GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA UNSTARRED QUESTION NO. 3094 TO BE ANSWERED ON 06.12.2019

Tiger Population

3094. SHRIMATI SANGEETA KUMARI SINGH DEO:

SHRI VINOD KUMAR SONKAR:

SHRI RAJA AMARESHWARA NAIK:

DR. SUKANTA MAJUMDAR:

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

- (a) whether the efforts of the Government have yielded in increase in Tiger Population in the country and if so, the details thereof;
- (b) whether the Government is considering to develop a corridor connectivity between the source population of tigers in India and neighbouring countries;
- (c) if so, the details thereof along with the progress in this regard so far;
- (d) whether the Government is planning to repopulate the Bengal Buxa Tiger Reserve by introducing tigers from Kaziranga National Park of Assam;
- (e) if so, the details thereof; and
- (f) the other significant steps taken by the Government for conservation of Tigers in the country?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

- (SHRI BABUL SUPRIYO)
- Yes, the Governments efforts have yielded an increase in tiger population in India. This is clearly evident from the results of four countrywide / All India Tiger Estimation taken in India since 2006, and the same is at **Annexure-I**. Under the ongoing Centrally Sponsored Scheme of Project Tiger, activities undertaken for fostering tiger conservation are at **Annexure-II**.
- (b) & (c) The Government of India, through the National Tiger Conservation Authority has already mapped out 32 major tiger corridors which *inter alia* include corridor connectivity through Nepal and Bhutan with the technical support of Wildlife Institute of India, Dehradun. The list of these corridors is at **Annexure-III**. Also, the corridors have been delineated in the adjoining area Plans which are integral part of Tiger Conservation Plans of tiger reserves.
- (d) & (e) The Government of India has recommended a project to repopulate the Buxa Tiger Reserve with tigers for which a five year plan at a total cost of Rs. 1849.50 lakhs has been approved by the Government of India in the year 2017.
- (f) Milestone initiatives taken by the Government of India through the National Tiger Conservation Authority for fostering conservation of tigers are at **Annexure-IV**.

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF THE LOK SABHA UNSTARRED QUESTION NO. 3094 ON TIGER POPULATION DUE FOR REPLY ON 06.12,2019

Details of tiger estimation pertaining to tiger landscapes in the country, for the years 2006, 2010, 2014 and 2018

	for the years 2006, 2010, 2014 and 2018				
State	Tiger Population				
	2006	2010	2014	2018	
Shivalik-Gangetic Plain Landscap	pe Complex	1	1		
Uttarakhand	178	227	340	442	
Uttar Pradesh	109	118	117	173	
Bihar	10	8	28	31	
Shivalik Gangetic	297	353	485	646	
Central Indian Landscape Comple	ex and Eastern Ghats Lar	ndscape Complex			
Andhra Pradesh	95	72	68	48	
Telangana	-	-	-	26	
Chhattisgarh	26	26	46	19	
Madhya Pradesh	300	257	308	526	
Maharashtra	103	169	190	312	
Odisha	45	32	28	28	
Rajasthan	32	36	45	69	
Jharkhand	-	10	3*	5	
Central India	601	601	688	1033	
Western Ghats Landscape Comple	ex				
Karnataka	290	300	406	524	
Kerala	46	71	136	190	
Tamil Nadu	76	163	229	264	
Goa	-	-	5	3	
Western Ghats	412	534	776	981	
North Eastern Hills and Brahmap	utra Flood Plains				
Assam	70	143	167	190	
Arunachal Pradesh	14	-	28**	29	
Mizoram	6	5	3*	0	
Nagaland	-	-	-	0	
Northern West Bengal	10	-	3*	0	
North East Hills, and Brahmaputra	100	148	201	219	
Sunderbans	-	70	76	88	
TOTAL	1411	1706	2226	2967	

^{*} From scat DNA

^{**} From camera trap data and scat DNA

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF THE LOK SABHA UNSTARRED QUESTION NO. 3094 ON TIGER POPULATION DUE FOR REPLY ON 06.12.2019

Several activities are undertaken for tiger conservation under the ongoing Centrally Sponsored Scheme of Project Tiger are as under:-

