### GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

# LOK SABHA UNSTARRED QUESTION NO. 1430 TO BE ANSWERED ON 08.12.2015

#### **Tiger Population**

### 1430. DR. P. VENUGOPAL: SHRI B. SENGUTTUVAN:

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

- (a) whether the overall tiger population in the country has gone up in the past few years and if so, the details thereof;
- (b) whether fool-proof methods and scientific techniques were adopted for the counting of the tiger population in the country and if so, the details thereof;
- (c) whether the population of tigers has increased in only some areas or in all the regions and wildlife parks in the country and if so, the details thereof; and
- (d) whether the sub-species of tiger, the Royal Bengal Tiger has increased or decreased in population and if so, the details thereof and the reasons therefor?

#### **ANSWER**

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI PRAKASH JAVADEKAR)

(a), (b) & (c) Yes Sir. The assessment of the status of tigers, co-predators and their prey 2014 using the refined methodology has shown a countrywide 30% increase in tiger numbers with an estimated number of 2226 (range 1945-2491) as compared to 2010 estimation of 1706 (range 1520-1909 tigers). The details of tiger estimation pertaining to tiger landscapes in the country for the years 2010 and 2014 are at **Annexure-I**. The current methodology of tiger estimation uses a double sampling approach to estimate the distribution and abundance of tigers in India, wherein robust spatially explicit capture recapture protocols using joint models have been employed. As first component, information is collected in first phase by ground surveys for determining occupancy of habitat patches by tigers and other predators, line transects to estimate prey abundance, sampling plots on the line transects to assess (habitat characteristics, human impacts and prey dung density).

Alongwith the information generated by the ground surveys, latest remotely sensed data on (a) landscape characteristics, (b) human "foot-print", and (c) habitat attributes are subsequently used to model tiger occupancy and abundance.

The second component of the double sampling consists of (a) scientifically rigorous abundance estimation in select sampling units using a remote camera trap based capture recapture technique for estimating tiger and other carnivore abundance and (b) line transect based Distance sampling for estimating prey abundance.

(d) The only species available in India is *Panthera tigris tigris* which is commonly called Royal Bengal Tiger, population of which has registered a countrywide 30% increase. The details are at **Annexure** as above. Most of the tiger landscapes of the country have shown increase in tiger population, *inter alia*, due to concerted efforts of the various stakeholders

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# ANNEXURE REFERRED TO IN REPLY TO PARTS (a), (b) & (c) OF THE LOK SABHA UNSTARRED QUESTION NO. 1430 ON TIGER POPULATION DUE FOR REPLY ON 08.12.2015.

## Details of tiger estimation pertaining to tiger landscapes in the country, for the years 2010 and 2014

State	Tiger Population		
	2010	2014	Increase / Decrease / Stable
Shivalik-Gangetic Plain Landscape			
Complex			
Uttarakhand	227 (199-256)	340	Increase
Uttar Pradesh	118 (113-124)	117	Stable
Bihar	8 (-)	28	Increase
Shivalik Gangetic	353 (320-388)	485 (427-543)	Increase
Central Indian Landscape Complex and Eastern Ghats Landscape Complex			
Andhra Pradesh (including Telangana)	72 (65-79)	68	Stable
Chhattisgarh	26 (24-27)	46	Increase
Madhya Pradesh	257 (213-301)	308	Increase
Maharashtra	169 (155-183)	190	Increase
Odisha	32 (20-44)	28	Stable
Rajasthan	36 (35-37)	45	Increase
Jharkhand	10 (6-14)	3+	Decrease*
Central India	601 (518-685)	688 (596-780)	Increase
Western Ghats Landscape Complex			
Karnataka	300 (280-320)	406	Increase
Kerala	71 (67-75)	136	Increase
Tamil Nadu	163 (153-173)	229	Increase
Goa	-	5	Increase
Western Ghats	534 (500-568)	776 (685-861)	Increase
North Eastern Hills and Brahmaputra Flood Plains			
Assam	143 (113-173)	167	Increase
Arunachal Pradesh	-	28*	Increase
Mizoram	5	3+	Stable
North West Bengal	-	3	**
North East Hills, and Brahmaputra	148 (118-178)	201 (174-212)	Increase
Sunderbans	70 (64-90)	76 (92-96)	Stable
TOTAL	1706 (1520-1909)	2226 (1945-2491)	Increase

<sup>+</sup> From scat DNA

<sup>\*</sup> From camera trap data and scat DNA

<sup>\*</sup> Much of the tiger occupied areas could not be surveyed owing to naxal problem

<sup>\*\*</sup> Tiger estimation was not done in the year 2010