Wildlife Conservation Trust

Healthy natural ecosystems and engaged, empowered communities are the foundation of economic growth.
The Wildlife Conservation Trust (WCT) was founded to safeguard India’s life-giving ecosystems in a holistic, sustainable manner. Recognising the interconnectedness between people and ecosystems, WCT uses a 360° approach to conservation by placing equal emphasis on both forest and wildlife conservation and community development. We work closely with forest departments across the country to fortify on-ground protection by training and equipping frontline forest staff. Through partnerships with NGOs, the Trust is attempting to strengthen public education systems, provide alternative livelihood options to rural youth and make healthcare accessible to people living in and around India’s forests. The idea is simple—secure key wildernesses to safeguard wildlife, people and rivers, and mitigate climate change. I invite you to join us in our mission to create a healthier, more prosperous India.

Hemendra Kothari
Founder and Chairman
Trustees

Mr. Hemendra Kothari
Chairman, DSP Investment Managers Pvt. Ltd; Founder, Chairman and Trustee, The Hemendra Kothari Foundation; Member, State Boards of Wildlife, Rajasthan and Maharashtra; Member, National Tiger Conservation Authority; Member, Advisory Council, Global Tiger Forum; India Chairman, The Nature Conservancy.

Mr. Bittu Sahgal
Founder and Editor, Sanctuary Asia Magazine and Sanctuary Nature Foundation; leading conservationist; Founder, Kids for Tigers, a nation-wide conservation education programme.

Ms. Aditi Kothari
Executive Vice President and Director, DSP Investment Managers Pvt. Ltd. Member of the Advisory Board of Dasra and DSP CSR committees. A Bachelor of Science in Economics from the Wharton School and an MBA from the Harvard Business School.

Ms. Shuchi Kothari
A Bachelor of Science in Economics from the Wharton School and an MBA from the Harvard Business School. She is a director of Health & Glow Retailing Pvt. Ltd.

President

Dr. Anish Andheria
Large Carnivore biologist, specialises in prey-predator relationships; Carl Ziess Conservation Awardee (2008); UAA-ICT Distinguished Alumnus Awardee (2017); Member, State Board of Wildlife, Maharashtra and Madhya Pradesh; Member, Madhya Pradesh Tiger Conservation Foundation.
 Advisory Board Members

**Mr. Subramaniam Ramadorai**
Former Chairman, NSDA and NSDC; Chairperson-Governing Board, TISS; Chairman, IIT-Guwahati; Former CEO and MD, TCS (1996 to 2009); Fellow, Indian National Academy of Engineering; Fellow, IEEE; Member, National Council, CIL.

**Ms. Naina Lal Kidwai**
Chairman, Max Financial Services; serves on the Board of Nestle SA; Non-executive Director, CIPLA Ltd.; Chair, FICCI’s Sustainability Council and Water Mission and Chair, India Sanitation Coalition.

**Mr. Dereck Joubert**
Award-winning filmmaker; National Geographic Explorer-in-Residence; Founder of the National Geographic Big Cats Initiative and a wildlife conservationist; recipient of 2008 World Ecology Award; recipient of Presidential Order of Merit in Botswana.

**Mr. Amit Chandra**
Managing Director, Bain Capital; World Economic Forum Young Global Leader (2007); listed by Forbes under Asia’s Heroes of Philanthropy (2016); Member of the Board of Directors of Tata Sons Limited, Genpact, L&T Finance, and Emcure Pharmaceuticals; Trustee of the Tata Trusts; Founder/Board Member of Ashoka University.

**Mr. Anshu Jain**

**Mr. Prashant Trivedi**
CIO, Multi-Act Family Office; Chairman Indian, Card Clothing Co. Ltd.; Founder and Chairman, Multi-Act Trading and Investments (Pvt.) Ltd.; Director, Great Plains Holdings (Kenya) Ltd.

**Dr. Thomas Kaplan**
Chairman and Chief Investment Officer, Electrum Group LLC; Executive Chairman, Panthera Corporation; Member, Order of the Légion d’Honneur of France (2014).

**Mr. Alok Kshirsagar**
Senior Partner, McKinsey & Company; leads McKinsey’s Risk Management Practice in Asia; Honorary President of the National Association for the Blind, Karnataka; serves on the board of PRS Legislative Research and the Next Gen Leaders board of the Indian School of Business; named “Young Global Leader” by the World Economic Forum.
India’s Biodiversity

- 1,300+ Species of birds
- 1,500+ Species of butterflies
- 400+ Species of mammals
- 300+ Species of snakes
- 15 Species of wild cats
- 25,000+ Species of flowering plants

The Environmental Crisis

Water supports all life on earth. The destruction of forests and the subsequent impact on the hydrological cycle is devastating communities across the world. Anthropogenic climate change is exacerbating the crisis.

Water

About 71% of earth’s surface is covered with water, but only a small fraction of this water is available for human consumption.

