

**GOVERNMENT OF INDIA  
AGRICULTURE  
LOK SABHA**

UNSTARRED QUESTION NO:1508  
ANSWERED ON:03.08.2010  
PRODUCTIVITY OF BT. COTTON  
Mirdha Dr. Jyoti

**Will the Minister of AGRICULTURE be pleased to state:**

- (a) whether any empirical data is available with the Government to prove that use of Bt. Cotton increases cotton productivity and gives better returns on investment;
- (b) if so, the details thereof alongwith the factors identified for better yield;and
- (c) the comparative figures for Bt. Cotton and non-Bt. Cotton in this regard?

**Answer**

MINISTER OF THE STATE IN THE MINISTRY OF AGRICULTURE AND MINISTER OF THE STATE IN THE MINISTRY OF CONSUMER AFFAIRS, FOOD AND PUBLIC DISTRIBUTION (PROF. K.V. THOMAS)

(a) & (b): Yes, Madam. The area under Bt. Cotton has increased from 29,000 hectares in 2002-03 to 80 lakh hectares (anticipated) in 2009-10. The average yield of Bt. Cotton has also increased from 300 kg per hectare in 2001-02 to 560 kg per hectare in 2007-08. Cultivation of Bt. Cotton has resulted in 31% increase in yield, 39% reduction in pesticide usage and more than 80% increase in profitability of farmers (ISAAA 2009). The factors identified for better yield include elite germplasm, better resistance to bollworms thus reducing pest incidence and thereby resulting in higher yield of Bt. Cotton.

(c): The comparative figures for Bt. Cotton and non-Bt. Cotton in terms of yield, insecticide use and net revenue are as under:-

2002-03      2004-05      2006-07

Bt.    Convent    Bt.    Convent    Bt.    Convent  
ional    ional    ional    ional    ional    ional

(i) Yield    1627.94    1212.92    1835.80    1360.33    2079.72    1457.71  
(kg/ha)

(ii) Insecticide    5.11    10.30    5.06    10.35    3.01    3.83  
use (kg/ha)

(iii) Net Revenue    13082.02    7741.62    12161.84    5317.79    17595.55    10331.89  
(inRs. /ha)

Source: Bt. Cotton in India - A Status Report (2nd ed.), Subramanian and Qaim, 2009.