Impact of rising temperature in production of wheat

2659. SHRI SANJAY RAUT: Will the Minister of AGRICULTURE be pleased to state:

- (a) whether it is a fact that rising temperature either at tillage stage or at the grain formation stage over the past few years is affecting wheat production in the country, and in turn food security;
- (b) as wheat alone contributes over 71 per cent of total foodgrain production, the efforts Government has made to increase the wheat production substantially; and
 - (c) the details of wheat production during the last five years, year-wise?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (PROF. K.V. THOMAS): (a) and (b) Research project findings of Indian Council of Agricultural Research on wheat crop indicated that there is about 3 to 4% decrease in grain with 1°C rise in temperature during grain filling stage. Out of 28 million hectares area under wheat in India, about 9 million hectares in north eastern plains zone, Central zone and peninsular zone is prone to terminal heat stress However, there is no major impact observed on wheat production due to rising temperature in recent past. There has been an increasing trend in wheat production due to rising temperature in recent past. There has been an increasing trend in wheat production since 2007-08. Wheat production has increased from 78.51 million tonnes in 2007-2008 to 80.71 million tonnes in 2009-10 (As per 4th advance estimates, 2010).

In order to Increase the production and productivity of wheat, Government of India has been implementing several crop Development Schemes such as National Food Security Mission — Wheat, Integrated Cereals Development Programme in Wheat Based Cropping System Areas (ICDP-Wheat) under Macro Management and Rashtriya Krishi Vikas Yojana etc.

In addition, heat tolerance varieties like DBW 14, DBW 16, Raj 3765, Lok 1, G 322 etc. have been popularized on larger scale under the above mentioned schemes. Besides, crop advisories are issued to wheat growing farmers for adopting latest crop production/protection technologies; timely sowing; resource conservation technology including zero seed drill; irrigation at critical stages to mitigate the sudden rise in temperature. Besides, Indian Council of Agricultural Research has also initiated networking projects for developing thermal and drought tolerant genotypes that are suitable for changing climatic scenario.

(c) State-wise production of wheat during last five year is given below:—

Production: in lakh tonnes

Name of the State	Year				
	2005-06	2006-07	2007-08	2008-09	2009-10*
Bihar	32.39	39.11	44.50	44.10	46.23
Gujarat	24.73	30.00	38.38	25.93	26.48
Haryana	88.57	100.55	102.36	108.08	105.00
Himachal Pradesh	6.79	5.02	5.04	5.47	5.69
Jammu and Kashmir	4.44	4.92	4.96	4.84	4.93
Madhya Pradesh	59.58	73.26	60.33	65.22	78.46
Maharashtra	13.00	16.31	20.79	15.16	17.57
Punjab	144.93	145.96	157.20	157.33	152.63
Rajasthan	58.65	70.56	71.25	72.87	68.28
Uttar Pradesh	240.74	250.31	256.79	285.54	278.10
Uttarakhand	6.45	8.01	8.14	7.97	8.37
West Bengal	7.74	7.99	9.17	7.65	8.37
ALL INDIA:	693.55	758.07	785.70	806.79	807.09

^{*}As per 4th advance estimates, 2010

Artificial crisis of certified seeds and fertilizers

2660. SHRI SHADI LAL BATRA: Will the Minister of AGRICULTURE be pleased to state:

- (a) whether there is artificial crisis of certified seeds and fertilizers during the sowing seasons leading thereby to their black marketing;
 - (b) if so, the details thereof; and
 - (c) the action taken by Government in this regard?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (PROF. K.V. THOMAS): (a) to (c) The availability of certified/quality seeds in the country is adequate for 2010-11. States have reported an availability of 321,35,928 quintals against the requirement of 290,75,810 quintals for the current year. The crop-wise detail is in the Statement-I (See below).

As far as fertilizer is concerned, the requirement, availability and sale for Kharif 2009, Rabi 2009-10 and Kharif 2010 is given in the Statement-II to V (See below). Supply of fertilizers by and large are as per requirement except shortage in a few places.