income. Andhra Pradesh the second largest producer of mulberry silk in the country lies in the southern part of Indian subcontinent and has congenial conditions for sericulture. In Andhra Pradesh Sericulture is one of the main farm activity next to Paddy, Sugar cane and Ground nut. Sericulture has become the main activity especially in the drought prone areas of two districts namely Chittoor and Ananthapur providing regular income to the rural people.

For the development and success of any agriculture/farm based activity, new technology development and its proper dissemination plays a major role. Since two to three decades, good number of innovative and highly productive technologies have been developed by the scientists of both central and state sector research institutes and many of them have reached the field successfully contributing for the success of sericulture not only in traditional state/districts but also in new areas. However, still there is a lacuna in the technology dissemination and adaptation of improved practices by the farmers who are the end users is coming in the way of the spread and development of Sericulture both in acreage and in production and productivity besides quality. Hence, the present study is conducted to know the gap between the adoption of improved sericulture practices and the role of associated factors contributing for the success and as well as its failure the enterprise in the two districts of Andhra Pradesh i.e. Chittoor and Kadapa.

METHODOLOGY

For the present study, five mandals in two districts namely Chittoor and Kadapa were chosen where sericulture is being practiced by good number of households. Total sample size selected was two hundred farmers at the rate of 100 farmers from each district. The survey was administered by personal face to face interview using a pre-structured questioner covering all activities of mulberry cultivation, cocoon production, socioeconomic conditions, education and knowledge level on the improved sericulture practices and the constraints being faced in adoption of improved technologies. Data was collected on the levels of adoption of various improved mulberry cultivation and cocoon production practices. After the data collection, a comparative analysis was made on the adoption percentage, income level farmer's educational status and their experience in sericulture. The constraints for non-adoption as expressed by the respondents was also recorded. Based in the

information collected, the education and Experience index were formulated as indicated follows:

The various attributes selected for study:

1. Education
2. Experience
3. Education and Experience

Grouping based on education level:

1. Graduation & Above - A group
2. Higher Secondary - B group
3. Primary - C group

Grouping Based on experience:

1. 10 years and above - High (H)
2. 5-10 years - Medium (B)
3. 0-5 years - Less (L)

Grouping Based on education and experience

Higher secondary and above + more than 5 years of experience-AH group

Up to higher secondary + up to 5 years of experience - BM group

RESULTS AND DISCUSSION:

The findings of the study and results of analysis are presented in the Table 1 and Table 2.

Table.1 Adoption percentage of improved Mulberry cultivation practices based on education and experience

S.No	Name of the group	Name of the District	
		Chittoor	Kadapa
I	Education		
1	A	83.33	78.0
2	B	77.6	74.61
3	C	67.23	73.43
II	Experience		
1	High (H)	79.9	83.78
2	Medium(M)	76.2	77.71
3	Less (L)	69.22	74.99
III	Education + Experience		
1	AH	88.9	54.9
2	BM	55.6	70.25

Table 2. Adoption percentage of improved Sericulture practices based on education and experience.

S.No	Name of the group	Name of the District	
		Chittoor	Kadapa
I	Education		
1	A	93.33	92.0
2	B	87.49	90.76
3	C	82.06	82.56
II	Experience		
1	High (H)	92.43	91.53
2	Medium(M)	90.28	88.19
3	Less (L)	83.01	79.0
III	Education + Experience		
1	AH	88.9	54.9
2	BM	55.6	70.25

Perusal of the Table1&2 indicates that the relation among the different attributes like education level, and length of experience (individually) and education and experience (combined) of the farmers on the adoption percentage of mulberry cultivation practices. Among all these three attributes, the farmers having more than 5 years of experience and at least higher secondary education are following many of the improved sericulture practices with 88.9 percentage of adoption (AH Group). The farmers who have better experience coupled with sufficient education can follow the improved technologies pertaining to both mulberry cultivation as well as silkworm rearing (AH group) and getting more income between Rs 45000 -50000 /acre/crop. Whereas the farmers who have higher education up to graduation (A Group) are following improved practices but the percentage of adaption is low (88.33) and their income level is somewhat less between Rs.35000-38000 compared to AH group. When we analysed the reasons for lesser income for A group compared to Group AH is because of insufficient experience.

Among the two districts, Chittoor district farmers are getting more income as it is traditional district and the farmers have more experience compared to Kadapa district farmers. In Kadapa district, the percentage of adoption is more among primary education level and less experienced farmers. The reasons are active participation of extension personnel in the new areas through various extension methods like demonstration, training to the farmers on the new technologies, field visits to progressive farmers' fields, research institutes etc., and Government incentives / subsidies.

Hence, the present study indicates that among the two districts, Chittoor and Kadapa, the percentage of adoption of improved sericulture practices is more among the farmers with at least higher secondary education and some experience (Group AH) compared to all other attributes like education alone(A) and experience (H) alone. The income levels of farmers of Chittoor district are more compared to Kadapa district as Chittoor district is a traditional sericulture area with farmers having long period of experience. But the adoption level is more among the farmers of Kadapa though it is a new area with less acreage. This can be attributed to intensive extension activities besides more incentives. The lacunae identified for lesser income in new areas may be due to lack of better marketing facilities with good price.

CONCLUSION

Based on the above study it can be concluded that single factor of education level or experience of the farmer or extension methods cannot bring in the desired level of technology adoption and realisation of the better income by the farmers. Hence a bi model approach combining different extension strategies needs to be developed separately for traditional and new areas. New areas need more intensive technology awareness, infrastructure facilities like marketing and other incentives for start-up tools. Whereas Traditional areas needs a programmes for change of mind set of the farmers towards new technological changes, more education level etc. For rapid spread of sericulture ensuring better income to the farmers, different approaches with group/community farming, farmers field schools, demonstrations and better access to the markets etc needs to be considered. As women are also involved in several sericulture practices techno economical empowerment of women is also of vital importance.

REFERENCES

- [1] Geetha, G.S.,Srinivasa,G, Jayaram, M.N.S.Iyengar and N.B VijayaPrakash (2001) “Socio-economic determinants of farmer oriented technology packages for Sericulture. A field study” Indian Journal of Sericulture, vol-40.No.1, 96-99.
- [2] Kumaresan P. and N.B Vijayaprakash, (2001) “ Economics of Sericulture VIS-À-VIS competing crops in Erode district of Tamilnadu”. Indian Journal of Sericulture, Vol.40, No.2, 142-146..
- [3] Mallikarjuna,B., H.M.Munikrishnappa, R.Gururaj and N.B.Vijay Prakash,(2006) “Assessment of new technologies of mulberry production and silkworm rearing in rain-fed area”, Indian journal of Sericulture, Vol-45, No,1, 1-6.
- [4] Singhvi, N.R. M.K.SethuRao, Y.R.Madhava Rao, M.N.S.Iyengar and R.K.Datta(1994) “Knowledge level and adoption of new sericulture

technology by farmers in Hunsur taluk, Mysore district, Karnataka state-
anevaluation”. Indian Journal of Sericulture , Vol.33, No.1, 48-55.

- [5] Sunil dutt,J., and R.R.chole (2002) “ A Study on adoption of Sericultural
practices by Sericulturists” , Indian Journal of Sericulture, February 2002,
vol.41, Page no: 1-5.