- 0.008% of all water is surface water, available for human consumption
- 1.7% of all water is locked in glaciers/ice
- 1.75% of all water is underground and out of reach
- 96.5% of all water is in the oceans

Climate

Studies show that there has been a rapid rise in global temperatures post the industrial era. Since 1880s, the average temperatures have increased by 0.8° Celsius. The impact of rising temperatures will be devastating and has caused:

- Falling crop yields in many areas, particularly developing regions
- Significant decreases in water availability in many areas
- Sea level rise, threatening major cities
- Rising intensity of storms, forest fires, droughts, flooding and heat waves

Interconnectedness between forests, tigers and climate change:

The Stern Review indicates that economic costs of climate change will lead to a loss of 5-20% of global GDP every year. A yearly investment of just 1% of global GDP per annum in renewable energy and forest conservation will help avoid the adverse effects of climate change.

By supporting natural regeneration of tiger forests, we can effectively mitigate climate change, in addition to conserving biodiversity and riverine ecosystems.
WCT’s Reach

WCT plays a catalytic role in the landscapes it operates in. Our focus is on strengthening sustainable ecosystems that will continue to serve wildlife and communities in the long-term. To achieve this, we work closely with government bodies and local NGOs, providing funding, technical support and consultancy. The solutions we create are rooted in hard science and are easily replicable.

The 360° Approach

Nearly 600 rivers originate from, or are fed by, the tiger-bearing forests of India. These tiger habitats are crucial for the water and food security of the country.

Several million people live in and around forests. Thus, one cannot talk about conservation without community participation. In view of this fact, WCT has adopted a 360° approach to conservation by focusing equally on wildlife protection and community development. Our mission is to secure vital wildlife habitats and catalyse the upliftment of marginalised communities.
Conservation Strategy

Inside Protected Areas

- Train frontline forest staff in wildlife law
- Train frontline forest staff in trauma management
- Train frontline forest staff in systematic patrolling
- Help strategise and implement anti-poaching operations
- Help monitor human disturbance and animal distribution inside tiger reserves
- Provide essential equipment for forest guards and patrolling camps (anti-poaching camps)
- Motivate forest staff through Wildlife Service Awards
- Provide veterinary help during translocation of wild animals
- Estimate carnivore populations using camera trapping
- Influence policy through targeted research and dialogue

Enhance livelihood options for local communities to reduce their dependence on forests
- Strengthen human-wildlife interface management to mitigate future conflict
- Provide veterinary support in mitigating human-wildlife conflict
- Support intelligence gathering to crack down on wildlife trade
- Estimate populations of large carnivores in human-dominated landscapes
- Advocate an integrated conservation approach involving local communities and the forest department
- Study dispersal of tigers and leopards in human-dominated landscapes using camera trapping and genetics
- Assess impact of infrastructure on forest connectivity and suggest mitigation measures
- Assess landscape connectivity and help identify wildlife corridors
- Work in close coordination with the existing government machinery
- Influence policy through targeted research and dialogue

Outside Protected Areas

- Support intelligence gathering to crack down on wildlife trade
- Help deploy radio-collars and monitor tiger and leopard movement/dispersal
- Help hire specialized lawyers to fight critical wildlife cases
- Conduct health check-up camps for frontline forest staff
- Provide veterinary support to conduct postmortems of wild animals
- Help strategise and implement anti-poaching operations
- Enhance livelihood options for local communities to reduce their dependence on forests
- Strengthen the rural education system - Teacher training; Developing learning aids; School infrastructure support
- Train the staff of territorial forest divisions in wildlife law
- Help improve the law enforcement mechanism along wildlife corridors
- Support intelligence gathering to crack down on wildlife trade
- Provide veterinary support in mitigating human-wildlife conflict
- Study long-term changes in land use and land cover patterns
- Work in close coordination with the existing government machinery
- Partner with NGOs, educational institutes, corporates and multilateral agencies to further our conservation goals
- Influence policy through targeted research and dialogue

Enhance livelihood options for local communities to reduce their dependence on forests
Equipping Patrolling Camps

Deeply concerned about the challenging working conditions of India’s frontline forest staff, WCT equips Patrolling Camps (or Anti-poaching camps) with 28 essential items. This crucial initiative has greatly boosted the morale of forest guards and watchers who are responsible for safeguarding India’s natural ecosystems.

Challenges faced by frontline forest staff

- Remote location
- Round the clock duty
- Patrolling rough terrain
- Combating forest fires
- Intercepting illegal activities
- Enduring extreme weather
- Possibility of animal attacks

Rapid Response Units

WCT designs and deploys fully-equipped conflict mitigation vehicles called Rapid Response Units (RRUs) to improve the effectiveness and reduce the response time of forest staff to emergencies.

