GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 296
TO BE ANSWERED ON 01.12.2015

Estimates of Tigers

296. SHRI PRATHAP SIMHA:

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

(a) whether the tiger population in the country is rapidly dwindling and if so, the details thereof, tiger reserve-wise;
(b) whether the Government is using camera trapping method over the pug mark method for conducting estimates of tigers in the country;
(c) if so, the details thereof and if not, the reasons therefor; and
(d) the efforts taken or being taken by Government to improve wild life habitat so that spill over animals could reclaim the forest?

ANSWER

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

(SHRI PRAKASH JAVADEKAR)

(a) No 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**.

(b) & (c) Yes Sir. 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) Funding assistance is provided to the tiger reserves based on their Annual Plan of Operation as per the provisions of approved Tiger Conservation Plan, for various activities, which inter alia, includes habitat improvement works like weed eradication, removal of gregarious plant growth from grasslands, grass improvement, water retention structures and the like, besides for voluntary village relocation of people living in "core or critical tiger habitats" and fostering corridor conservation through restorative strategy to arrest habitat fragmentation.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF THE LOK SABHA UNSTARRED QUESTION NO. 296 ON ESTIMATES OF TIGERS DUE FOR REPLY ON 01.12.2015.

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

	Tiger Population		
State	**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**

+ From scat DNA

♣ From camera trap data and scat DNA

* Much of the tiger occupied areas could not be surveyed owing to naxal problem

** Tiger estimation was not done in the year 2010

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