

Constraints of Bt Cotton Growers

COTTON (*Gossypium* sp.) the white gold and king of fibers is cultivated in tropical and subtropical regions of more than 70 countries across the world. India is the second largest cotton producer and consumer in the world. In India, Bt cotton occupies an area of 11.73 million ha with a production of 39.00 million bales and productivity of 565 kg/ha in 2014-15. In Karnataka, Bt cotton occupies an area of 7.60 lakh ha with a production of 26.90 lakh bales and a productivity of 626 kg/ha. The increase in productivity from 247 kg/ha in 2005-06 to 626 kg/ha in 2014-15 is mainly due increased cultivation of Bt cotton (Anon., 2014). Though the farmers are adopting the Bt cotton, they are facing various constraints. Therefore, the present study was carried out to elicit the constraints faced by the Bt cotton growers.

The present study was conducted purposively in two taluks of Belagavi district. Three villages from each taluk were selected based on the criterion of maximum area under Bt cotton. From each village, a list of Bt cotton growers was prepared with the help of Agricultural Assistants and 20 respondents from each village were selected by using simple random technique thus making a total sample of 120. Data were collected by using structured pre-tested interview schedule. Constraints faced by the Bt cotton growers were classified into three categories namely production, financial and marketing. The responses were documented as 'severe', 'moderate' and 'not at all', assigning score of 3, 2 and 1, respectively. Score obtained for each constraint was ranked.

The data in Table I revealed that high cost of plant protection chemicals (I rank), high cost of seed material (II rank) and non-availability of technical guidance (III rank) were the major production constraints by Bt cotton growers in order of priority. Other constraints faced by the Bt cotton growers was the non-availability of technical guidance. These findings are in agreement with the findings of Varadaraju *et al.* (2009), Basavaraj Gundappagol (2014) and Vinayak Narayan Nayak (2014).

With regard to the financial constraints, Bt cotton growers faced were inadequate credit (I rank) and

inadequate subsidy (II rank). Most of the respondents felt that the quantum of loan was not sufficient to take up Bt cotton cultivation. Inadequate subsidy was an other major financial constraints faced by the Bt cotton growers. As the subsidies were limited in number and most of the respondents were not able to get the subsidies. With respect to high interest rate on loan, the respondents felt that interest rate on loan should be minimized. These findings are in agreement with the findings of Madhu (2010).

TABLE I
Constraints experienced and suggestions offered by Bt cotton growers (n=120)

Constraints and suggestions	Score	Rank
I. Constraints		
<i>A. Production constraints</i>		
High cost of plant protection chemicals	333	I
High cost of seed material	304	II
Non availability of technical guidance	296	III
High cost of fertilizers	291	IV
High diseases incidence	246	V
Increased pest incidence	242	VI
Non availability of irrigation water	238	VII
Non availability of Bio fertilizers	218	VIII
Scarcity of labour	208	IX
Non availability of loan	202	X
Non availability of seed in time	200	XI
Non availability of agricultural implement	194	XII
Non availability of sowing implement on time	185	XIII
Non availability of FYM/Compost	179	XIV
<i>B. Financial constraints</i>		
Inadequate credit	272	I
Inadequate subsidy	246	II
High interest rate on loan	214	III
Non availability of credit in time and insufficient	211	IV
Insufficient repayment time	206	V

Constraints and Suggestions	Score	Rank
C. Marketing constraints		
Lack of market information	331	I
Delayed cash payment	236	II
Poor transport facilities	229	III
Lack of storage facilities	221	IV
Improper weighing	217	V
High transportation charges	216	VI
Exploitation by middlemen	215	VII
High commission rates	208	VIII
Distant location of market	203	IX
Non-availability of regulated market	202	X
Complexity of payment	182	XI
II. Suggestions to overcome constraints		
Providing timely market information	323	I
Inputs should be made available at cheaper rate	309	II
Supply of power/electricity continuously	307	III
Quality seeds should be made available at affordable price	294	IV
Fixing of minimum support price	285	V
Establish demonstration plots in the locality	278	VI
Promote contract farming	241	VII
Assured irrigation facility	238	VIII
Extension personnel should visit farm once in fortnight during crop season	224	IX
Encourage the cultivation of pigmented cotton	209	X
Credit should be made available at cheaper interest rate	199	XI
Expansion of storage facility	192	XII
Create awareness on cotton picking machine	181	XIII

The lack of market information (I rank), delayed cash payment (II rank) and poor transport facilities (III rank) were the major marketing constraints faced by Bt cotton growers. These findings are in consonance with the findings of Varadaraju *et al.* (2009).

Further, it is evident from the Table I that the major suggestions given by the Bt cotton growers were provide timely market information (I rank), inputs be made available at cheaper rate (II rank) and continuous supply of power / electricity (III rank).

The findings of the study revealed that majority of Bt cotton growers have faced the constraints of high cost of inputs, inadequate credit and lack of market information. Major suggestions were to provide timely market information, inputs be made available at cheaper rate and continuous supply of power/electricity. Hence, the developmental departments and concerned organizations should minimize the inputs cost, provide adequate credit and market information to the Bt cotton growers for enhancing the cotton production.

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