2,500 Patrolling camps equipped

Balaclava
Boots
Winter jacket
Poncho
Tent
Sleeping bag
Ground sheet
Cot
Cupboard
Trunk
Backpack
First aid kit
Torch
Digital camera
Binoculars
GPS
Water tank
Utensils
Water purifier
Water bottle
Mosquito net
Compass
Walkie-talkie
Solar charging unit

54 fully functional RRUs deployed
33 essential items per RRU
43 Protected Areas covered
Improving Mobility of Forest Staff

WCT supplements the efforts of state governments by donating an array of vehicles for frontline forest staff. We believe that greater mobility of the staff translates into better protection of remote, undulating and vulnerable forest areas, and improves responses to human-animal conflict situations.

We believe that improving the mobility of frontline forest staff is intrinsic to the strong protection mechanism of a forested landscape. Bicycles, motorcycles, 4WD vehicles, water tankers, boats and tractors, all play their part in enhancing the efficiency of forest staff. Needless to say, access to vehicles considerably reduces the reaction time of staff to emergencies.

Sheetal Navgire
Programme Coordinator

Donations

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4,500</td>
<td>Bicycles</td>
</tr>
<tr>
<td>650</td>
<td>Motor vehicles</td>
</tr>
<tr>
<td>15</td>
<td>Boats</td>
</tr>
</tbody>
</table>
Wildlife Crime Prevention Training for Frontline Forest Staff

Hunting, illegal trade, electrocution and poisoning are serious threats to wildlife. Effective and timely law enforcement is the key to reducing these widespread threats. WCT has created the Wildlife Law Enforcement Training (WLET) programme to build capacity in the frontline forest staff across the country.

Till date, WCT has trained over 12,000 forest officers through 190 training sessions. In fact, WCT’s WLET programme is part of the core curriculum of the state forest training institutes of Madhya Pradesh and Maharashtra.

WCT has initiated specialised training programmes for frontline forest staff with the aim of creating better capacity for on-field enforcement responses to wildlife crime. The basic and advanced sessions, titled ‘Law Enforcement, Evidence Collection and Site Security’ (LEECSS) and ‘Module on Offence Reduction and Enforcement’ (MORE) respectively, are designed for imparting skills in the effective use of wildlife law, wildlife forensics and crime scene management practices.

Wildlife Crime Prevention Training for Senior Officials

WCT conducts a training programme for senior forest staff — Range Forest Officer (RFO), Assistant Conservator of Forests (ACF) and Deputy Conservator of Forests (DCF). The training involves a) wildlife law and legal procedures, b) case studies on latest judgements and c) modern crime investigation techniques. WCT also organises trainings for senior officers on forensic science in collaboration with well-equipped labs to help create better understanding of the scope and limitations of forensic analysis and to systematise field techniques of evidence collection.
Law Enforcement Monitoring

WCT’s Law Enforcement Monitoring (LEM) division, in collaboration with the Wildlife Institute of India (WII), State Forest Departments and the NTCA, strives to make patrolling more systematic and tactical, so as to monitor and eliminate or reduce illegal activities inside tiger reserves and other Protected Areas. The LEM module, called MStiPES, helps maintain a database of patrolling, illegal activities and ecological attributes in an analytical framework. The availability of this information on a weekly basis allows the Field Director to take effective management decisions.

WCT is helping implement MStiPES in Pench and Satpura Tiger Reserves in Madhya Pradesh; and Pench, Bor, Nawegaon-Nagzira and Melghat Tiger Reserves and Umred-Pauni-Karhandla, Katepura and Dnyanganga Wildlife Sanctuaries in Maharashtra.

Over 20,50,000 km of patrol efforts have been analysed and reported to the park management between May 2016 and December 2018, covering a total area of over 8,050 sq. km.

Training, which includes introduction to MStiPES, observation recording and data collection, GPS handling and mock patrol, is conducted for forest guards in consultation with senior forest officers.

Over 800 forest guards from 55 ranges across nine parks have been trained in LEM implementation. Additionally, refresher training and on-site feedback is provided on the patrol efforts on a regular basis.
Site Security

Recognising the importance of a year-round vigil in safeguarding forests, WCT, in collaboration with Panthera, conducts a nine-day training programme to improve the skills of frontline forest staff in a number of disciplines.

As a law enforcement officer, the forest guard has to carry out patrolling and overt/covert operations on a daily basis. Hence, developing his/her skill set is of paramount importance.

Site security training helps develop the capacity of forest guards in human tracking, making tactical observations, using camouflage and concealment at the time of patrolling and carrying out search operations, which in turn strengthens the protection mechanism of the forest.
Canine-Assisted Wildlife Investigation Programme

Humans generally look at landscapes in one dimension, as we primarily use vision to find tracks and signs. However, dogs scan the same landscape using olfactory senses, thereby providing an entirely different approach to detection and search.

The Canine-Assisted Wildlife Investigation Programme (CAWIP) comprises four working dogs specially trained to carry out varied tasks related to detection of target species or indirect evidences left behind by wild animals or wildlife poachers/hunters.

The objective of CAWIP is to help our field teams in human-wildlife interface management, carrying out conservation research, road ecology surveys, disease surveillance, and wildlife law enforcement.