1. Stepping up protection: (antipoaching squad/Tiger Protection Force deployment)

The antipoaching operations in tiger reserves are site specific. However, the following activities, *inter alia*, form part of the protection strategy in tiger reserves, namely:—

- (a) Raising, arming and deployment of Special Tiger Protection Force.
- (b) Use of information technology in wildlife crime prevention.
- (c) Launching M-STrIPES for field patrolling.
- (d) Deployment of antipoaching squads.
- (e) Establishing and maintenance of existing patrolling camps/chowkis and deployment of camp labourers for patrolling.
- (f) Organising vehicular patrolling by constituting squads (Tiger Protection Force), comprising of field staff, labourers and police/SAF/ex-army personnel, with wireless handset and paraphernalia for apprehending offenders, apart from prescribing a patrolling calendar for the squad.
- (g) Establishing and maintenance of wireless network.
- (h) Organising surprise raids jointly with the local police in railway stations, local trains, bus-stops, buses, catchers and cafeteria.
- (i) Ensuring special site-specific protection measures, during monsoon as 'Operation Monsoon' considering the terrain and accessibility of Protected Areas.
- (j) Deployment of ex-army personnel / home guards.
- (k) Deployment of local work force for patrolling, surveillance of water holes, manning barriers.
- (1) Procurement of arms and ammunition.
- (m) Procurement/maintenance of elephant squads.
- (n) Rewards to informers.
- (o) Legal support for defending court cases.
- (p) Procurement of vehicles, boats.
- (q) Procurement of field gear, night vision device.

2. Deciding inviolate spaces for wildlife and relocation of villagers from core or critical tiger habitats in Tiger Reserves within a timeframe and settlement of rights.

2.1. The Wild Life (Protection) Act, 1972, as well as the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, require that rights of people (Scheduled Tribes and other traditional forest dwellers) recognized in forest areas within core and critical tiger or wildlife habitats of tiger reserves or protected areas may be modified and resettled for providing inviolate spaces to tiger or wild animals. This requires payment of compensation (rights settlement in addition to the relocation package offered under the Centrally Sponsored Scheme at present). Chapter IV of the Wild Life (Protection) Act, 1972 (section 24) provides for acquisition of rights in or over the land declared by the State Government under section 18 (for constituting a Sanctuary) or section 35 (for constituting a National Park). Sub-section (2) of section 24 of the Wild Life (Protection) Act, 1972 authorizes the Collector to acquire such land or rights. Therefore, payment of compensation for

the immovable property of people forms part of modifying or settling their rights which is a statutory requirement.

- 2.2. The ongoing study and the analysis of the available research data on tiger ecology indicate that the minimum population of tigresses in breeding age, which are needed to maintain a viable population of 80-100 tigers (in and around core) require an inviolate space of 800-1200 sq. km. Tiger being an "umbrella species", this will also ensure viable populations of other wild animals (copredators, prey) and forest, thereby ensuring the ecological viability of the entire area and habitat. Thus, it becomes an ecological imperative to keep the core areas of tiger reserves inviolate for the survival of source populations of tiger and other wild animals.
- 2.3. The proposed package has following two options, namely:
 - (a) Option I Payment of the entire package amount (Rs. 10 lakhs per family) to the family in case the family opts so, without involving any rehabilitation or relocation process by the Forest Department.
 - **(b)** Option II Carrying out relocation or rehabilitation of village from protected area or tiger reserve by the Forest Department.

3. Strengthening of infrastructure within Tiger Reserves.

The following activities, inter alia, would form part of reinforcing the infrastructure of Tiger Reserves (including support to new tiger reserves), namely:—

- (a) Civil Works (staff quarters, family hostels, office improvement, patrolling camp, house keeping buildings, museum, culverts).
- (b) Maintenance, creation and upgradation of road network.
- (c) Maintenance and creation of wireless tower.
- (d) Maintenance and creation of fire watch tower.
- (e) Maintenance and creation of bridges, dams, anicuts.
- (f) Maintenance, creation of firelines and firebreaks.
- (g) Maintenance and creation of earthen ponds.
- (h) Procurement, maintenance of vehicles (Gypsy, Jeep, Truck, Tractor etc.).
- (i) Habitat improvement works.
- (j) Procurement of hardware, software and Geographical Information System (GIS).
- (k) Procurement of compass, range finder, Global Positioning System (GPS), camera traps.
- (l) Procurement of satellite imageries for management planning.
- (m) Map digitization facility for management planning.

