

A Study on Constraints Faced by the Farmers in Adoption and Marketing of Extra Long Staple Cotton Production Technology

ABSTRACT

The present study was conducted to analyse the constraints faced by the farmers in adoption and marketing of ELS cotton production technology. The study was taken up in two blocks of Vellore district namely, Tirupattur and Kandhili blocks of Tamil Nadu. The sample size of 132 cotton growers was drawn on proportionate random sample method. The data were collected using a well-structured interview schedule and data were analysed using appropriate statistical analysis. The study revealed that less than two-thirds (62.87%) of the respondents faced the problem of labour crisis followed by transportation problem (57.57%).

Keywords: Constraints; Adoption; Marketing behaviour, Suggestions.

INTRODUCTION

Agriculture continues to be the most effective sector of our economy, as about 70.00 per cent of the population is engaged in agriculture and allied activities for their livelihood. Agriculture is not only an essential occupation of the people but also the way of life, culture and custom. Agriculture provides the principal means of livelihood for over 60 per cent of India's population.

Cotton is considered as "white gold" among the cultivated crops on account its importance in agricultural and industrial sectors. Cotton occupies a prominent position in Indian economy. It is the primary raw material for the vast domestic textile industry and makes a substantial contribution to the country's foreign exchange earnings. Cotton is the backbone of the textile industry, which consumes 59.00 per cent of the country's total fibre production.

The term 'Extra Long Staple' (ELS) cotton typically denotes a cotton fibre of extraordinary fibre length. The recognised industry standard for the minimum fibre length of

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29 an ELS fibre is 34.925 mm. This minimum length is significantly longer than traditional
30 varieties of cotton, known as upland cotton, where the staple length is average of 26-27 mm.
31 Along with the fibre length, ELS cotton is also recognised for their superior strength and
32 better uniformity.

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33 However, even with all the benefits of the ELS fibre characteristics and its apparent
34 desirability, it is grown only in limited quantities. ELS and LS (Long Staple) cotton represent
35 only about 3.00 per cent of the entire world's cotton production. The ELS cotton varieties are
36 specific in their needs to produce a successful crop. ELS cotton tend to be very vigorous
37 plants and if not managed will grow to be large plants with minimal fibre production.
38 Environmental conditions for ELS cotton are specific; they can be produced only in the
39 limited areas that suit the plant's needs for hot days and cold nights. All of these factors result
40 in higher production costs, with increased risks compared to upland cotton. This, in turn, is a
41 major limiting factor for the production of ELS cotton.

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42 With this background, the present study was designed and entitled "Constraints Faced
43 by the Farmers in Adoption and Marketing of ELS Cotton Production Technology. The
44 primary objective of this study is to find out the constraints faced by the cotton growers and
45 to suggest suitable strategies.

46 **METHODOLOGY**

47 The study was taken up in two blocks of Vellore district namely, Tirupattur and
48 Kandhili blocks. Four villages from the two blocks namely- Madapalli, Ponngulam,
49 Udayamputhur and Sevvathur with a sample size of 132 farmers were selected.
50 The data were collected using a well-structured interview schedule, and data were analysed
51 using appropriate statistical analysis.

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52 **FINDINGS AND DISCUSSION**

53 *Constraints faced by cotton growers*

54 A significant task of extension service is to get modern and improved technologies
55 adopted by the client system, the farmers. Farmers however sometimes find difficult to
56 continue the use of enhanced practices recommended. Hence the constraint analysis is
57 becoming one of the essential components of extensive research.

58 The constraints were asked through open-ended questions. The collected constraints were
 59 analysed and tabulated with the help of percentage analysis.

60 **Labour crisis:** labour crisis is a major issue which affects the overall production of cotton.
 61 Due to scarcity of labour and lack of skilled farmers, the global cultivation and harvesting of
 62 long staple cotton crop decreases.

63 **Difficulty in picking the bolls:** Under rainfed situation picking up cotton bolls are difficult.
 64 The best time to collect bolls is during pleasant seasons like summer mornings or in winter.

