



AMRIT KAAL KA “TIGER VISION”

TIGER @ 2047



मंत्री
पर्यावरण, वन एवं जलवायु परिवर्तन
और
श्रम एवं रोज़गार
भारत सरकार



MINISTER
ENVIRONMENT, FOREST AND CLIMATE CHANGE
AND
LABOUR AND EMPLOYMENT
GOVERNMENT OF INDIA

भूपेन्द्र यादव
BHUPENDER YADAV



MESSAGE

India has achieved several milestones on the wild tiger agenda. The Tiger Vision Plan for the Amrit Kaal focuses on a landscape level approach for sustaining wild tiger habitats, while recognizing tiger and its role as a mascot for livelihood, sustenance of natural resources, and preserving the socio-cultural ethos.

The Vision plan spells out the much-needed synergy between conservation and development. It is aimed towards consolidating and strengthening "exclusive" tiger agenda in the core habitats, and "inclusive strategy" in the larger landscape for addressing human tiger interface, and bringing sustainable gains to landscape level stakeholders, while focussing on a composite action portfolio involving inter-departmental coordination across national, state, and field levels for securing habitat integrity, connectivity and integrated development.

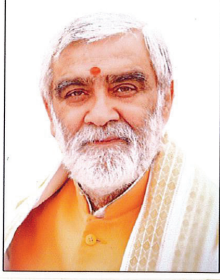
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(Bhupender Yadav)



आज़ादी का
अमृत महोत्सव

अश्विनी कुमार चौबे
Ashwini Kumar Choubey



सत्यमेव जयते

आहारशुद्धौ सत्त्वशुद्धिः



एक कदम स्वच्छता की ओर

राज्य मंत्री
पर्यावरण, वन एवं जलवायु परिवर्तन
उपभोक्ता मामले, खाद्य और सार्वजनिक वितरण
भारत सरकार
MINISTER OF STATE
ENVIRONMENT, FOREST AND CLIMATE CHANGE
CONSUMER AFFAIRS, FOOD & PUBLIC DISTRIBUTION
GOVERNMENT OF INDIA

MESSAGE

Strong tiger governance and holistic tiger reserve management in India have resulted in the country becoming a global leader in wild tiger conservation.

As we celebrate half a century of Project Tiger, the country is moving forward with its new tiger vision, which brings the perspective of the majestic cat becoming a major indicator of climate, ecosystem well-being, human health and livelihood. The vision aims to sustain tigers for posterity, while preserving tangible and intangible gains derived from these wilderness habitats. With an envisioning at a landscape level based on best practice normatives, and ensuring sectoral integration and convergence, the vision plan perfectly aligns to India's growth story in the Amrit Kaal.

(Ashwini Kumar Choubey)

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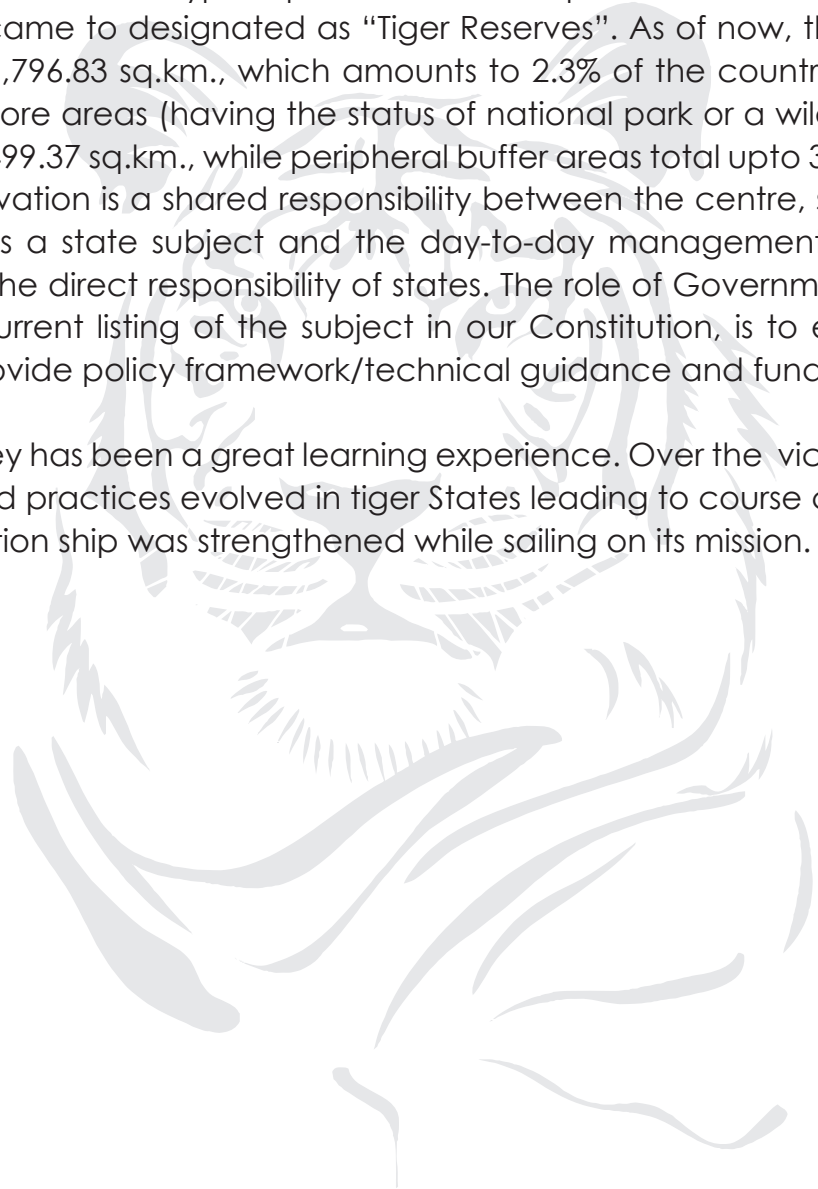
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THE JOURNEY SO FAR