4. Habitat improvement and water development.

These, inter alia, may include, weed eradication, removal of gregarious plant growth from grasslands, grass improvement, water retention structures and the like. These initiatives would increase the forage and browse values of the habitat for wild animals.

5. Addressing man-animal conflict (ensuring uniform, timely compensation for human deaths due to wild animals, livestock depredation by carnivores, crop depredation by wild ungulates) (compensation for crop loss is a new component):

This would involve:

- (a) payment of compensation for cattle lifting, death of human beings and crop depredation due to wild animals.
- (b) creation of crop protection structures.
- (c) procurement and deployment of traps, cages to catch problematic animals.
- (d) procurement of tranquilizing equipments, rescue vehicles and drugs.

6. Co-existence agenda in buffer or fringe areas.

The fringe areas around tiger reserve have corridor value, and their ecological sustainability is important to prevent the area from becoming ecological sinks on account of over use of resources and unwise land use. This calls for delineation of buffer zone around a tiger reserve to incorporate such fringe areas so that it can fulfill the following objectives, namely:

- (a) providing ecologically viable livelihood options to local stakeholders for reducing their dependency on forests.
- (b) conserving the forest area through restorative inputs involving local people for providing habitat supplement to wild animals moving out of core areas.

7. Rehabilitation of traditional hunting tribes living around tiger reserves.

There is an urgent need to launch a rehabilitation and development programme for the denotified tribes and tribes involved in traditional hunting, living around tiger reserves and tiger corridors. The following denotified tribes and communities are involved in traditional hunting of wild animals: Behelias, Ambalgars, Badaks, Mongias, Bavariyas, Monglias, Pardhi, Boyas, Kaikads, Karwal Nat, Nirshikaris, Picharis, Valayaras, Yenadis, Chakma, Mizo, Bru, Solung and Nyishi. While this list is not exhaustive, around 5,000 such families are required to be taken up under a welfare programme (forming part of NTCA initiatives) during the Plan period. The rehabilitation and welfare package should be evolved in a site specific, consultative manner with livelihood options, to include: wages for such people towards their deployment in foot patrolling for protecting wildlife, providing agricultural land with irrigation, basic health care, housing and related community welfare inputs and basic education facilities. The experience gained in the past for settling denotified tribes by the salvation army is required to be considered dispassionately while structuring the programme.

8. Research and field equipments.

The All India tiger estimation using the new methodology approved by the Tiger Task Force has resulted in a permanent monitoring protocol for the field units. The Phase-IV, tiger reserve level, would be launched to monitor the source populations of tiger. Further, assistance would be provided for fostering field oriented research and to equip the staff with facilities like Global Positioning System (GPS), camera traps, night vision, range finder and related accessories including hardware and software.

9. Staff development and capacity building.

9.1. This would involve:

- (a) Capacity building and training.
- (b) Providing project allowance and special incentives.
- (c) Specialized training in the use of Geographical Information System (GIS), antipoaching operations.
- (d) Specialized training in jurisprudence and wildlife forensics.
- (e) Study tours for appraisal of good practices in other reserves.
- (f) Dissemination workshops.

- (g) Specialized training in park interpretation.
- (h) Specialized training in management planning.
- 9.2. The above inputs are extremely important for enhancing the skill of field staff. Several instances of poaching occur for want of specialized training in crime detection and related skills.
- 10. Mainstreaming wildlife concerns in tiger bearing forests and fostering corridor conservation through restorative strategy involving locals to arrest fragmentation of habitats.

This would involve:

- (a) Redressing man-animal conflict.
- (b) Capturing problematic and aberrant wild animals.
- (c) Monitoring of wild animals.
- (d) Antipoaching operations.
- (e) Habitat improvement measures.

11. Safeguards and Retrofitting measures in the interest of wildlife conservation.

Several tiger reserves are affected on account of heavily used infrastructure like roads, railway tracks etc. The high tension electric lines passing through many reserves cause mortality of wild animals due to electrocution by poachers. In the interest of wild animals several safeguards as well as retrofitting measures may be required, which would be supported on a site-specific basis.

