

The biosafety assessment includes environment safety assessment (pollen escape out-crossing, aggressiveness and weediness, effect of the gene on non-target organisms, presence of the protein in soil and its effect on soil micro-flora, and baseline susceptibility studies etc.) and health safety assessment (composition analysis, allergenicity and toxicological studies, and feeding studies on fish chicken, cows and buffaloes etc.) The biosafety data are available in the public domain and can be accessed at <http://www.envfor.nic.in/divisions/csurv/geac/geac%20home.html> and <http://www.igmoris.nic.in>

(c) Preliminary laboratory based research has been initiated by a few institutions on eucalyptus, bamboo, casuarina, rubber, bell pepper, brahmi, amla, ashwagandha, ginger and anantmool. However, so far no transgenic with these trees or medicinal plants has been developed except rubber which is also under greenhouse studies.

(d) Does not arise.

Wild animals

3237. SHRI RAMA CHANDRA KHUNTIA:

SHRI RUDRA NARAYAN PANY:

Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

(a) the detailed statistics of wild animals like tiger, bear, elephant, lion, black bucks, cheetal, deer and leopard from 2000 to 2009, State-wise and whether these statistics are correct;

(b) if not, whether forest department officers are giving wrong figures to protect their services and the census method is not correct; and

(c) whether Government would implement a different method to get the correct statistics?

THE MINISTER OF STATE OF THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI JAIRAM RAMESH): (a) to (c) Comprehensive and nation *wide* population estimation of wildlife (except for flagship species like tiger, elephant, etc.) has not been carried out/collated at Central Government level. The details of the all India estimation of tiger carried out during 2001-02 (using earlier methodology) as well as the latest all India estimation of tiger, carried out during 2006-2008 are at Statement-I and II respectively (*See below*). However, the latest estimation cannot be compared with the previous estimations on account of the modified methodology adopted. Similarly, the details of the all India enumeration of wild elephants carried out in 2002 and 2007-08 are at Statement-III (*See below*). Further, as per the estimations carried out during 2001 and 2005, the population of Lions in Gir forests were 327 and 359±10 respectively.

Population estimation of wild animals are based on the best scientific knowledge available and the methodology adopted for such estimation is subjected to refinement/modification from time to time based on the advances in knowledge and technology. There are no such reports

available with the Ministry indicating that forest departments are giving wrong figures to protect their service.

Statement-I

Population estimates of tigers (2001-02) (Using earlier methodology)

S.No.	Name of the State	2001-02
1.	Andhra Pradesh	192
2.	Arunachal Pradesh	61
3.	Assam	354
4.	Bihar/Jharkhand	110
5.	Goa/Daman and Diu	5
6.	Karnataka	401
7.	Kerala	71
8.	Madhya Pradesh/Chhattisgarh	937
9.	Maharashtra	238
10.	Meghalaya	47
11.	Mizoram	28
12.	Nagaland	23
13.	Orissa	173
14.	Rajasthan	58
15.	Tamil Nadu	60
16.	Uttar Pradesh/Uttarakhand	535
17.	West Bengal	349
TOTAL :		3642

Statement-II

Population estimates of tigers (2006-08) (using latest methodology)

State	Tiger Number		
	No.	Lower limit	Upper limit
1	2	3	4
<i>Shivalik-Gangetic Plain Landscape Complex</i>			
Uttarakhand	178	161	195

1	2	3	4
Uttar Pradesh	109	91	127
Bihar	10	7	13
Shivalik-Gangetic	297	259	335
<i>Central Indian Landscape Complex and Eastern Ghats Landscape Complex</i>			
Andhra Pradesh	95	84	107
Chhattisgarh	26	23	28
Madhya Pradesh	300	236	364
Maharashtra	103	76	131
Orissa	45	37	53
Rajasthan	32	30	35
Jharkhand**		Not Assessed	
Central Indian	601	486	718
<i>Western Ghats Landscape Complex</i>			
Karnataka	290	241	339
Kerala	46	39	53
Tamil Nadu	76	56	95
Western Ghats	402	336	487
<i>North East Hills and Brahmaputra Flood Plains</i>			
Assam*	70	60	80
Arunachal Pradesh*	14	12	18
Mizoram*	6	4	8
Northern West Bengal*	10	8	12
North East Hills, and Brahmaputra	100	84	118
Sunderbans		Not Assessed	
TOTAL TIGER POPULATION:	1411	1165	1657

*Population estimates are based on possible density of tiger occupied landscape in the area, not assessed by double sampling.

**Data was not amenable to population estimation of tiger. However, available information about the landscape indicates low densities of tiger in the area ranging from 0.5 to 1.5 per 100 km².

Statement-III

Estimated Population of Wild Elephants

Region	State	Elephant Population	
		2002	2007-08
North-East	Arunachal Pradesh	1607	1690
	Assam	5246	5281
	Meghalaya	1868	1811
	Nagaland	145	152
	Mizoram	33	12
	Manipur	12	Nil
	Tripura	40	59
	West Bengal (North)	292	300-350
	Total for North-East	9243	9305-9355
East	West Bengal (South)	36	25
	Jharkhand	772	624
	Orissa	1841	1862
	Chhattisgarh	—	122
	Total for East	2649	2633
North	Uttarakhand	1582	1346
	Uttar Pradesh	85	380
	Total for North	1667	1726
South	Tamil Nadu	3052	3867
	Karnataka	5838	4035
	Kerala	3850	6068
	Andhra Pradesh	74	28
	Maharashtra	—	7
	Total for South	12814	14005
Islands	Andaman and Nicobar	40	NA
GRAND TOTAL :		26413	27669-27719