

# Economic distress of Cotton Farmers in India

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## Introduction

India is mainly an agricultural country. Agriculture is the most important occupation for most of the Indian families. In India, agriculture contributes about sixteen percent (16%) of total GDP. Main two crops are found in India namely Rabi and khariff. These crops are further categorized as cash crops (Cotton, Groundnut, sugarcane) and basic crops (rice, wheat, and gram). India is the third largest producer of cotton in the world after China and USA. In India cotton is grown in three zones which are as follows

- a) Northern zone- Punjab, Haryana and Rajasthan.
- b) Central zone- Gujarat, Maharashtra and Madhya Pradesh. <sup>1</sup>
- c) Southern zone - Andhra Pradesh, Tamil Nadu and Karnataka.

The major producers of cotton in India are Haryana, Punjab, Gujarat and Maharashtra. The last year, whitefly have destroyed two third of the cotton in Punjab. Punjab has nearly 12 lakh acres of land which was used for cotton cultivation of BT cotton type. This type of cotton resists some of the pests like Bollworm. The farmers raised the loan from banks to grow cotton crop. Most of the farmers had also taken land on lease to grow cotton crops. The Peasantry economy of India is already into debt trap. The main focus of this paper is to show the economic condition of farmers and Farmer's Distress. Cotton growing farmers facing many problems like low price and productivity, damages due to rain fall, leaf diseases, weed infestation, lack of knowledge, pink bollworm, whitefly and other environmental factors. These factors are responsible for distress and farmers weak situation in India.

## Objective

- To Study Financial Performance of cotton growing farmers.
- To study the Factors associated with distress of cotton growing farmers.

<sup>1</sup> This information is retrieved on dated August 14,2016 from [cotcorp.gov.in/national-cotton.aspx](http://cotcorp.gov.in/national-cotton.aspx)

## Review of Literature

### Economic Analysis of cotton

**Kumar et al (2016)** conducted a study on Hisar district in Haryana state to know the economic aspect of Bt cotton and non Bt varieties under natural or unsprayed conditions. They Found, used of hybrid cotton was increasing year by year and area under the crop was increasing year by year. Farmers were growing more hybrids but some farmers were still stuck with to their Traditional growing of cotton deshi varieties. Bt cotton needed one or two sprays and deshi needed five to six, this difference and their expectations attract to adopt Bt varieties cotton.

**Singh et al. (2016)** conducted a study of a sample village in Hissar and Sirsa district of Haryana to find out the economics of Bt cotton cultivation. They concluded Bt cotton has increased the yield up to 50 per cent and reduced the sprays cost half and they also showed Bt was reduced the expenses of sprays.

**Singh et al. (2016)** examined the impact of socio economic and institutional factors to adopting IPM practices in paddy and cotton .Imperial model, regression model showing technology awareness to help the farmers' capacity on decision making and finding appropriate solutions.

**Yadav et al. (2016)** conducted a study concerned with inter gender work participation in cotton cultivation in districts Fatehabad and Sirsa of Haryana .To examine the labour use pattern in cotton cultivation and inter gender participation in cotton cultivation .He concluded the majority of respondents were from the upper caste, most of female respondents were illiterate and male respondents were educated. The farming was main occupation of male and engaged in land preparation .sowing, mechanical weeding, plant protecting, fumigation and marketing. Majority of the female respondent were involved in manual weeding, picking bolls, stalk harvesting and stooage. All this showed participation of male and female in cotton cultivation.

**Odedokun et al. (2015)** conducted a study Concerned with economic analysis of cotton production Zamfara state, Nigeria. To know the role of socio economic characteristics of cotton farmer, pattern of resource utilization and state wise profit of cotton production were the main objectives of their study. The author covered 220farmersby Questionnaire. They concluded that input utilization, socio economic

characteristics and production technology directly affect cotton productivity .Net farmer's income indicated that cotton business was profitable in studied area.

**Singh et al. (2015)** conducted a study on economic analysis of Bt cotton in Sirsa district of Haryana. To know the economics of Bt cotton cultivation. The author covered 120 farmers for getting information from 4 villages. They asserted there was wide gap between potential yield and actual yield. This gap showed profit of cotton farmers.