12. Providing basic infrastructure. The expenditure for consultancy, field visits by expert teams, all India tiger estimation and continuous monitoring of tigers (Phase-IV), support for monitoring tigers outside tiger reserves through National Tiger Conservation Authority grant, developing a National Repository of Camera Trap Photo Database of tiger, strengthening of National Tiger Conservation Authority at the Center and Regional Offices, besides establishing a monitoring lab.

13. Independent monitoring and evaluation of tiger reserves.

The second round of independent monitoring has been completed using globally accepted indicators. This would be further refined and continued.

14. Establishment and development of new tiger reserves.

'Project Tiger' has a holistic ecosystem approach. Though the focus is on the flagship species 'tiger', the project strives to maintain the stability of ecosystem by fostering other trophic levels in the food chain. This is essential to ensure an ecologically viable population of tiger, which is at the 'apex' of the ecological food chain. The community pressures on forests are ever on the increase in developing countries and India is no exception. As a sequel, the tiger habitat has become fragile and weak at several places, warranting a focused conservation approach. Our protected areas and tiger reserves are analogous to "islands" in an ocean of the other-use patterns. Empirical evidences from 'island biogeography' indicate that "isolated" reserves lose their species rapidly owing to 'ecological insularization'. Further, apart from fragmentation, the situation is aggravated by degraded forest cover owing to biotic pressure, dislocated prey – predator ratio, absence of effective measures to ensure the desired level of protection and lack of eco developmental initiatives for the fringe dwelling stake holders to reduce their dependency on forest resources. Since 'Project Tiger' would go a long way in redressing the above situation, the Steering Committee of Project Tiger in its meeting held on the 23rd January, 2003 recommended inclusion of new tiger reserve areas so as to increase the total area of 'Project Tiger' from existing 37761 sq. kms. to 50,000 sq. kms. during the Tenth Plan period.

15. Provision of Project Allowance to staff of Project Tiger.

The tiger States would be supported (100%) for Project Allowance to staff of tiger reserves.

16. Staff welfare activities.

Staff welfare inputs like residential accommodation for the children of frontline staff in nearby towns or villages, supply of kerosene, medicine, field kit, mosquito net, torch and the like would be supported.

17. Fostering Tourism or Ecotourism in tiger reserves.

'Tourism' in the context of Tiger Reserves is contemplated as "ecotourism", which needs to be ecologically sustainable nature-tourism. This is emerging as an important component of tourism industry. It is distinct from 'mass tourism', having sustainable, equitable, community based effort for improving the living standards of local, host communities living on the fringes of tiger reserves. Ecotourism is proposed to be fostered under 'Project Tiger' to benefit the host community in accordance with tiger reserve specific Tourism Plan forming part of the Tiger Conservation Plan, subject to regulation as per carrying capacity, with a focus on buffer areas. Since, tourism has been happening in areas of national parks and wildlife sanctuaries which are now designated as core or critical tiger habitat, regulated low impact tourism (visitation) would be allowed in such areas subject to site specific carrying capacity. However, no new tourism infrastructure should be permitted in such core and critical tiger habitats. Further, the buffer forest areas should also be developed as wildlife habitats with the active involvement of local people living in such areas. This would provide extended habitat to tiger population for its life cycle dynamics, besides benefitting local people from ecotourism activities in such areas while reducing the resource dependency of people on core or critical tiger habitats and human-tiger interface conflicts. The opportunities for stakeholders would include management of low cost accommodation for tourists, providing guide services, providing sale outlets, managing excursions, organizing ethnic dances and the like.

ANNEXURE REFERRED TO IN REPLY TO PARTS (b) & (c) OF THE LOK SABHA UNSTARRED QUESTION NO. 3094 ON TIGER POPULATION DUE FOR REPLY ON 06.12.2019

