



Attitude of Costomers Towards Sustainable Cotton Production

KEYWORDS

Customers, Sustainable Cotton Production & Attitude

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ABSTRACT Cotton is an important agricultural commodity, both globally as well as domestically in many developing and underdeveloped countries. The environmental impacts associated with cotton production, such as soil and water pollution, are increasingly coming into focus and reiterating the need for sustainable production systems. In these aspects customers play a significant role in promoting sustainable cotton production. The major objective of this paper is to study the attitude of customers towards sustainable cotton production. Attitude towards sustainable cotton production scale was developed by researcher to collect the data. Simple random technique has been used to select 212 customers from different parts of India. The findings of the study revealed that 146% of customers were undecided in their attitude, 44% of the customers shows positive attitude and 22% of them showed unfavorable attitude. This paper suggests few implications to enhance attitude of costumers towards sustainable cotton production.

Introduction

Cotton is an important agricultural commodity, both globally as well as domestically. In many developing and underdeveloped countries, cotton exports are not only a source of vital foreign exchange earnings, but also account for a substantial proportion of their GDP and tax income, leading to significant economic and social development.

About 70% of the global cotton production comes from 4 countries, which include China (27%), India (22%), USA (13%) and Pakistan (8%). In the current year 2011-12, world cotton production is expected to rise by 7% to 26.7 million MT over last year (being the largest crop since 2004/05). The production increase will be driven primarily by China, followed by India and Pakistan. According to the USDA estimates, China's production is expected to rise by 8% to 7.2 million MT, India's by 6% to 5.9 million MT and Pakistan's by 17% to 2.2 million MT in 2011-2012.

India is a major producer of cotton and is also the 2nd largest exporter after the USA. It accounts for around 59% share in the raw material consumption basket of the Indian textile industry. Thus, cotton plays a major role in sustaining the livelihood of an estimated 5.8 million cotton farmers and about 40-50 million people engaged in related activities, such as cotton processing and trade. India has the largest cotton cultivated area, which constitutes about 30% of the global cotton area. India's cotton production has increased at a CAGR of 8.5% from 2003 to 2010. In 2001, India was a net importer of cotton. Within 7 years, five million Indian cotton farmers have made India the world's second largest producer and second largest exporter of cotton (ahead of USA, behind China), by doubling India's cotton production.

Globally, demand for cotton has led to more than threefold increase in its production since 1950s. However, this increase in production has been achieved through intense input application, use of which has most often overlooked environmental impacts. Some of these unsustainable production practices include indiscriminate use of pesticides and fertilizers, inefficient use of irrigated water, with no regard to water quality or water use. Agriculture accounts for 83% of total water usage.

While cotton is a water intensive crop, it's the quality of the water that is most affected by its cultivation, due to leaching and run off chemicals in ground and surface water. These environmental impacts associated with cotton production are increasingly coming into focus and reiterating the need for sustainable production systems.

Accelerated demand for cotton, globally, has led to more than threefold increase in its production since 1950s. This increase in production has been achieved through intense input application, use of which has most often overlooked environmental impacts. Some of these unsustainable production practices include indiscriminate use of pesticides and fertilizers, extensive use of irrigated water, with no regard to water quantity and quality, use of applications that contribute to soil erosion, and an unbalanced (quantity, time of use) use of resources in some areas.

Need and Rationale for the study:

The environmental impacts associated with cotton production, such as soil and water pollution, are increasingly coming into focus and reiterating the need for sustainable production systems. The United Nations defines 'Sustainable development' as development that meets the needs of the present, without compromising the ability of future generations to meet their own needs'. The basic premises of this definition are supported by three pillars of sustainable development economic sustainability, environmental protection, and social security. In these aspects it is also important to know the customers view of sustainable cotton production because ultimately customers are target population for sustainable cotton production.

This paper provides an overview of customers' attitude towards sustainable cotton production in India.

Objectives of the study:

1. To study the attitude of customers towards sustainable cotton production.
2. To study the difference in the level of attitude of customers towards sustainable cotton production with respect to a) gender b) employment status.

Hypotheses of the Study:

1. Hypothesis 1: There is no significant difference in the attitude of customers towards cotton production with respect to gender.
2. Hypothesis 2: There is no significant difference in the attitude of customers towards cotton production with respect to employment status.

Sample of the study:

In the present study Simple random technique has been used to select 212 customers from different parts of India.

Tool used for the study:

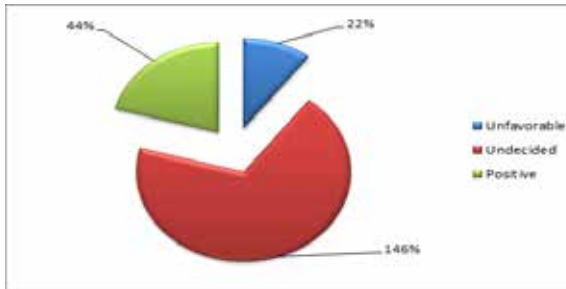
Attitude towards sustainable cotton production scale was developed and used to collect the data.