65 **Pests and diseases in cotton:** Despite sufficient awareness, the practice of IPM is not carried
 66 out in several cotton fields. Cotton leaf curl virus (CLCuV) is one of the significant biotic
 67 constraints which affects the production of crops. Lack of knowledge among farmers, or may
 68 be due to availability and standard bioagents degrades the overall output.

69 **Price fluctuations:** In the last 200 years or so cotton prices have seen sharp spikes probably
 70 four or five times. This is another most significant constraint affecting the production.
 71 Constant lowering and hiking of price affect the output.

72 **Involvement of middlemen:** Intermediaries plays a significant role in the marketing. Both
 73 the consumers and producers gain immensely from the roles of intermediaries, who ensures
 74 that there is a seamless flow of goods in and also the availability of crop. Unavailability of
 75 proficient middlemen pauses the marketing of crops which on simultaneously decreases the
 76 production.

77 **Partial payment:** Static payments always slowdowns the overall output of the production.
 78 Proper payments from the management are always needed to balance the harvesting process.

79 **Transportation problem:** Transportation and transport cost plays the key role in recognising
 80 the link between accessibility and agricultural development. Proficient transport system is
 81 necessary to assure a proper balance between agriculture and marketing.

83 **Table 1. Constraints faced by cotton growers in the adoption of ELS cotton production**
 84 **technologies**

(n=132)*

S.No.	Constraints	Number	Per cent	Rank
1	Labour crisis	83	62.87	I
2	Difficulty in picking the bolls	56	42.42	III
3	Pests and diseases in cotton	45	34.09	IV
4	Price fluctuations	33	25.00	V

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S.No.	Constraints	Number	Per cent	Rank
5	Involvement of middlemen	22	16.66	VIII
6	Partial payment	30	24.24	VI
7	Transportation problem	76	57.57	II
8	Bolls don't burst well	28	21.21	VII

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***Multiple responses obtained**

87 From the above Table 1 it was observed that less than two-thirds (62.87%) of the respondents
 88 faced labour problem while cultivation and harvesting followed by transportation problem
 89 (57.57%), difficulty in picking those bolls (42.42%), pests and disease infestation in cotton
 90 (34.09%), price fluctuations (25.00%), partial payment (24.24%), bolls don't burst well
 91 (21.21%) and involvement of middlemen (16.66%).

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93 ***Suggestions to overcome the constraints***

94 Suggestions offered by the farmers should serve as an eye-opener to those persons who adopt
 95 the recommended technologies. So, probable implications were encountered to overcome the
 96 limitations faced by the cotton growers and presented in Table 2.

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Table 2. Suggestions to overcome the constraints

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(n=132)*

S.No.	Suggestions	Number	Per cent
1	Creating awareness on cotton technologies through organizing more training programmes	42	31.81
2	Price stabilization	38	28.78
3	Involvement of middlemen should be avoided	20	15.15
4	Full payment can be credited	35	26.51
5	Vehicles can be provided by the government officials	67	50.75
6	Viable pest and disease resistant hybrids may be introduced	22	16.66

99

***Multiple responses obtained**

100 The above Table 2 shows the suitable suggestions to the farmers who are facing the
101 constraints. About half (50.75%) of the respondents gave suggestions that vehicles can be
102 provided by government officials followed by to create awareness on cotton technologies
103 through training programmes (31.81%), price stabilization (28.78%), full payment can be
104 credited (26.51%), viable pests and disease resistant hybrids may be introduced (16.66%) and
105 involvement of middlemen should be avoided (15.15%).

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109 CONCLUSION

110 The study revealed that majority of them faced the problem of labour crisis,
111 transportation problem and pests and disease attack. The study indicated new
112 agricultural machineries may be popularised among farmers and farmers must be
113 trained in handling those implements to overcome the problem of labour scarcity.
114 Further viable pests and disease resistant hybrids can be introduced to reduce the loss
115 caused by pests and disease incidences. The government officials can provide vehicle
116 for transportation.

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