List of macro/landscape level tiger corridors

Sl.	Landscape	Corridor	States/ Country	
No. 1.	Shivalik Hills &	(i) Rajaji-Corbett	Uttarakhand	
1.	Gangetic Plains	(ii) Corbett-Dudhwa	Uttarakhand, Uttar Pradesh,	
	Guingette Trains	(II) Corocu-Dudiwa	Nepal	
		(iii) Dudhwa-Kishanpur-Katerniaghat	Uttar Pradesh, Nepal	
2.	Central India & (i) Ranthambhore-Kuno-Madhav		Madhya Pradesh, Rajasthan	
Eastern Ghats		(ii) Bandhavgarh-Achanakmar	Madhya Pradesh, Chhattisgarh	
		(iii) Bandhavgarh-Sanjay Dubri-Guru Ghasidas	Madhya Pradesh	
		(iv) Guru Ghasidas-Palamau-Lawalong	Chhattisgarh & Jharkhand	
		(v) Kanha-Achanakmar	Madhya Pradesh, Chhattisgarh	
		(vi) Kanha-Pench	Madhya Pradesh, Maharashtra	
		(vii) Pench-Satpura-Melghat	Madhya Pradesh, Maharashtra	
		(viii) Kanha-Navegaon Nagzira-	Madhya Pradesh, Maharashtra,	
		Tadoba-Indravati	Chhattisgarh, Andhra Pradesh	
		(ix) Indravati-Udanti Sitanadi- Sunabeda	Chhattisgarh, Odisha	
		(x) Similipal-Satkosia	Odisha	
		(xi) Nagarjunasagar-Sri Venkateshwara National Park	Andhra Pradesh	
3. Western Ghats		(i) Sahyadri-Radhanagari-Goa	Maharashtra, Goa	
	(ii) Dandeli Anshi-Shravathi Valley	Karnataka		
		(iii) Kudremukh-Bhadra	Karnataka	
		(iv) Nagarahole-Pusphagiri-Talakavery	Karnataka	
		(v) Nagarahole-Bandipur-Mudumalai- Wayanad	Karnataka, Kerala, Tamil Nadu	
		(vi) Nagarahole-Mudumalai-Wayanad	Karnataka, Kerala, Tamil Nadu	
		(vii) Parambikulam-Eranikulam-Indira Gandhi	Kerala, Tamil Nadu	
		(viii) Kalakad Mundanthurai-Periyar	Kerala, Tamil Nadu	
4.	North East	(i) Kaziranga-Itanagar WLS	Assam, Arunachal Pradesh	
		(ii) Kaziranga-Karbi Anglong	Assam	
		(iii) Kaziranga-Nameri	Assam	
		(iv) Kaziranga-Orang	Assam	
		(v) Kaziranga-Papum Pane	Assam	
		(vi) Manas-Buxa	Assam, West Bengal, Bhutan	
		(vii) Pakke-Nameri-Sonai Rupai-	Arunachal Pradesh, Assam	
		Manas		
		(viii) Dibru Saikhowa-D'Ering-	Assam, Arunachal Pradesh	
		Mehaong	A 1 D 1 1	
		(ix) Kamlang-Kane-Tale Valley	Arunachal Pradesh	
		(x) Buxa-Jaldapara	West Bengal	

ANNEXURE REFERRED TO IN REPLY TO PART (f) OF THE LOK SABHA UNSTARRED QUESTION NO. 3094 ON TIGER POPULATION DUE FOR REPLY ON 06.12,2019

Milestone initiatives taken by the Government of India through the National Tiger Conservation Authority for conservation of tigers are as under:-

Legal steps

- 1. Amendment of the Wild Life (Protection) Act, 1972 in 2006 to provide enabling provisions for constituting the National Tiger Conservation Authority under section 38 IV B and the Tiger and Other Endangered Species Crime Control Bureau under section 38 IV C.
- 2. Enhancement of punishment for offence in relation to the core area of a tiger reserve or where the offence relates to hunting in the tiger reserves or altering the boundaries of tiger reserves, etc.
- 3. Comprehensive guidelines under section 38O 1 (c) of the Wildlife (Protection) Act, 1972 issued for Project Tiger and Tourism in Tiger Reserves on 15th October, 2012.