**Godara et al. (2015)** Examined price acreage response of American cotton in Haryana .To know the growth, behavior of area, yield of American cotton and its influential factor price .Correlation was used as statistical tools. It was observed that the growth performance of the area, yield and production of American cotton was positive during all period .There was positive correlation between farm harvest price and area of American cotton.

**Sauel et al. (2015)** reviewed two issues; first showed the state wise cotton scenario of cotton production and second export composition and competitiveness. In this paper author calculated revealed comparative advantages, export performance ratio and revealed symmetric comparative advantages as methodology. They concluded the production of Indian economy increased and production and productivity. Some states Karnataka, Punjab and Tamil Nadu have declined. The poor cotton quality was major constraints in cotton export.

**Narmadha and Algumani (2015)** examine the impact of WTO on cotton in India and growth rate of area, Production and productivity. Secondary data based study , compound growth rate and student T test used as a statistical tools .they concluded that post period of WTO showed a significant increased area, production, productivity and registered high growth .Pre period showed the import and export of cotton significantly increased and concluded conditions were favorable in Indian cotton industry.

**Kumar (2015)** conducted a study showed trend of production in Haryana (1966-2012) and examined to cotton trend in Haryana and to know the temporal and spatial variation in the production of cotton .This study was Secondary data based and they divided the period in three parts .they asserted 1966-69 American production more than 60% but it increased 90% and the production of desi cotton decreased

same in second period. But in third period 2009-2012 bhiwani and jind both district have more than 96% production of American cotton or below 4% of desi cotton.

**Mohanasunderm (2015)** observed the cultivation of cotton in India, to showed the problems faced and factor affected the cotton cultivation .the main finding showed that various problem specially the shortage of labour on the time of cultivation and harvesting .He suggested government must take steps to remove the labour shortage .

**Agerwal et al. (2015)** examine to analysis constraints in cotton production at the field level and to find the way to reduction yield gap .they asserted increased the production increased when constraints limited in studied area.

**Alam et al. (2013)** described the socio economic characteristics of cotton farmers, profitability level of cotton production and constraints associated with cotton production in Tarabastate,Nigeria. The data was collected from 100 cotton farmers. They found farmers of studied area were diverse socio economic characteristics and the major constraints were studied area price of seed cotton, high pest, disease decreased the profitability.

**Kavitha et al. (2013)** conducted a study to examine the technology efficiency and cost returns under the organic and Bt farming of cotton in erode district of Tamil Nadu. They used FRONTIR model and cobb Douglas function as a statistical tools. They asserted that no significant difference in yield two farming situations. It was also founded the cost of cultivation of organic farmers was lower than the Bt farmers by 4 percent due to less expenses seed.

**Jagannath and Mali (2013)** conducted a study on the basis of primary data to analyzed the to check the status of cotton as a cash crop in present scenario ,to study the satisfaction of cotton growing farmers towards cotton crop production and to study the suggestions and expectation of cotton growing farmers to improve the present cotton condition. The finding of this study that 97% farmers refused cotton as a cash crop because problem such as price, Finance availability, and quality farm inputs showed the wide gap in present marketing system. Moreover 95% farmers were not satisfied with cultivation of cotton crop. All the expectations of cotton growing farmers were concentrating on good market price for cotton crop which helped them better financial condition.

**Samuel et al. (2013)** studied the production and productivity of cotton in India, State wise growth of production and constraints in export of cotton with especially to quality parameters. They asserted production and productivity of cotton showed the positive growth while area growth in India negative due to lack of proper cotton testing in India. Poor quality of cotton was the major constraints in India.

**Parshanth et al. (2012)** conducted a study to knowledge levels of organic farmers and conventional farmers in Karimnagar district of Andhra state. The author covered 100 farmers, 50 of conventional and remaining organic farmers as primary data. They founded the organic farmers knowledge level high than the conventional farmers.

**Ali et al. (2012)** examined the economic analysis of input trend in cotton production process in Pakistan, to study the overtime cost of input trend in cotton production process and to find out the cost benefit analysis. They concluded that cost benefit analysis showed the input cost has increased and the negative returns indicate cost of inputs have increased. The correlation matrix showed the positive correlation among the input variables.