These dogs can detect the presence of scats, tracks, blood trails, kills and urine of target species, which in turn can help answer a vast array of conservation queries related to human-wildlife conflict, wildlife crime and research.
Connectivity Conservation

WCT’s field interventions are rooted in hard science. Our research helps us recommend policy change at both national and state levels. We combine conservation genetics and GIS to study and predict the movement of tigers through complex landscapes that include well-protected tiger reserves and Protected Areas, relatively less protected but good quality forests, highly degraded forests and revenue land. This helps us identify the most viable corridors as well as bottlenecks in these corridors.

WCT’s scientists spend extensive amounts of time and effort collecting data on forest cover and waterbodies, man-made infrastructure, human activity and animal densities. The GIS platform then integrates these layers to create a composite, landscape-level perspective of the concerned area. This is then shared with relevant agencies to formulate a holistic strategy for conservation of large landscapes keeping in mind the well-being of both people and wildlife.

Our analysis highlights corridors connecting existing Protected Areas and other tiger source sites in a landscape. The map shows areas best suited for movement of tigers and identifies possible pinch points along them. The red and orange regions in the map show areas with least resistance to tiger movement.

However, at several places there are bottlenecks or a near break in connectivity. Such areas need urgent attention not only from the government but also from NGOs working to ensure long-term sustenance of forests, wildlife and communities.
Wildlife Population Estimation

WCT uses camera traps to count tigers and leopards, and helps the government maintain a consolidated database of large carnivores living both inside and outside Protected Areas. Camera trapping is by far the most reliable population estimation technique. WCT has the capacity to survey about 8,000 sq. km of tiger habitat using camera traps each year. Our current work focuses on forests outside national parks and sanctuaries to make a case for conservation of tigers in the corridors.

Our camera trapping exercise also helps understand the abundance and distribution of several lesser-known species such as wolf, hyena, pangolin, ratel, rusty-spotted cat, Indian fox, otter and four-horned antelope. This information will go a long way in planning recovery programmes for these rapidly dwindling species. Another major benefit of WCT's long-term camera trapping work is the estimation of the dependence of local communities on forest and wildlife. This in turn assists both the government and other NGOs in planning interventions that can reduce forest degradation without hampering the livelihoods of people living in and around forests.

"Systematic and intensive monitoring of tiger populations inside and outside Protected Areas tells us whether WCT’s community and protection-related interventions are successful. A stable tiger population indicates a healthy ecosystem, which in turn means that local communities will be able to avail the benefits of ecosystem services such as clean water, rich soils, pollination, seed dispersal etc."

Vivek Tumsare
Field Biologist
Most wild tigers live in small, isolated Protected Areas (PAs) interspersed in a sea of human-dominated environment. While significant effort has been invested in increasing tiger populations inside PAs, much less has been done to understand the influence of different landscape elements on connectivity of disjointed tiger populations. WCT is trying to fill this gap by employing genetic approaches in conjunction with landscape ecology to study and measure the extent of such effects on tiger populations.

Aditya Joshi
Head, Conservation Research

The tiger faecal samples collected from the field are analysed and the findings are used to detect the movement of individual tigers across large landscapes. Our research has shown that relatively small Protected Areas and highly fragmented forest patches outside these Protected Areas play an important role in maintaining genetic connectivity between tiger populations interspersed across large human-dominated landscapes.

WCT’s intensive genetic studies have provided substantial evidence for the need to safeguard corridors for long-term survival of tigers and their prey.
Radio-Telemetry

Radio-telemetry is one of most widely used technologies for understanding the behaviour and ecology of wild animals. Its importance from the context of tiger conservation cannot be overstated. Being saturated with tigers, the core zones of several tiger reserves have no room for new entrants. As a result, a large majority of young tigers disperse into less-protected forests via corridors.

WCT uses radio-telemetry to understand how dispersing tigers use their habitat, to suggest and implement community interventions for mitigating conflict arising from the interaction between people and tigers.

Some effective interventions include livelihood programmes to reduce dependence of people on forests and awareness drives to inform people about subtle behaviour changes needed to coexist with large carnivores.

Understanding the dispersal of tigers and leopards also helps us devise training programmes for frontline forest staff. WCT also assists the forest department in radio-collaring tigers that have been declared as dangerous to humans. By closely monitoring their movements, we provide unbiased evidence to enable the forest department to make critical decisions.
When humans and wildlife live alongside each other, there is bound to be some interaction between the two. Often, humans perceive such interactions as conflict, endangering the lives of both people and wildlife. WCT works closely with state forest departments to mitigate conflict and minimise losses caused on either side due to these interactions. WCT’s Human-Wildlife Interface Management (HWIM) division trains forest staff in reducing damage during conflict situations and assists the forest department in devising long-term solutions.

**Issues that needed WCT intervention**
- Attack on humans
- Staying
- Trapped
- Abandonment
- Radio-collaring
- Tiger deaths
- Others

**WCT interventions**
- 54% Human-carnivore interface management
- 23% Rescue
- 23% Post-mortem

**Species benefitted from WCT interventions**
- 8% Attack on humans
- 85% Staying
- 7% Trapped

WCT assists the forest department developing a human-tiger interface prediction module. This module uses spatial and temporal characteristics of previous interactions and helps the forest department in predicting potentially sensitive situations in the future.