India has completed half a century of successful in-situ wild tiger conservation under "Project Tiger". This humongous effort has no parallel in the contemporary global scenario, in terms of its scale and magnitude.

The genesis of Project Tiger goes back to the early seventies. On the first of April 1973, it was launched in nine eco-typical protected areas, spread across the country in nine states, which came to designated as "Tiger Reserves". As of now, the Project Tiger coverage is 75,796.83 sq.km., which amounts to 2.3% of the country's geographic area. Of this, core areas (having the status of national park or a wildlife sanctuary) amount to 41,499.37 sq.km., while peripheral buffer areas total upto 34,297.46 sq.km. Wildlife conservation is a shared responsibility between the centre, states, and civil society. Land is a state subject and the day-to-day management of biodiversity and wildlife is the direct responsibility of states. The role of Government of India, by virtue of concurrent listing of the subject in our Constitution, is to enact enabling legislations, provide policy framework/technical guidance and funding support.

The tiger journey has been a great learning experience. Over the vicissitude of time, numerous good practices evolved in tiger States leading to course corrections. The tiger conservation ship was strengthened while sailing on its mission.



MILESTONES

- Home to more than 70% of world's wild tigers
- The extant tiger strategy involves a combination of mutually complementary “exclusive” tiger actions in the core, and an “inclusive” multiple use agenda for garnering people support in the peripheral buffer
- Statutory backing for Project Tiger and enhancement of penal provisions
- Strengthening anti-poaching activities: protection infrastructure, communication, e-surveillance, state of the art M-STRIPES patrol, security planning and audit, strengthened communication, frontline capacity building, support for deployment of local workforce to complement frontline patrolling
- Achieved the TX2 goal of the Global Tiger Recovery Program
- Increase in Project Tiger coverage: 53 tiger reserves
- Evolving Standard Operating Procedures for states and field formations to deal with various situations
- Support for active management: buildup of prey base through translocation and in-situ enclosures, tiger translocation from reproductively surplus area habitat to other reserves with comparatively low tiger density
- Efforts under the refined country level tiger assessment recognized in the Guinness Book of World Record (National Tiger Conservation Authority (NTCA) and Wildlife Institute of India (WII))
- Several tiger sites conferred with international accreditations like Conservation Assured Tiger Standards (CA | TS) and TX2 awards
- Evaluating ecosystem services emanating from tiger reserves.
- Forest fire audit protocol developed for tiger reserves
- First transcontinental Reintroduction of a mega-carnivore - Cheetah from South Africa and Namibia
- Increase in population of co-predators like the leopard
- Science based management and monitoring of tigers, co-predators, prey and habitat.
- Transnational cooperation with Tiger Range Countries
- Handholding facilitating dissemination of good practices to tiger range countries through the intergovernmental platform of Global Tiger Forum

