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Factors Affecting Farm Women in the Adoption of Environmental Friendly Agricultural Technologies

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ABSTRACT
Cotton is the world's most popular textile raw material and referred to as the "King of fibers" or "White gold". Worldwide cotton is grown in over 100 countries. The cotton is grows well under (warm) tropical climate, with long dry season (over three months) followed by sufficient rains. Production wise it supplies 18.00 per cent of the world cotton, about 4,59 million tons per year. Cotton crops stand for about 14-16.00 per cent of the total crops in India and 4,5 million farmers and 60 million people in total get their income from cotton. Women referred as 'invisible farmers' are the backbone of agricultural work force in our country. Be it in crop farming, animal husbandry, fisheries, forestry or any allied agricultural activities, women do the most tedious and strenuous tasks. That women play a significant and crucial role in agricultural development and allied fields including in the main crop production, livestock production, horticulture, post harvest operations, agro/ social forestry, fisheries, etc. Recognition of their crucial role in agriculture should not obscure the fact that farm women continue to be concerned with their primary functions as wives, mothers and homemakers. The study was conducted in Salem district of Tamil Nadu. A sample size of 120 small farm women was selected by using proportionate random sampling technique. Most of the farm women (92.18) expressed inadequacy of capital as the major socio-personal constraints followed by non-availability of credit (92.16) and poor economic status (90.11)
Keywords: *farm women, cotton farming, technology.*

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INTRODUCTION

Cotton is an important cash crop and source of livelihood. Cotton is the world's most popular textile raw material and referred to as the "King of fibers" or "White gold". Worldwide cotton is grown in over 100 countries. The cotton is grows well under (warm) tropical climate, with long dry season (over three months) followed by sufficient rains. Cotton accounts for nearly half of the world's textile production and is a vital part of many economies [5]. Cotton production is the main source of income for approximately 100 million families in over 70 countries. However, developing countries are struggling on the cotton market. Cotton is also the first crop in India and it has 9 million hectares of land under cotton making it the country with the largest area under cotton in the world, accounting for about one fourth of the world cotton area. Production wise it supplies 18.00 per cent of the world cotton, about 4,59 million tons per year. Cotton crops stand for about 14-16.00 per cent of the total crops in India and 4,5 million farmers and 60 million people in total get their income from cotton [1].

Women referred as 'invisible farmers' are the backbone of agricultural work force in our country. Be it in crop farming, animal husbandry, fisheries, forestry or any allied agricultural activities, women do the most tedious and strenuous tasks. Women have played and continue to play a key role in the conservation of basic life support systems such as land, water, flora and fauna. They have protected the health of the soil through organic recycling and promoted crop security through the maintenance of varietal diversity and genetic resistance. That women play a significant and crucial role in agricultural development and allied fields including in the main crop production, livestock production, horticulture, post harvest operations, agro/ social forestry, fisheries, etc.

MATERIAL AND METHODS

The study was conducted in Salem district of Tamil Nadu. A sample size of 120 small farm women was selected by using proportionate random sampling technique. The factors affecting experienced by the farm women in the adoption of suitability of cotton technologies was also identified and ranked. The required data were collected by personal interview utilising a well structured and pre-tested interview schedule. Besides that the group discussion and observations were also used for data collection. The collected data were tabulated and analysed using appropriate statistical tools viz., percentage analysis.

RESULTS AND DISCUSSIONS

Factor affecting experienced by the farm women in the adoption of suitability of cotton technologies. When suitability of technologies is introduced among the farm women for adoption, initially farm women face lot of difficulties in terms of understanding its concepts, developing a favourable attitude, getting the required inputs, suitability of technologies and ensuring market facilities. Adoption of particular suitable technology will take place only when farm women feel that the technology is suitable to their farming conditions. Moreover, any social science research will not be considered as complete, unless the constraints are taken into account.

Hence, this part deals with the factor affecting by the farm women in the adoption of suitability of technologies. Farmwomen were asked to express their affected factor individually. Further, the constraints were classified into five categories viz., socio-personal, economic, imfrastructural and technological constraints. The data were collected, processed and discussed in Table-1

Table-1. Factors affecting experienced by the farm women in the adoption of eco-friendly technologies