Administrative steps

- 4. Constitution of the National Tiger Conservation Authority (NTCA) with effect from the 4th September, 2006, for strengthening tiger conservation by, interalia, ensuring normative standards in tiger reserve management, preparation of reserve specific tiger conservation plan, laying down annual audit report before Parliament, constituting State level Steering Committees under the Chairmanship of Chief Ministers and establishment of Tiger Conservation Foundation.
- 5. Constitution of a multidisciplinary Tiger and Other Endangered Species Crime Control Bureau (Wildlife Crime Control Bureau) with effect from the 6th June, 2007 to effectively control illegal trade in wildlife.
- 6. Strengthening of antipoaching activities, including special strategy for monsoon patrolling, by providing funding support to tiger reserve States, as proposed by them, for deployment of antipoaching squads involving ex-army personnel or home guards, apart from workforce comprising of local people, in addition to strengthening of communication and wireless facilities.
- 7. In-principle approval has been accorded by the National Tiger Conservation Authority for creation of new tiger reserves, and the sites are: Sunabeda (Odisha) and Guru Ghasidas (Chhattisgarh). The State Governments have been advised to send proposals for declaring the following areas as tiger reserves: (i) Mhadei Wildlife Sanctuary (Goa), (ii) Srivilliputhur Grizzled Giant Squirrel / Megamalai Wildlife Sanctuaries / Varushanadu Valley (Tamil Nadu), (iii) Dibang Wildlife Sanctuary (Arunachal Pradesh), (iv) Cauveri-MM Hills Wildlife Sanctuary (Karnataka) and (v) Nandhaur Wildlife Sanctuary (Uttarakhand).
- 8. Rajaji National Park (Uttarakhand), Orang National Park (Assam) & Kamlang Wildlife Sanctuary (Arunachal Pradesh) have been notified as 48th, 49th & 50th Tiger Reserves.
- 9. The revised Project Tiger guidelines have been issued to State Governments for strengthening tiger conservation, which apart from ongoing activities, inter alia, include financial support to States for enhanced village relocation or rehabilitation package for people living in core or critical tiger habitats (from Rs. 1 lakh per family to Rs. 10 lakhs per family), rehabilitation or resettlement of communities involved in traditional hunting, mainstreaming livelihood and wildlife concerns in

forests outside tiger reserves and fostering corridor conservation through restorative strategy to arrest habitat fragmentation.

- 10. A scientific methodology for estimating tiger (including co-predators, prey animals and assessment of habitat status) has been evolved and mainstreamed. The findings of this estimation and assessment are bench marks for future tiger conservation strategy.
- 11. The 18 tiger States have notified the core/critical tiger habitat (40145.30 sq. km.), and the buffer/peripheral area (32603.72 sq.km.) of all the 50 tiger reserves in the country, under section 38V of the Wild Life (Protection) Act, 1972, as amended in 2006.
- 12. Regional Offices of the National Tiger Conservation Authority are operational at Nagpur, Bengaluru and Guwahati headed by an Inspector General of Forests.

Financial steps

13. Financial and technical help is provided to the State Governments under various Centrally Sponsored Schemes, such as "Project Tiger" and "Integrated Development of Wildlife Habitats" for enhancing the capacity and infrastructure of the State Governments for providing effective protection to wild animals.

International Cooperation

- 14. India has a bilateral understanding with Nepal on controlling trans-boundary illegal trade in wildlife and conservation, apart from a protocol on tiger conservation with China.
- 15. A protocol has been signed in September, 2011 with Bangladesh for conservation of the Royal Bengal Tiger of the Sunderban.
- 16. A sub-group on tiger and leopard conservation has been constituted for cooperation with the Russian Federation. Indo-Russia bilateral took place in September 2018 at Moscow, wherein a tripartite MOU between the National Tiger Conservation Authority, Wildlife Institute of India and A.N. Severstov Institute of Ecology & Evaluation was agreed upon and signed on 4.12.2018.
- 17. India is the founder member of the Global Tiger Forum of Tiger Range Countries for addressing international issues related to tiger conservation.
- 18. During the 14th meeting of the Conference of Parties to CITES, which was held from 3rd to 15th June, 2007 at The Hague, India introduced a resolution along with China, Nepal and the Russian Federation, with direction to Parties with operations breeding tigers on a commercial scale, for restricting such captive populations to a level supportive only to conserving wild tigers. The resolution was adopted as a decision with minor amendments. Further, India made an intervention appealing to China to phase out tiger farming and eliminate stockpiles of Asian big cats body parts and derivatives. The importance of continuing the ban on trade of body parts of tigers was emphasized.
- 19. Based on India's strong intervention during the 62nd meeting of the Standing Committee of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) at Geneva from 23-27 July, 2012, the Convention on International Trade in Endangered Species of Wild Fauna and Flora Secretariat has issued a notification No. 2012/054 dated the 3rd September, 2012 to Parties to fully implement Decision 14.69 and report to the Secretariat by 25 September, 2012 (Progress made on restricting captive breeding operations of tigers etc.).