**Brookshire and Norum (2011)** examined the effect on student knowledge, skill and attitude regarding to cotton. They observed that conduct three phase curricular activity like summit, pre summit post summit and writing competition. They asserted that summit was way of given new knowledge, skills and attitude. Pre summit over all positive summit towards sustainable development organization and post summit knowledge improved the significantly improved towards the cotton. Essay writing showed they have limited knowledge such kind of topics.

**Kuruganti (2009)** studied Bt cotton not increased the yield. Average growth, yield and production area calculated as a methodology. He asserted the yield increased from intensive agriculture model and not improve the living hood of farmers.

**Parsad (1999)** conducted a study on suicide death and quality of Indian cotton in Andhra. The main finding of in this paper was to show the reason for suicide due to losses of cotton farmers and concluded that due to reduction of cotton and disease were the main reason for farmers death and cotton quality of Indian cotton was no so good which was earlier.

## Trends of cotton farmers suicides in India

**Khinda and Husna (2016)** make an attempt to show the main reason of farmers' suicides and crop failure. Situation showed through pie chart and graph .They concluded that due to losses in cotton crop farmers become insolvent and committed suicide in Haryana and Punjab.

**Gruere and Sengupta (2016)** described with concerned Bt cotton and farmers suicides in India: An Evidence based Assessment and studied Bt cotton not a main factor behind the farmers suicides. He measured Bt cotton technology has been very effective over all India. This study covered five years 2002-2007. The main finding indicates in some parts of states dry condition and irrigated system pushed farmers in Financial Distress used of Bt cotton seeds .But Bt cotton was not only responsible factor of farmers suicides it was one of them like weather ,Marketing constraints.

**Gutierrez et al. (2015)** in this paper studied to examine yield, weather and suicides of Indian cotton farmers. Physiologically based model was used as a tool. They concluded Bt cotton may be economic in irrigated area and cost of Bt cotton increased the risk of farmers and losses due to insolvency, low yield cotton farmers forced committed suicides.

**Mittra and Shroff (2007)** conducted a study to examine the bases reasons of farmer's suicides in Maharashtra. They observed the very important observation that farmer's suicides rates were high where cotton was important crop .the major finding of this paper farmer's suicides main reason was crop loss.

**Mishra (2006)** conducted a study concerned with Cotton farmers suicides in Maharashtra to know the suicides scenario at micro level .He observed Micro level analysis based on field survey in the districts of Wardha,Washim and Yavatmal. Cotton was the major crop which grown up 33% Wardha, 21%in Washim and46% area of Yavatmal.Due to rainfall shortage, price and yield in selected districts socked the cotton farmers. Full fill their losses taken personal loans from money lender and cooperative banks. These states were top in farmer's suicides during the studied time and risk factor at micro level clearly indicated that indebted ,distortion of economic status ,conflict with other family members, crop failure ,burden of daughter/sisters marriage ,decline a social position, dispute , health problems ,recent death ,history in suicide in family were also large socio economic factors. The above factors were responsible for farmer suicides.

**Mohanty and Shroff (2004)** studied farmers' suicides in Maharashtra. In this paper showed farmer's situation and farmer Suicides basic reason in cotton crop. They concluded after long crop loss farmers take loan from moneylenders. The new crop maximum portion of agriculture income goes in repaying their loans. These type of condition for also responsible for suicides and indebtedness.

**Shameem (1998)** conducted a study concerned with suicides of cotton farmers in Andhra Pradesh .He studied causes behind suicides of cotton farmers in Andhra Pradesh .He found the various factors or reasons for suicides like adverse rain fall and low yield ,adverse price ,rise in cost of cotton and bad position of co-operative credit. He concluded the deep stress due to inaccessibility of institutional credit and dependence on moneylender at high rate of interest was the main behind the farmer's suicides in studied area.

## Conclusion:

After reading above Literature it can be concluded that cotton played very important role in Indian economy .But the Area of cotton production and productivities reduced year by year and so the farmers got confused and distressed. The main reason for reduction the production and productivity were Environment factors, Seeds Varieties and diseases. Last few years farmer's losses and farmers suicides rates increased. But we cannot identify a single factor which is responsible for farmer's loose, indebtedness and suicides.

