



## Assessment of farmer's profitability on cotton crop at district Sanghar, Sindh, Pakistan

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### ABSTRACT

The aim of this study is on economic analysis of cotton production. The specific objectives were to describe socio-economic characteristics to determine profit in cotton production. Primary data were used for the study through interview of both better cotton farmers and control farmers. The study was conducted in the different union councils of taluka Sinjhor at district Sanghar, Pakistan. Results found that 67% famers was recorded primary level education. The average of land respondent was recorded on 7acres /farmers having less than 20 acres were 65% and more than 20 were 35% farmers. Self-growing rate was 72% and farming experience respondent was 77%. Maximum input and expenditure was observed in control farmers as compared to lead farmers. The total cost in cotton crop was highest in control farmers and farmers benefit ration observed higher of lead farmers as compared to control famers.

### INTRODUCTION

Cotton is one of the most imperative and kharif Crop. Pakistan produced cotton largest in all over the world, cotton export and consumed of the fourth position (GOP, 2015). Total cotton crop is cultivated on 3.6 million hectares in all over the country and shared 1.0 percent in GDP (Haider, 2016). In the year 2015-16 cotton crop was sown decreased as compared last year and the production was declined than last year, due to attack of bollworms and other sucking pests (Anonymous, 2015). Cotton is cultivated is about 70 countries of the world. However, in Asian countries Pakistan, China and India which are major cotton growing countries. China is one of the major cotton producer than other countries of the world. USA is the second, India is the third and Pakistan is fourth cotton producer of the world (Sabir et al., 2011). Bt. (*Bacillus Thuringiensis*) is toxic bacteria, firstly it was discovered in the year of 1901 by Japan and re-discovered in the year of

1911 by Germany (Cororaton and Orden, 2010). But developmental countries working on Bt. cotton for reduction the uses of the toxic pesticides. In Bt. *CryIAC* protein is create the resistance against especially bollworm complex (James, 2010). In Pakistan, Bt. cotton varieties cultivation was banned for uses as business, due to highly attack of leaf curl virus (CLCV) and various sucking pest (Qaim and Zilberman, 2003).

In present scenario cotton is cultivated Punjab and Sindh province, Bt. cotton varieties cultivation is fast increased about 65 per cent in Punjab province while 80 per cent in Sindh. Bt. cotton provide maximum economic benefits than non- Bt. cotton crop (Ashfaq et al., 2012). The number of researchers studied on uses of Bt. cotton and they observed that Bt. cotton can reduce applications of insecticide and labour costs (Huang et al., 2001; Eyhorn et al., 2005; Javed et al., 2006; Dev & Rao 2007; Moras & Manian 2008; Abid et al., 2011; Nazli et al., 2011; Ashfaq et al., 2012; Nazli et al.,

2012; Miriti et al., 2013 and Herring 2013). Sanghar is primarily an agricultural or cotton growing district in Sindh, Pakistan. A major amount of the population lives in rural areas and mostly dependent on cotton crop. Mostly cotton provides employment to farmer community. Main objectives of the present surveyed are determination the cost of production cotton growers and to estimate the education level of cotton growers at district Sanghar.

## MATERIALS AND METHODS

This study for measuring cotton farmers profitability was conducted in seven union councils i.e Kurkali, Jhol, Piru Fakir Shoro, Jaffar Khan laghari, Jatiya, Khadro and Gul Muhammad Laghari of taluka Sinjhor, district Sanghar. In the course of study five villages per union council and 10 better cotton farmers per village were selected randomly. To get good results a lead farmer was selected. The farmer chosen at every point of data collection possess good understanding as he receives training from field staff and serve voluntarily as leader of the farmer group of 25-35 strength. For each better cotton farmer there was a control farmer for comparative study.

Methodology for data collection was interview of both better cotton farmers and control farmers. A questionnaire was developed by putting all sowing to harvesting practices information in the form. Both better cotton farmer and control farmer were inquired about what they put during whole growing season in the cotton crop for good yield. Expenditures recorded in the data were: cost of seed and labor charges for sowing seed, mode of irrigation and labor charges, cost of fertilizers and labor charges for application, pesticides for pest management and picking charges. It was aimed to calculate per acre cost done by better cotton farmer and control farmers and their margin of profit. To calculate net profit of farmer a calculation of cost per 40 kg was used. The data, thus obtained were analyzed using simple percentage.

## RESULTS AND DISCUSSION

The results shown in Table 1 indicate the characters of farming community at different

union councils of taluka Sinjhor, Sindh province. Present result showed that the mean literacy rate of farmers was observed 67%, average of land was found 7 acres per farmers, Less than 20 acres land owners of farmers was noted 65% and more than 20 was found 35%. Formers community are self-growing rate 72% and farming experience respondent was observed 77% in different union councils of taluka Sinjhor.