1. **Vision:** Securing Tigers for Posterity
2. **Goal:** To maintain a viable and sustainable population of tiger in the wild based on carrying capacity of the habitat and to bring all potential tiger habitat under the coverage of Project Tiger
3. **Objective:** To ensure maintenance of a viable population of tiger in India for scientific, economic, aesthetic, cultural and ecological values and presence for all times, areas of biological diversity for benefit, education and awareness of the society.
4. **Perspective:**



TIGER

- *Mascot of livelihood and sustainable development*
- *Indicator of ecosystem well-being in sync with global sustainable development, biodiversity, and climate goals*
- *Model for securing green investments: innovative green business models*
- *Umbrella for wildlife and biodiversity conservation: Securing ecosystem services for perpetuity*

CONTOURS OF THE AMRIT KAAL TIGER STRATEGY

Bringing all potential tiger bearing forests under the ambit of Tiger Reserves

Resorting to “exclusive” tiger agenda based on normative codified through good practices for maintaining a viable wild tiger population in core critical tiger habitats of tiger reserves, within the inherent biological carrying capacity of the habitat – working towards an inviolate core critical tiger habitat

Adopting an “inclusive” co-occurrence agenda for buffer and corridor areas beyond towards gainful engagement with all stakeholders, while ensuring the centrality of local people, through community stewardship and innovative, sustainable business models

Adopting a centrifugal vision vis-à-vis the tiger reserve and envisioning a larger outer landscape (Zone of Influence) subsuming the tiger reserve and the Eco Sensitive Zone, while syncing the same with the district planning process/ implementation for due integration at various levels

ENVISAGED STRENGTHENING ACTIONS FOR TIGER DURING “THE AMRIT KAAL”

Level I (National)

S.No.	Theme	Envisaged Strengthening Actions
1.	Enhanced Central assistance for core critical tiger habitat	<ul style="list-style-type: none"> • State of the art technology support for surveillance and security plan implementation • Security audit • Frontline Capacity Building • Fire Surveillance • Communication (wireless) e-surveillance • Vehicular mobility including choppers • Rapid Response Team • Radio telemetry • Wildlife forensics • Updation of tool kits (protection) • Strengthening State level WCCB hubs • Support for Human-Wildlife Conflict control room • “Janta” insurance for peripheral dwellers • Creation of frontline staff development fund • Support for in-situ rewilding facility • Support for active management • Fixing a country level carrying capacity for Tiger to guide active interventions • Enabling joint patrolling with Army, Seema Suraksha Bal, Border Security Force at international border • Orientation for army, Seema Suraksha Bal, Border Security Force, Police and customs personnel • Periodic refresher for senior level officers • Need based issuance of SOPs synergy with Veterinary Department for Wildlife disease safeguard • Support for smart green infrastructure for sectors dealing with heavily used infrastructure including road, rail, dams
2.	International Cooperation	<ul style="list-style-type: none"> • Strategy of good practices for • Joint patrolling within the ambit of bilateral instruments • Joint Wildlife appraisal • Joint checking of river courses making borders
3.	Enhanced Central Assistance for Buffer and Beyond (Tiger Landscape)	<ul style="list-style-type: none"> • Enabling policy regime for sectoral integration for complementary resource support from line departments – viz. Ministry of Rural Development, Defence, Agriculture, Power, Irrigation, Mining, Surface Transport, Railways • Strengthening Tiger Conservation Foundations as entrepreneurial vehicles for ecodevelopment and economically gainful community stewardship

S.No.	Theme	Envisaged Strengthening Actions
4.	Linking tiger conservation gains with Climate Change adaptation	<ul style="list-style-type: none"> • Securing Support from Commerce Ministry of innovative business models with Corporates • Soliciting complementary support for States from Climate city
5.	Fostering Climate smart practices	<ul style="list-style-type: none"> • Securing complementary support from Ministry of Agriculture, Power and related departments
6.	Strengthening market linkage for internal carbon trading	<ul style="list-style-type: none"> • Engagement with the Ministry of Corporate Affairs
7.	Improving forest productivity vis-à-vis local resource dependency	<ul style="list-style-type: none"> • Synergy with CAMPA and Green India Mission
8.	Fostering Pandemic Buffering	<ul style="list-style-type: none"> • Synergy with one health programme
9.	Assessment of Ecosystem Services	<ul style="list-style-type: none"> • Linkage with Ministry of Corporate Affairs for promoting green growth
10.	Improving tiger management	<ul style="list-style-type: none"> • Management Effectiveness Evaluation (MEE) and Conservation Assured Tiger Standards (CA TS) in all tiger reserves • Review of normatives for field actions
11.	Fostering sustainability of traditional small towns proximal to tiger reserves	<ul style="list-style-type: none"> • Support for "Tiger Towns" in collaboration with Ministry of Urban Development
12.	Factoring host community driven ecotourism with Climate Change	<ul style="list-style-type: none"> • Support in collaboration with Ministry of Tourism