WCT’s veterinarians assist the forest departments in:
- Tracking tigers inhabiting areas close to human settlements
- Tranquilizing large carnivores
- Monitoring radio-collared tigers and leopards
- Conducting post-mortems of deceased wildlife to ascertain the cause of death

"Large carnivores, when in proximity of human dominated landscapes, attract considerable attention because of the perceived threat to human life. This often leads to removal of animals by the forest department or persecution of animals by local communities. WCT’s interventions under the HWIM project provide technical assistance to the forest department to understand and manage conflict on the ground and propose solutions which are favourable to both people and animals."

*Dr. Prashant Deshmukh*

**Veterinarian**
Human Death Investigation

Tigers thrive in several forests outside India’s Protected Area (PA) network, and often come in contact with livestock and humans. Loss of human life or livestock changes the perception of local communities towards tiger conservation, often leading to a demand for removal of the tiger. Throughout the Central Indian Landscape, an average of 15 people die because of tiger attacks every year. WCT regularly receives requests from the forest department to help identify the problem tiger from several individuals that may be using the same area.

Since 2015, WCT has assisted the Maharashtra and Madhya Pradesh forest departments in investigating 21 human casualties and suggested corrective measures to diffuse the tension between local communities and the forest department. We analyse alleged tiger-caused human deaths using the following four filters:

- **Species Filter:** Identify the species based on hairs on victim’s body, pugmarks from the site of attack, and bite-marks
- **Spatial Filter:** Estimate the number of tigers inhabiting or using the area where human death has occurred, with the help of camera traps
- **Temporal Filter:** Map the movement of tigers and assess the probability of the presence of each individual tiger at the site of attack
- **Forensic Filter:** Collect DNA samples from the human victim or cattle kill to help identify an individual tiger

### Wildlife Health Monitoring

Human population explosion, habitat fragmentation and land use changes are some of the factors affecting the health of wildlife populations.

**WCT’s Disease Surveillance Project aims to achieve the following:**

- Integrate disease surveillance in park management practices
- Build the capacity of park veterinarians by providing trainings and access to surveillance labs
- Promote research on ecology of diseases in free ranging wildlife

The project, in collaboration with the Madhya Pradesh Forest Department (MPFD), is being executed with active participation of the Madhya Pradesh Animal Husbandry Department and Project Directorate of Foot and Mouth Disease, IVRI, Mukteshwar. We are focused on bringing in more stakeholders at the table and creating a system in which different government and non-governmental institutions cooperate to achieve conservation goals with respect to wildlife health.

As part of this initiative, a disease surveillance system has been established and is now functional in the Bandhavgarh Tiger Reserve (BTR). Multiple government agencies, under the leadership of MPFD and WCT, are working together to run an effective surveillance system for infectious diseases among wild herbivores. WCT aims to replicate this model in other parks, adding more species and diseases under the surveillance system.
According to estimates, a million vertebrates are killed on roads every day in the United States, while up to 27 million birds are killed every year on European roads. Similar estimates are unavailable from India. This lack of information on a) the number of animals run over by vehicles b) affected species and c) the locations of roadkills are a major limitation in suggesting and designing effective mitigation measures. Citizens can also contribute valuable data that can help draw meaningful inferences.

WCT has developed and launched an app called ‘Roadkills’ and a web-based platform called roadkills.in to collect data on mortality of wild animals on roads and railway lines in India. This Citizen Science Project endeavours to engage with concerned citizens across the country with the hope that the data collected in this manner will be useful to researchers and road planners across the country in reducing wildlife mortality, installing wildlife-friendly mitigation structures along linear infrastructure, and improving passenger safety.

WCT’s camera trapping exercise in the Satpura Tiger Reserve led to the discovery of the Eurasian Otter *Lutra lutra*, one of the rarest mammals of India. The Eurasian Otter is found largely in Europe, Africa and Asia (Map). Based on historical records, it was believed to exist in India along with the two much more common otter species - Smooth-coated otter *Lutrogale perspicillata* and Asian small-clawed otter *Amblonyx cinereus*.

While the other two species are found at many places across India, the Eurasian otter, as per old records, was believed to occur in the Himalayas and in some remote high altitude streams in southern Western Ghats. However, there was no direct evidence to confirm its presence in India. According to the International Union for Conservation of Nature (IUCN), the Eurasian Otter is listed as ‘Near Threatened’. Throughout its historic range, this species has either gone extinct from several regions or its population has drastically reduced. WCT’s discovery extends its geographical range to central India and also provides the first ever photographic evidence of its existence in India. This phenomenal finding underlines the value of large inviolate protected areas in conserving biodiversity.
Mitigating the Impact of Linear Infrastructure

Over the last decade, India’s economy has been growing at a fairly high rate, and is expected to continue its trajectory in the near future. This creates a steep demand for linear infrastructure such as roads, railways, power lines and canals, which are considered necessary for economic growth. Linear infrastructure may require relatively small portions of forest land but has a disproportionately large impact in the form of breakages in wildlife corridors, habitat fragmentation, and wildlife mortality (roadkills). To mitigate the negative impact of such large scale development is beyond the capacity of a single organisation. The problem is compounded by inadequacy of data and lack of capacity among regulatory agencies.