During the 18th CoP held at Geneva in August 2019, based on an intervention from India, a slew of decisions were adopted to intervene in territories which had facilities for keeping big cats as a reinforcement of decision 14.69.

- 20. The 3rd Asia Ministerial Conference (3 AMC) was organized in New Delhi from 12-14 April 2016. Inspired by the statement of Prime Minister of India, Narendra Modi, during this conference that "conservation of tigers is not a choice, it is an imperative", to achieve the concrete results of ensuring the conservation of tigers in the wild and their habitats by 2022, the representatives of the Governments of the Tiger Range Countries resolved to:
 - Accelerate implementation of the Global Tiger Recovery Programme (GTRP)/National Tiger Recovery Programme (NTRP) and agreed actions from the above-mentioned declarations, review and update priority and differentiated action plans, and track progress through mutual and systematic reporting and evaluation.
 - Align development and tiger conservation in a mutually complementary manner by reorienting development strategies to mainstream the concerns of tiger conservation, such as by integrating tiger and wildlife safeguards in infrastructure at the landscape level, developing partnerships with business groups, and strong engagement with local stakeholders.
 - Leverage funding and technical support from international organisations, bilateral and multilateral financial institutions, foundations, civil society organisations, private sector, and climate funds, in addition to TRC governments.
 - Recognise and enhance the importance of tiger habitats by promoting them as providing ecosystem services, as engines of economic growth and helping to address climate change.
 - Emphasize recovery of tiger populations in areas with low tiger densities and restoration in areas from which they have been extirpated by using successful programs of tiger reintroduction and rehabilitation of their habitats and prey.
 - Strengthen co-operation at the highest levels of government to combat wildlife crime, address the demand for tiger products, and increase formal and informal transboundary coordination.
 - Enhance knowledge sharing and capacity development for all stakeholders and increase the use of technology, including smart tools, monitoring protocols, and information systems, to improve management effectiveness.

OTHER MISCELLANEOUS STEPS

- 21. Creation of Special Tiger Protection Force (STPF):-The Special Tiger Protection Force (STPF) has been made operational in the States of Karnataka (Bandipur), Maharashtra (Pench, Tadoba-Andhari, Nawegaon-Nagzira, Melghat), Rajasthan (Ranthambhore) and Odisha (Similipal), out of 13 initially selected tiger reserves, with 60% central assistance under the ongoing Centrally Sponsored Scheme of Project Tiger, Kaziranga (Assam) with 90% central assistance.
- 22. In collaboration with TRAFFIC-INDIA, an **online tiger mortality data base** is operational and Generic Guidelines for preparation of reserve specific Security Plan have been prepared which form a basis for antipoaching strategies in the overarching Tiger Conservation Plan.
- 23. Implementing a tripartite Memorandum of Understanding (MOU) with tiger States, linked to fund flows for effective implementation of tiger conservation initiatives.
- 24. Steps taken for modernizing the infrastructure and field protection, besides launching 'Monitoring system for Tigers' Intensive Protection and Ecological Status (M-STrIPES)' for effective

field patrolling and monitoring. The M-STrIPES application has been made android based with three distinct modules, viz. patrol, ecological and conflict.