Findings:

Objective 1: To study the attitude of customers towards sustainable cotton production.

Table 1 shows the attitude of Customers towards Sustainable cotton production.

Category	Frequencies	Percentage
Unfavourable	22	10.4
Undecided	146	68.9
Positive	44	20.8
Total	212	100.0



Graph 1: Shows the attitude of Customers towards Sustainable cotton production

It is found from the above table and graph that 146% of customers were undecided in their attitude, 44% of the customers shows positive attitude and 22% of them showed unfavorable attitude. In short, it is clear that the majority of the customers were undecided in their attitude towards computer application.

Objective 2: To study the difference in the level of attitude of customers towards sustainable cotton production with respect to a) gender b) employment status
Hypothesis 1

There is no significant difference in the attitude of customers towards cotton production with respect to gender. To test the hypothesis 1, percentage, mean standard deviation and t-value was calculated.

Table 2 shows the number and percentage of total male and female Customers towards sustainable cotton production classified under unfavourable, undecided and positive attitude

Attitude	Teachers		Total
	Male	Female	
Unfavourable	10	12	22
Undecided	94	52	146
Positive	32	12	44
Total	136	76	212

From the table, it can be viewed that 10% of male and 12% of female had an unfavorable attitude towards Sustainable cotton production, whereas 94% of male and 52%

of female were had an undecided attitude, further 32% of male and 12% of female were in positive attitude categories. More details regarding the attitudinal difference with reference to gender is presented in the following table.

Table 3 shows the gender, number, mean, S.D. and t-value of Customers attitude towards Sustainable cotton Production.

Gender	N	Mean	Std. Deviation	t-value	Significant / Not Significant
Male	136	35.8529	3.02711	2.956	NS
Female	76	34.5526	3.09578		

From the above table it is evident that the obtained t-value is less than the table value (1.64) at 0.05 levels. Hence the null hypothesis is accepted and the alternative hypothesis is rejected. This means there is no difference between the mean scores of male and female Customers attitude with respect to Sustainable Cotton Production.

Hypothesis 3

There is no significant difference in the attitude of customers towards cotton production with respect to employment status.

To test the hypothesis 3, percentage, mean, standard deviation and t-value were calculated.

Table 4 shows the number and percentage of Self-employed, Employed, and Students Customers are classified under unfavourable, undecided and positive attitude.

Qualification	Self-employed	employed	student	Total
Unfavourable	2	20	0	22
Undecided	30	84	32	146
Positive	6	24	14	44
Total	38	128	46	212

From the above table, we can describe that 2% of self-employed, 20% of employed customers and 0% of students come under unfavourable attitude and 30% of self-employed customers, 84% of employed customers and 32% of Student customers come under undecided attitude classification, whereas 6% of Self-employed customers, 24% employed customers and 14% of Student customers come under positive attitude. The detailed description regarding qualification is given below.

In order to test the hypothesis 3, one way ANOVA test was applied and the results are presented in the following table.

Table 5 shows one way ANOVA for the mean scores of Self-employed, Employed, and Students Customers attitude with respect to Sustainable cotton production.

Source of variation	Degrees of freedom	Sum of squares	Mean sum of squares	F-value	Significant / Not Significant
Between groups	69.716	2	34.858	3.701	S*
Within groups	1968.568	209	9.419		
Total	2038.283	211			

From the above table it is evident that the calculated value of F is 3.701 which is greater than table value at 0.05 level. Hence the null hypothesis is rejected and the alternative hypothesis is accepted. This means there is a sig-

nificant difference in the attitude of Self-employed, Em-
ployed, and Students Customers attitude with respect to
Sustainable cotton production.

If F is significant, to know the pair wise comparison of type
of employment with respect to attitude towards Sustain-
able cotton production. Tukeys HSD post hoc procedures
were followed and the results are presented in the follow-
ing table.

**Table 6: Pair wise comparison of employment status
with respect to attitude towards Sustainable cotton pro-
duction by Tukeys HSD post hoc procedure**

Variable	Type of school	Self-em- ployed	Em- ployed	Student
Sustainable cotton pro- duction	Self-em- ployed	-	.42105	1.01373
	Em- ployed	.42105	-	1.43478*
	Student	1.01373	1.43478*	-

From the above table, it can be inferred that the mean dif-
ference between the attitude towards Sustainable cotton
production of employed customers and student customer
is significant.

Implications of the Study

- 146% of customers were undecided in their attitude
towards sustainable cotton. This is an indication that
majority of the customers are not aware of sustainable
cotton and cotton products. In this regard the brands
and advertising companies should provide more em-
phasis on sustainable cotton products and in turn
provide awareness to customers. Further by creating
awareness among the customers it will help in better
marketing of sustainable cotton products.
- Cotton Corporation of India (CCI) should make man-
datory for brands by using sustainable cotton in their
production, which inturn will help in building aware-
ness among general public.

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