Moreover, the science of road ecology, which can help mitigate the ill-effects of linear infrastructure, is in its infancy in India.

WCT is trying to fill this gap through a three-pronged approach so that a win-win solution can be achieved for both natural ecosystems and development.

1. **Road Ecology Surveys:** WCT conducts ecological studies on roads which are proposed for expansion, to locate the hotspots of roadkills and help identify suitable locations for introducing mitigation structures (opposite page, bottom), so that conservation costs are incorporated at the inception of the project.

2. **Addressing Gaps in Existing Policy:** WCT maintains a database of proposed roads and railways that are planned for upgradation. The proposed alignments of these roads and railways are overlaid on maps of existing forests using GIS techniques to identify corridors that are likely to get fragmented. These composite maps (below) are shared with regulatory bodies so that mitigation structures can be planned proactively.

3. **Building Capacity in the Field of Road Ecology:** WCT collaborates with leading experts to conduct training workshops focused on the science and policy aspects of road ecology. We invite practitioners from regulatory agencies such as the NTCA, Forest Department, infrastructure development agencies, NGOs, and wildlife biologists, not only from India but also from other tiger range countries for these workshops.
Conservation Behaviour

WCT’s believes that ecology is the bedrock of the economy. We use large qualitative and quantitative datasets for a nuanced understanding of individual and institutional behaviour with respect to natural resource use. Frameworks of economics, psychology, sociology and anthropology with strong ecological foundations are used to gather insights into ground realities, which are then used to evolve evidence-based policy inputs, design conservation interventions, and assess efficiencies of conservation interventions.

‘Change in the behaviour of people and functioning of enforcement agencies is imperative for conservation of large landscapes. This will happen when data from grassroots is analysed to provide critical information to design, drive and measure conservation impact at all levels, be it policy or on-ground action.’

Rushikesh Chavan
Head, Conservation Behaviour

The Conservation Behaviour team undertakes psychosocial and socio-economic studies to understand social drivers and their interactions to build invaluable insights for introducing community interventions.

It undertakes studies of frontline forest staff using Implicit Assessment Tools to identify motivation influencers in order to help design programmes and policies that improve their performance and cater to their day-to-day needs.

WCT is involved in the following:

- Identifying factors driving forest resource extraction and firewood usage in the Greater Tadoba Landscape
- Understanding income sources of villages situated in close proximity to forest blocks
- Identifying motivation influencers of frontline forest staff in the tiger reserves
- Evaluating and comparing existing policies and practices and suggesting policy changes to aid conservation
- Carrying out Cost Benefit and Cost Effectiveness analyses of large-scale infrastructure projects located in ecologically sensitive areas
Village Social Transformation Programme (VSTP)

The Maharashtra Village Social Transformation Foundation (VSTF) was set up by the Government of Maharashtra, with support from corporates, with an aim to create a unique public-private partnership that aids holistic development in rural Maharashtra. The objective was to integrate multiple developmental goals including skill training, education, health, water security and environment protection in over 1000 villages in a manner that is scalable, sustainable and self-enforcing.

WCT has partnered with VSTF to provide technical inputs to 69 villages in the Bramhapuri Division of the Chandrapur District of Maharashtra that are critical from the perspective of forest and wildlife conservation. As part of this association, WCT works closely with the Maharashtra Forest Department, the Chandrapur Collector’s office, Rural Development Fellows and local communities to:

- Build capacity of the local communities to co-manage the forests around their villages in association with the forest department
- Develop technological solutions for dissemination of vital information about wild animals to avert human-wildlife interaction proactively
- Estimate population of carnivores and closely monitor the impact of interventions on them
- Building capacity in local villagers to improve their employability
- Create baselines of economic and psychosocial parameters to monitor impacts of interventions

Women carrying firewood collected from nearby forest (above left). Foxlight-cum-camera trap contraption installed near an agricultural field to study and mitigate crop depredation by wild herbivores. A WCT study (below) shows that energy consumption increases with increasing incomes.

WCT team carries out a field survey

Villagers roast the day’s catch for their evening meal
Livelihoods

WCT partners with the Maharashtra Government, corporates and other NGOs on the Village Social Transformation Programme in the Chandrapur district. We develop sustainable livelihood options for communities based on local resources, with a focus on agriculture and allied activities. In our endeavour to improve agricultural practices and entrepreneurship opportunities, we have adopted the following strategy:

- Understanding the developmental priorities of communities, especially with respect to livelihoods
- Coordinating with and providing technical guidance to the Chief Minister’s Rural Development Fellows
- Promoting and motivating farmers to adopt best agriculture practices through exposure visits and capacity building programmes
- Encouraging group farming and women self-help groups
- Provide alternative livelihoods to youth through skill development

175,000 villages are located in and around forest areas

3 million People live inside tiger reserves

40-60% of the total income of communities living in and around India’s Protected Areas is generated from forests.