## RESEARCH GAP

- There is no official record kept by government regarding labour working in cotton fields at macro level so it is required to conduct large number of micro level studies to understand the phenomenon.
- The problems of cotton growing farmers are categorised well in terms of social, economic and psychological etc. in existing literature.
- In previous studies the impact of diseases on cotton production is shown well but the economic and social impact on life of farmer due to these diseases and resulting reduced production has not been analysed in detail.
- Impact of decreasing yield and production on labourers is not discussed properly.

## References

- Agarwal, I., A.R.Redd, Singh, S., & M.Yelker, S. (2015). Yield gap and constraints analysis of cotton in India. *J. Cotton Res. Dev.* , 29 (2), 333-338.
- Bose, A. (2000). From Population to Pests in Punjab: American Boll Worm and Suicides in Cotton Belt. *Economic and Political Weekly* , 35 (38), 3375-3378.
- Godara, A. S., Poonia, U., Bishnoi, D. K., & Prakash, S. (2015). Prices acreage response of American cotton in Haryana. *Indian J. Agric. Res.* , 49 (2), 142-147.
- Gulab Singh, Singh, G., Singh, P., K.S.Suhag, & Singh, B. (2015). An economic analysis of Bt cotton in Sirsa district of Haryana. *J. Cotton Res* , 29 (1), 163-166.
- Herring, R. J., & Gold, A. G. (2005). Biology and Utility, Meanings and Histories. *Economic and Political Weekly* , 40 (38), 4117-4120.
- Kapadia, H. J., Butani, A. M., & Khandpara, M. D. (2015). Efficacy of taqat against alternaria leaf spot disease of cotton. *J. Cotton Res. Dev* , 29 (2), 305-309.
- Madhu, G., Srinivasulu, K., Rani, P. P., & Rao, A. S. (2014). Economics of rainfed Bt cotton as influenced by sequential application. *J. Cotton Res. Dev* , 28 (2), 257-259.
- Mishra, S. (2006). Farmers' Suicides in Maharashtra. *Economic and Political Weekly* , 41 (16), 1538-1545.
- Mitra, S., & Shroff, S. (2007). Farmers' Suicides in Maharashtra. *Economic and Political Weekly* , 42 (49), 73-77.
- Mohanasundaram, D. P. (2015). Cultivation of Cotton: A Study on Factors and Problems. *International journal of Art ,Humanities and Management Studies* , 1 (3), 1-6.
- Mohanty, B. B., & Shroff, S. (2004). Farmers' Suicides in Maharashtra. *Economic and Political Weekly* , 39 (52), 5599-5606.
- P. Prasannath, Ready, M. J., & Rao, S. (2012). Assessment of knowledge levels of organic and conventional cotton. *Agriculture Update* , 7 (3&4), 171-174.

- Plewis, I. (2014). Indian farmer suicides is GM cotton to blame? *The Royal Statistical Society* , 42 (2), 14-18.
- Samuel, J., H, B., Puspanjali, & r, R. (2013). Trend in Area, Production and Productivity of Cotton Across the Major State India. *International Journal of Humanities, Arts* , 1 (2), 97-102.
- Sanjaykumar, P., & Yashwant, D. P. (2013). Is Cotton a Real Cash Crop ? Cotton. *International Journal of scientific Research* , 2 (1), 2277 - 8179.
- Sengupta, G. G. (2013). Bt Cotton and Farmer Suicides in India: An Evidence-based Assessment. *Development Studies* , 47 (2), 316-337.
- singh, B., K.S.Suhag, Dass, D., Kumar, R., & GulabSingh. (2016). An economic analysis of Bt cotton production in Hisar and Sirsa. *J. Cotton Res. Dev* , 30 (2), 302-309.
- UpdeshKhinda, & Husna. (2016). Cotton crisis and farmer's suicides: Analysis of the recent happenings in India. *Journal of Business Management & Social Sciences Research* , 5 (5), 130-137.
- Visvanathan, S. (1998). The Sadness of Cotton. *Economic and Political Weekly* , 33 (7), 323-324.