- 25. Initiatives taken for improving the field delivery through capacity building of field officials, apart from providing incentives.
- 26. As a part of active management to rebuild Sariska and Panna Tiger Reserves where tigers have become locally extinct, reintroduction of tigers and tigresses have been done. The successful reintroduction of wild tigers in Panna is a unique exercise and one of a kind in the world. The reintroduced tigresses are breeding.
- 27. **All India Tiger, Co-predators and Prey Estimation, 2018:-** The fourth round of country level tiger status assessment completed in 2018, with findings indicating an increase with a tiger population estimate of 2967 (lower and upper limits being 2603 and 3346 respectively), as compared to the last country level estimation of 2014, with an estimate of 2226 (lower and upper limits being 1945-2491 tigers), 2010 estimation with an estimation of 1706 (lower and upper limits being 1507-1896) and 2006 estimation, with an estimate of 1411 (lower and upper limits being 1165 and 1657). At present, India has around 75% of tiger population and its source areas amongst the 13 tiger range countries in the world, owing to its long history of conserving the species through Project Tiger (2.21% of country's geographical area spread out in 50 tiger reserves in 18 States).
- 28. **Management Effectiveness Evaluation (MEE)**: A report on Management Effectiveness Evaluation (MEE) of Tiger Reserves was released in July, 2019, containing the fourth round of independent assessment based on refined criteria done in 2018 for 50 tiger reserves. Out of 50 tiger reserves, 21 were rated as 'very good', 17 as 'good' and 12 as 'fair'.
- 29. Providing special assistance for mitigation of human-tiger conflicts in problematic areas.

Standard Operating Procedures (SOPs)

- 30. A 'Standard Operating Procedure' for dealing with tiger deaths has been issued, based on advisories of Project Tiger / National Tiger Conservation Authority, with inputs from Wildlife Crime Control Bureau, State officials and experts, fine tuned to meet the present challenges.
- 31. A 'Standard Operating Procedure' for dealing with straying tigers in human dominated landscape has been issued.
- 32. A 'Standard Operating Procedure' for disposing tiger/leopard carcass/body parts has been issued.
- 33. A Standard Operating Procedure has been issued to deal with orphaned / abandoned tiger cubs and old / injured tigers in the wild.
- 34. A 'Standard Operating Procedure' has been issued to deal with tiger depredation on livestock.
- 35. A 'Standard Operating Procedure' for Interstate Co-ordination amongst tiger reserves that share boundary was issued by the NTCA.
- 36. A 'Standard Operating Procedure' has been issued for active management towards rehabilitation of tigers from source areas at landscape level.
- 37. Phase-IV tiger reserve level, continuous monitoring of tigers using camera traps and building up data on photo captures of individual tigers, has been institutionalized.

- 38. A national repository of camera trap photo IDs of individual tigers has been created.
- 39. Field level workshops for capacity building of field officers to deal with straying tigers.
- 40. On completion of pilot e-surveillance project in Corbett Tiger Reserve (Uttarakhand), central assistance (100%) has been provided for installing 24X7 e-surveillance at Kaziranga Tiger Reserve (Assam) and fringes of Ratapani Wildlife Sanctuary (Madhya Pradesh).
- 41. **Economic Valuation of sixteen tiger reserves** done in collaboration with the Indian Institute of Forest Management to assess value of the ecosystem services they provide and their potential role in climate change mitigation.
- 42. Trial of Unmanned Aerial Vehicle for monitoring done in the Panna Tiger Reserve (Madhya Pradesh), in collaboration with the Wildlife Institute of India and now getting extended to 13 other tiger reserves too. Frontline staff has been capacity built and first set of equipment handed over at the Panna Tiger Reserve.
- 43. Assessment of Status, Density and Change in Forest Cover in and around tiger reserves of the Shivalik Gangetic Plain Landscape done in collaboration with the Forest Survey of India.
- 44. A joint report of Bangladesh has been brought out on the assessment of tiger status in the Sundarbans.
- 45. National Tiger Conservation Authority and Wildlife Crime Control Bureau have established an online tiger / wildlife crime tracking / reporting system in tiger reserves.
- 46. Based on International standards, security audit framework of the NTCA has been validated for implementing across all tiger reserves. 25 tiger reserves have been assessed for their security protocols through this framework.
- 47. To assess status of tiger bearing areas outside tiger reserves, the CA|TS (Conservation Assured | Tiger Standards) framework is being used, which helps identify inadequacies in management interventions in such areas so that gaps can be addressed through appropriate strategies. 2 of the 4 global sites accredited with CA|TS certification are in India, namely the Ramnagar and Lansdowne Forests Divisions in Uttarakhand.
- 48. Initiative has been taken to come out with a sub-continental level tiger estimation report along with Nepal, Bhutan and Bangladesh.
- 49. To assess occupancy of tigers in high altitude landscapes, a collaborative project with the Global Tiger Forum has been initiated.