Rural communities living in and around forests are important stakeholders in WCT’s conservation goals. We engage them so that they are able to a) align with the conservation agenda and b) reduce their dependence on forests, while engaging in sustainable livelihood practices.

WCT equips rural youth from remote forest villages with employability skills, connects them with employers, and helps them build gainful careers.
Preventive Health Check-up of Frontline Forest Staff

The health of frontline forest staff is central to the protection of wildlife. The geographical remoteness of their location combined with the lack of affordable and quality healthcare is a critical challenge for healthcare providers. WCT’s unique Caring for Conservators (CFC) programme provides expert medical healthcare to frontline forest staff. The CFC programme has benefitted over 16,000 frontline forest staff across India.

Health checks are essential in developing a preventative approach by helping the early diagnosis of conditions such as anemia, high blood pressure, liver disease, diabetes and eye problems. Our health teams analyse the most prevalent conditions among forest staff and ensure that specialists are called in to provide advice and recommend the best line of treatment.

The Caring for Conservators programme has benefitted 16,000 frontline forest staff across India.

75% of forest staff were at risk of chronic diseases.

14% of forest staff were diagnosed with chronic illnesses.

22% of forest staff were found to be in need of follow up healthcare services.

The above inferences are based on the screening of 5,000 forest staff across 13 parks.
India ranks first in frontline forest staff mortality. More than 100 forest staff have died in the last four years due to accidents and injuries sustained during work. WCT, in collaboration with The Tulsi Foundation, UK, has delivered trauma management training to over 1,100 frontline forest staff through 31 trauma training camps in 13 tiger reserves and one wildlife sanctuary. We have also conducted the first ever ‘Health Needs Assessment’ study of frontline forest staff working in tiger reserves; and this information will be used to develop evidence-based and sustainable health care facilities for forest staff.

**Insights from a survey of 1,000 forest guards:**

- **33%** of forest guards suffered minor injuries while working in the field
- **11%** had a serious accident while working in the field
- **13%** had a major injury while working in the field
- **10%** were victims of animal attacks including snake bites

Given that there are only three forest dispensaries inside India’s 769 Protected Areas, urgent action is required to provide basic lifesaving trauma skills and equipment to frontline forest staff. We are working to develop a cost-effective and sustainable model to provide emergency trauma care and training to frontline forest staff.

We are the first to develop a ‘First Aid Field Guide for Forest Staff’ that educates frontline forest staff about various health emergencies and techniques that would help save lives in remote locations. WCT also trains its own staff in trauma management, which includes a module on psychological health.
Improving Access to Healthcare for Frontline Forest Staff

Our survey revealed that on average forest guards have to travel over 30 km to avail basic medical care. We found that 29% of the guards had suffered from malaria while working in the field; and that there were marked variations in the distances required to be travelled for definitive care. Delays in the diagnosis and subsequent treatment can have a significant impact on the prognosis of this disease. WCT provides training to guards to use point-of-care malaria testing kits to speed-up the diagnosis of the disease.

WCT is now planning collaborative efforts with state health departments to develop strategies that will improve the access of primary health care facilities for forest staff around Protected Areas.

Median distance travelled by forest staff for definitive care of malaria
(Based on a survey of over 1000 forest staff)
Education

WCT understands the value of education for children and their family’s future. We work extensively with government schools situated in remote areas in and around tiger reserves to build the capacity of teachers, provide infrastructural support to schools and create alternative avenues of learning.

Humans share natural resources with other life forms. Over centuries, the forest-based lifestyle has metamorphosed into a massive urban society. The challenge is to allow humans to gain and use knowledge while maintaining a harmonious relationship with the environment. An education system that emphasises on equitable use of the last remaining ecosystems without destabilising the balance of nature will redress the problem of environmental degradation.

Dr. Sandeep Deshmukh
Head, Education

Rural schools in and around forest areas often have the following shortcomings:

- Poor infrastructure
- Insufficient learning resources
- Limited access to technology
- Poor teacher support system
- Teachers with inadequate teaching skills
- Inadequate teaching staff
- Lack of engagement between schools

260 million children study in 1.5 million schools in India
80% schools are in rural areas
Cluster Resource Centres (CRCs) and Block Resource Centres (BRCs)

The CRCs and BRCs were designed by the government to provide academic guidance to teachers; develop and distribute teaching resources; collate data on demographic composition of local communities; student enrollment, retention and learning levels, and school infrastructure; and motivate communities to assist in school management. However, an overwhelming majority of CRCs are performing below capacity due to resource constraints.

Seeing the potential of CRCs, WCT decided to revive and transform them into ‘Knowledge Hubs’ for teachers, children, youth and others in the local communities.