A maximum inputs was observed on application of fertilizers followed by pesticide applications, seeds, farm yard manure (FYM), labor, picking, sowing, canal irrigation, others, land preparation and tubewell irrigation in control farmers. However, on lead farmers maximum inputs was observed on fertilizer applications followed by in farm yard manure (FYM), seeds, sowing, canal irrigation, pesticides, others, labor, picking, land preparation and tube well irrigations. Inputs were observed higher at control farmers as compared to lead farmers (figure 1). Similar surveyed was conducted by Khan et al. (2009) they also reported that application of chemical fertilizers was higher in control farmers than lead farmers. A maximum expenditures Was found applications of fertilizer followed by cotton picking, land preparation, pesticides, seeds, farm yard manure (FYM), labor, others, sowing tube well irrigations and canal irrigation both lead and control farmers (Figure 2).

Table 1  
Characters of farming community at different Union Councils of taluka Sinjhor, Sindh province.

Characters of farmers	Reported
Educated	67%
Average of land	7 acre/ farmers
Less than 20 acres land	65%
More than 20 acres land	35%
Self growing	72%
Farming experience	77%

The present study agrees with various researchers such as Khan et al. (1986) Hassan. (1991); Nabi (1991); Anwar. (1998); Chaudhry and Khan. (2009) they found cost fertilizers was higher as compared to others expenditures. The results in figure 3 showed that the economic analysis of

cotton production. Results revealed that maximum yield of cotton, gross income, farmer benefit ratio was observed in lead farmers, gross cost and cost per 40 kg (Rs) was higher in control farmers.

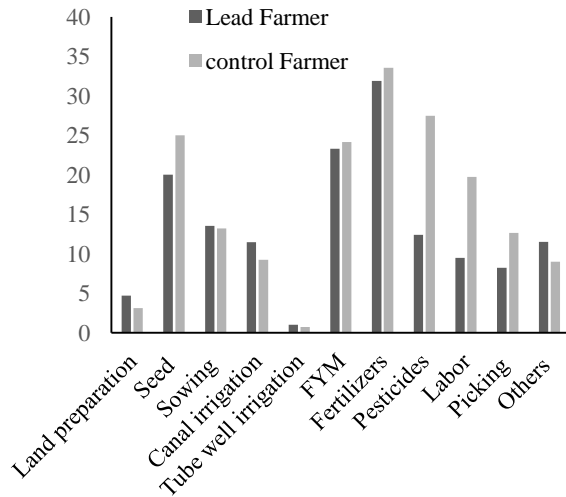


Figure 1  
Inputs in cotton crop of lead and control farmers.

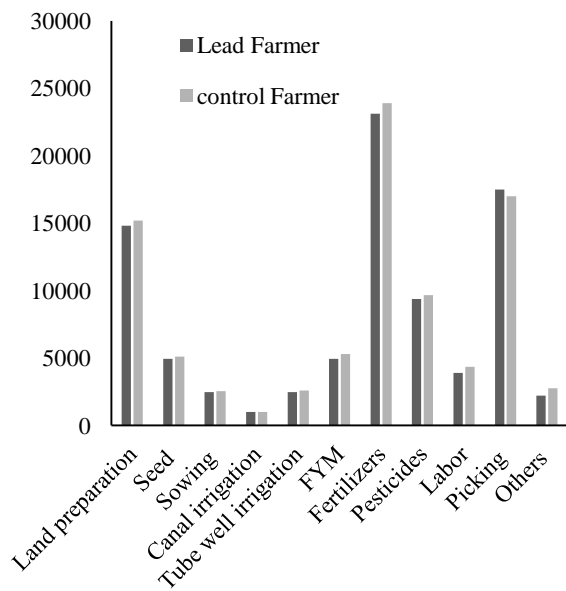


Figure 2  
Total expenditures of lead and control farmers in cotton crop.

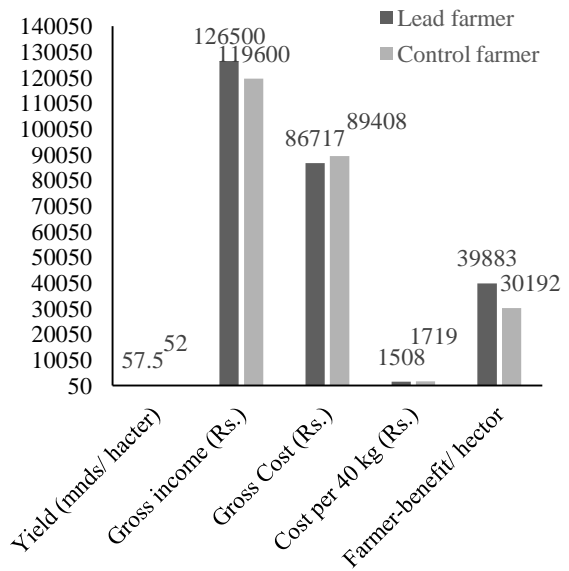


Figure 3  
Economic Analysis of cotton production.

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