Level II (State)

S.No.	Theme	Envisaged Strengthening Actions
1.	Themes 1 to 12 at National level	<ul style="list-style-type: none"> Complementary State support
2.	Staff Development and fostering professionalism	<ul style="list-style-type: none"> Special allowance for non-family postings in difficult climatic zones 100% filling up of vacant posts in Tiger Reserves Posting personnel with proven track record and passion Special curriculum for frontline in service Training centre to deal with poaching, Human-Wildlife Conflict Developing range offices as composite technical and managerial hubs, equipped with state-of-the-art technology for communication and Rapid Response to deal with emergent situations
3.	Support for sectoral (intra and inter) integration in Tiger Landscape	<ul style="list-style-type: none"> Periodic review and directions in the context by the steering committee under Chief Minister
4.	Strengthening Tiger Reserve governance	<ul style="list-style-type: none"> Bringing core and buffer under unified control of the Field Director
5.	Sustaining tiger gene porosity through linkages in the tiger landscape	<ul style="list-style-type: none"> Identifying vegetal & non vegetal linkage facilitating movement of big cats Securing the (ecological) integrity of such linkages Institutionalizing day to day monitoring by active frontline and community stewards
6.	Proving ecologically viable livelihood options to local	<ul style="list-style-type: none"> Preference to indigenous people for recruitment in the frontline cadre
7.	Human-Wildlife Conflict	<ul style="list-style-type: none"> Categorising HWC as Natural disaster and providing funding support from the concerned department for preventive and control measures, while fixing mandate/responsibility for related line departments
8.	Creation/ strengthening of state level tiger cell	<ul style="list-style-type: none"> Institutionalising the tiger cell at State Headquarter under a senior police official, while linking it with District Tiger cell involving DM/SP/CJ
9.	Zero pendency of schedule-I WL offence cases	<ul style="list-style-type: none"> Launching periodic special drive to clear pending court cases
10.	Dealing with LWE and other conflict situations	<ul style="list-style-type: none"> Ensuring actions for security and livelihood options to locals, monitored by a special task force
11.	Sustainable Tiger /WL Tourism	<ul style="list-style-type: none"> Strict adherence to visitor carrying capacity Prescribing landscape/architectural codes with climate smart features
12.	Legitimacy to Tiger landscape strategy	<ul style="list-style-type: none"> Providing an enabling legal provision in Land Revenue Code or Town & country planning Act
13.	Intra/interstate coordination	<ul style="list-style-type: none"> Institutionalizing actions

Level III (Tiger Reserve - Field Formations)

(A) Core Critical Tiger Habitat (Protected Area Status)

S.No.	Theme	Envisaged Strengthening Actions
1.	Field Protection	<ul style="list-style-type: none"> • Security Planning as a part of Tiger Conservation Plan • Security Audit • Refining normatives for protection infrastructure vis-à-vis emerging challenges • Surveillance having State of the art technology • Leg work normatives • Drone/chopper surveillance • Establishing 24x7 Control rooms • Deployment of local workforce in day to day patrolling • Sniffer dog Squads • Elephant Squads • Wireless networking (24x7) • Reserve level Tiger/Co-predator camera trap repository for monitoring • Smart patrolling having M-STRIPES • Market surveillance • Capacity building of patrolling squads • Special joint patrolling and monitoring actions in transboundary tiger sites with neighboring states/ countries
2.	Addressing Habitat Welfare factors	<ul style="list-style-type: none"> • Computing habitat carrying capacity for tiger • Limiting habitat development actions w.r.t. prevailing tiger carrying capacity. • Adopting "micro core" approach for reviving low density areas • Prescribing threshold alerts vis-à-vis buffer – core area ratio • Ensuring special protection during monsoon and pinch periods • Human-Wildlife Conflict in sync with NTFP collection
3.	Fire Protection	<ul style="list-style-type: none"> • GIS and remote sensing-based alerts • Complementary traditional preventive and control methods with technology
4.	Flood Protection	<ul style="list-style-type: none"> • GIS and remote sensing-based alerts • Complementary traditional preventive and control methods with technology
5.	Wetland Conservation	<ul style="list-style-type: none"> • Listing and mapping of existing wetlands • Monitoring water quality, biodiversity, and addressing stressors • Annual ground and GIS based monitoring to prevent depletion and fragmentation