S. No	Constraints	Mean score	Rank
1.	**Socio–personal constraints**		
	(I) Lack of knowledge on technologies	89.92	III
	(II) Non –availability of labour	88.12	IV
	(III) Lack of experience	82.53	VI
	(IV) Lack of time	86.47	V
	(V) Poor economic status	90.11	II
	(VI) Inadequacy of capital	92.18	I
	(VII) Lack of motivational factors	80.50	VII
	(VIII) Manual weeding caused scratching and itching	78.16	VIII
2.	**Economic constraints**		
	(I) High cost of labour	80.12	IV
	(II) High cost of inputs	89.72	II
	(III) Uncertainty of price for the produce	79.12	V
	(IV) High cost of hired implements	85.33	III
	(V) Non –availability of credit	92.16	I
3.	**Infrastructural constraints**		
	(I) Lack of transport facilities	90.86	I
	(II) Erratic supply of electricity	88.53	III
	(III) Non –availability of inputs in time	89.16	II
	(IV) Lack of market facilities	73.92	VI
	(V) Poor extension service	84.53	IV
	(VI) Non –availability of implements	78.57	V
4.	**Technological constraints**		
	(I) Lack of suitable technologies	92.08	I
	(II) Poor storage facilities	73.92	III
	(III) Lack of technical skill in handling and use of various farm tools and machinery	78.57	II

Socio- personal constraints

Many social-personal constraints were reported by the women involved in cotton cultivation, of which inadequacy of capital (92.18) was recorded as the first important constraints followed by poor economic status (90.11), lack of knowledge (89.92), non-availability of labour (88.12), lack of time (86.47), lack of experience (82.53), lack of motivational factor (80.50) and manual weeding caused scratching and itching

(78.16) which secured rank from I to VIII. Basically the farm women belonged to small sized land holding with poor economic background. Further, they lacked sufficient knowledge on the application of weedicides, pesticides and fertilizers. Hence, majority of the respondents would have perceived the above mentioned constraints. This result is in line with the findings of Guna [3] who also reported that inadequacy of capital and lack of knowledge on technologies as the major constraints faced by the farm women in the adoption of paddy and black gram technologies.

Economic constraints

It is evident from Table-1, that most of the farm women (92.16) expressed non-availability of credit as the major constraints followed by high cost of inputs (89.72), high cost of hired implements (85.33), high cost of labour (80.12) and uncertainty of price for the produce (79.12) which were assigned rank from I to V. It may be due to limited credit facilities available to the farm women through the primary agricultural co-operative banks. The problem of labour scarcity emerged during peak agricultural operations. The farm women therefore had to hire labours at any cost demanded them, which often matched with the high wages provided in secondary and tertiary sector. These findings are in conformity with the findings of Shitu Adenipekun Gabriel [4] who also reported that non-availability of credit and high cost of labour as the major constraints faced by the respondents in the adoption of cotton technologies.

Infrastructural constraints

Among all the identified problems, lack of transport facilities was the major problem faced by an over whelming majority of the farm women (90.86) followed by non –availability of inputs in time (89.16), erratic supply of electricity (88.53), poor extension service (84.53), non-availability of implements (78.57) and lack of market facilities (73.92) which secured rank from I to VI. This is because of the difficulties in transporting the produce to distant place for marketing. These results are in conformity with the results of Guna (2016) who found that lack of market facilities were the major infrastructural constraint faced by the farm women in the adoption of technologies.

Technological constraints

From the Table-1, it could be seen that majority of them (92.08) expressed lack of suitable technologies for cotton farming as the serious technological constraints followed by lack of technical skill in handling and use of various farm tools and machinery (78.57) and poor storage facilities (73.92) as their technological constraints in the adoption of cotton technologies. Thus, it can be concluded that most of the technological constraints were related to non-availability of quality seeds, non-availability of timely plant protection measures and lack of suitable inter-cultivation implements as expressed by farm women. Arulraj [2] also reported that lack of suitable technologies as the major constraint expressed by the respondents in his study on technological needs of banana growers.

CONCLUSION

The problem of was identified inadequacy of capital as one of the major factors affecting by farm women. The supply system of eco-friendly inputs to the farm women by the government agencies need to be streamlined to ensure adequate and timely availability through multiple local distribution points. The farm women also expressed lack of market facilities as a major factors affecting. Hence, planners and policy makers may strengthen the existing marketing structure and improve their functioning which will enable the farm families to sell their eco-friendly produce at competitive price avoiding middlemen.

REFERENCES

1. Agarwal, O.P. (2007). Cotton Economy in India, World Cotton Research Conference – 4.
2. Arulraj, A. (2013). Technological Needs of Banana Growers of Cuddalore District, Unpublished M.Sc. (Ag.) Thesis, Annamalai University, Annamalai Nagar.
3. Guna, B. (2016). Role of Farm Women in the Transfer of Eco-friendly Technologies, Unpublished Ph.D. Thesis, Annamalai University, Annamalai Nagar.
4. Shitu Adenipekun Gabriel. (2014). Comparative Analysis on Precision Farming Technologies in Selected Crops of North Eastern Karnataka, Unpublished M.Sc. (Ag.) Thesis, University of Agricultural Sciences, Raichur.
5. WWF. (2013). Bomull – En vattenslukande gröda. http://www.wwf.se/vrtarbete/vtmarkerstvatten /vattenfotavtryck/1128210-bomull-1a-sida [2015-10-27].

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