S.No.	Theme	Envisaged Strengthening Actions
6.	Human-Wildlife Conflict	<ul style="list-style-type: none"> • Setting up of 24x7 Control room fully equipped with communication facilities and Rapid Response Teams • State of the art preventive and control measures (Reference: Uttar Pradesh Masterplan) • Maintaining a daily dashboard of wildlife mortality/livestock-crop depredation • Maintaining monthly charts of human wildlife conflict score in the GIS domain and syncing with M-STRIPES data • Day to day plotting of big cat/elephant and wildlife presence near human settlements • Fixing of maintaining IDs of individual tigers based on tiger reserve camera trap repository • Day to day patrolling of frontline/community stewards/elephant squads towards issuance of alerts/forecasts • Syncing monthly calendar of local harvest/phenology/NTFP collection with spatial movement of wild animals • Taking day to day note of livestock/crop depredation • Special proficiency of frontline/community stewards in rescuing wild animals in distress • Evolving village cluster level radio hubs for broadcasting day to day hourly alerts by trained local community stewards towards movement of tiger/elephant and other wild animals in vulnerable areas
7.	Science, Research and Technology	<ul style="list-style-type: none"> • Evolving partnerships towards developing technology for protection, monitoring, and addressing HWC issues • Species specific programmes for conserving other Rare, Endangered, Threatened (RET) species and their niche habitats
8.	Active Management	<ul style="list-style-type: none"> • Prey/predator augmentation • Providing wild stock for repopulating other areas • Computation of inherent biological carrying capacity of the habitat for tiger and for deciding active actions • Identifying inherent open areas/meadows and tallying with prevalent wild ungulate carrying capacity for considering prey augmentation • Capacity building of frontline and community stewards in "BOMA" technique, chemical immobilization of tiger • Creation of in-situ rewilding enclosure

S.No.	Theme	Envisaged Strengthening Actions
9.	Establishing Satellite micro cores	<ul style="list-style-type: none"> Identifying cropland parcels contiguous with river stretches/forest edges, non-tiger/elephant corridors, forest patches of 50 Hectare or more Considering such patches as "satellitic micro cores" (stepping-stone) for intensive monitoring of human-wildlife conflicts, without embarking on wildlife fostering actions Day to day reporting of animal presence/ interface events to nearby control room
10.	Securing inviolate spaces	<ul style="list-style-type: none"> Fostering voluntary village relocation from core critical tiger habitat in a timebound manner Fostering relocated sites as heterogenous open areas to promote natural ecological succession Computing carbon sequestration in such areas to access climate funds for adaptation rendered in the context Green mitigation and retrofitting measures for linear infrastructure
11.	Ecotourism	<ul style="list-style-type: none"> Strict adherence to computed visitor carrying capacity Avoiding any action which may disturb the circadian rhythm of wild animals Prioritising gainful engagement with local community for active host community driven tourism resulting in enhanced income Syncing village tourism as part of the local tourist circuit Developing proximal traditional towns as sustainable "Tiger Towns" to ensure tourism infrastructure/ practices are in tune with the natural environ/ ecological setting
12.	Disease Surveillance	<ul style="list-style-type: none"> Evolving a local landscape epidemiology map (historical, periodically updated with prevailing disease occurrence) Preparation of preventive vulnerable zones in collaboration with local veterinary department Supporting research for vector cycles related to pastoral/sylvatic cycles in the area Maintaining immunized buffers for highly contagious diseases Syncing with one health action
13.	Conserving historical and cultural sites	<ul style="list-style-type: none"> Listing and mapping of cultural and historic sites Evolving site preservation programmes

S.No.	Theme	Envisaged Strengthening Actions
14.	Tiger Reserves with Urban interface	<ul style="list-style-type: none"> • Developing contingency plans as part of Tiger Conservation Plan • Gainful engagement of urban stewards with due capacity building to monitor wildlife movement • Institutionalising a garbage disposal plan for preventing conditioning of wild animals to carrion feeding and possible conditioning • Deployment of road patrols linked to 24x7 control room • Ensuring Human Wildlife Conflict readiness with response Rapid Response Team and related actions • Synergy with State Pollution Control Board for preventing garbage disposal/sewage contamination in the tiger reserve landscape

B) Buffer and Beyond (Zone of Influence subsuming buffer and Eco Sensitive Zone)

The co-occurrence agenda of buffer, corridor and beyond (upto a 10 km. radius from the periphery of the core needs to be implemented as a landscape strategy). There are several stakeholders governmental and non-governmental including the local people. The government departments need to be mutually complementary in their action in the interest of biodiversity at large, with a focus on human-wildlife interface.

An illustrative format of stakeholder engagement towards tiger landscape conservation is indicated below vis-à-vis desired actions/ongoing schemes:

S.No.	Name of the Stakeholder	Desired actions
1.	Forest	Incorporation of actions (near sensu stricto) preventive and control measures in forest/Protected Areas, rural-forest interface, urban-forest interface, linear infrastructure traversing forested areas/ Protected Areas and overall conflict management, wetland and river/gullies management including identified satellitic micro cores to be incorporated in respective working plans
2.	District Administration	Incorporation in district planning process, Law and order during interface conflict situations, implementation of masterplan interventions in non-forest areas (preventive and control)
3.	Police	Law and order, crowd management during interface conflict situations forest/wildlife crime situations
4.	Agriculture	Cropland management (fine tuning sowing/ harvesting, including choice of species, innovative mechanisation as warranted), soil conservation measures to prevent gully erosion (avoiding wildlife shelters

S.No.	Name of the Stakeholder	Desired actions
5.	Rural Development	Making available livelihood options (wage oriented)
6.	Road and Transport/Public Works Department	Preventive interventions along civil structures/culverts/highways apart from road hit safeguards
7.	Road and Highway authorities	Preventive interventions along civil structures/culverts/highways apart from road hit safeguards Implementing green infrastructure for linear structures in critical corridors
8.	Railway	Preventive interventions along civil structures/ railway line apart from railway hit safeguards
9.	Irrigation	Water level regulation to prevent flooding of wildlife movement pathways, construction of crocodile filters/weirs
10.	Environment	Interventions for safeguarding green space, management of urban fauna/flora, invasive weed management in urban/rural landscapes to prevent wildlife cover
11.	Municipal Body	Garbage disposal (solid as well as drainage), monitoring carrion feeding to prevent wildlife adaptation Conservation and improvement of water sources
12.	Veterinary	Human-wildlife conflict management: rescue operations of wild animals in distress or those causing distress
13.	Panchayat	Community stewardship for preventive and control actions for addressing HWC in rural landscape Special focus on wetland conservation and climate smart village actions
14.	Urban Development	Urban/rural cover management to avoid wildlife shelter/cover along green spaces, community stewardship along forest- interface borders to facilitate preventive and control actions, implementation of actions envisaged in a "tiger town"
15.	Tourism	Garbage disposal and monitoring of food waste accumulation near tourist destinations Preserving local aesthetics and design Promoting local livelihood and business models for enhancing community entrepreneurship
16.	Pollution Control Board	River/channel/wetland cleaning to prevent carrion feeding by wild animals
17.	Commerce and Industries	Business models for community stewardship (livelihood gain to locals), creating market linkage for local produce
18.	Paramilitary	Transboundary monitoring/surveillance of wild animal movement

S.No.	Name of the Stakeholder	Desired actions
19.	Border Road Organization	Transboundary monitoring/surveillance of wild animal movement, safeguarding blockage of traditional wild animal pathways to prevent altered movement towards human settlements
20.	State Electricity Board	Insulating high tension cables near human settlements to avoid targeted killings of wild animals
21.	Disaster Management Authority	Funding of preventive and control measures as per HWC masterplan
22.	Business and Industry	Complementary support programmes and CSR activities towards biodiversity conservation
23.	Institutions representing Civil Society	Complementary support for above actions



EXPERT COMMITTEE TO PREPARE A VISION PLAN FOR STRENGTHENING PROJECT TIGER

1. Dr Rajesh Gopal, Secretary General, Global Tiger Forum – Chairman
2. Dr. Amit Mallick, IGF, NTCA – Member Convenor

Members

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