Specific components of WCT’s CRC-based support strategy:

- **Teacher Training:** Non-conventional teaching aids such as 3D models, games, puzzles, learning kits, engineering tools and simulations to help improve the understanding of concepts.

- **Integrated Development of Children:** Competitions, STEM clubs and vacation camps to make the learning experience more interesting. Help youth gain skills in mathematics, science, communication and engineering by including them in teacher training programmes.

- **Performance Incentives:** Rewards for teachers, schools and school management committees; honorarium for community volunteers; and fellowships for teachers, CRCs, BRCs and youth. Travel grants for CRC staff to facilitate their visits to the schools.

Tangible benefits of a CRC-based approach:

- Better access to an assortment of training courses

Programme outcomes:

- A generation of learners who have completed ten years of quality schooling
- Enhanced interest of children and youth in Science, Environment Consciousness and Engineering
- Development of problem solving skills
- Availability of a multitude of physical resources enhancing creativity

- Financial and academic support to schools for carrying out innovative educational projects
- Appointment of Extension Teachers
- Demonstration kits for nearly 130 science and mathematics activities for students of grades VI to VIII
- Laboratory equipment for teachers and students of secondary grades
- Library containing books, magazines and journals in English and local languages
- Creation of convening facilities allowing a much larger participation in training, conferences, seminars and administrative meetings
- Internet connectivity to teachers, CRC staff and students
Influencing Policies

Policies act as building blocks for charting the success of any conservation strategy. WCT holds an important place in structuring those building blocks.

- Member of State Boards for Wildlife of Madhya Pradesh, Rajasthan and Maharashtra
- Member of First State Expert Appraisal Committee, Maharashtra (1st SEAC)
- Steering Committee of Madhya Pradesh Tiger Foundation
- Executive Committee of National Tiger Conservation Authority (NTCA)
- Member of Independent Expert Team, Management Effectiveness Evaluation of Tiger Reserves in India (MEE)
- Member of Global Tiger Forum (GTF)
- Member of International Union for Conservation of Nature (IUCN)
- Member of Executive Committee of the Village Social Transformation Foundation

WCT assists the Global Tiger Forum (GTF) in building capacity of other Tiger Range Countries (TRCs) by supporting bilateral tiger consultations between India-Bhutan (above), India-Nepal and India-Bangladesh. WCT also funds specially-designed workshops for conservation practitioners from other TRCs with a focus on better management of tiger landscapes.

WCT’s interventions for long-term conservation success:

- Suggest mitigation measures in upcoming developmental projects to allow safe passage for wildlife across large landscapes
- Assist state governments in demarcation and notification of buffer zones of tiger reserves
- Catalyse interstate and inter-country cooperation to achieve shared conservation goals
- Carry out rapid scientific surveys for the forest department to build a case for declaration or expansion of Protected Areas
- Advocate the creation of permanent posts for veterinarians in tiger reserves
- Provide scientific support to assist state forest departments in management of forests and wildlife
- Train and support the forest department in carrying out operations to mitigate human-carnivore conflict
- Institutionalise the use of subsurface earthen dams instead of expensive and environmentally unfriendly large cement structures inside forests
WCT Small Grants (WCT-SG)

WCT believes that the pivotal idea behind any long-term conservation effort is the involvement of individuals and organisations through a) shared goals b) knowledge generation and dissemination c) awareness building d) community participation and e) policy change. At the heart of all this is a robust understanding of species and their interaction with ecosystems, of which humans are an integral part. There are several organisations and individuals involved in conservation and/or research of species and habitats. However, due to paucity of funds, many are unable to ask relevant questions that seek solutions for the sustenance of natural ecosystems that are being impacted by the ever-increasing human footprint on the planet. In an attempt to provide opportunities to budding as well as practicing conservationists to pursue their passion of conserving endangered species and their habitats, WCT launched the WCT-SG programme in March 2017. Through this effort, we hope to draw attention to lesser-known species that need as much, if not more, attention as the tiger, rhino and elephant.

Conservation projects supported under the WCT-SG programme:

- Conservation status survey of Smooth-coated otters in the Krishna river delta of Andhra Pradesh
- Nest ecology and conservation of King Cobras in the Western Himalayas
- Assessing patterns of livestock loss due to wolves in an arid human use landscape of north Karnataka
- Evaluating the efficacy of human-elephant conflict mitigation strategies in reducing negative interactions in the agroforestry landscape of northern West Bengal
- Understanding the responses of the endangered Ganges River Dolphin to anthropogenic underwater noise in the Ganges and Hooghly rivers
- Initiating conservation breeding of Asian Brown Tortoise in selected north-east Indian zoos with focus on reintroduction strategies
- Evaluating the population structure and conservation status of the endangered Humphead Wrasse in the Gulf of Mannar
- Participatory assessment of coastal plateaus in Ratnagiri district to designate “Biodiversity Heritage Sites” as per Biodiversity Act, 2002
- Social Fencing Urban Protected Areas: Model planning for Eco-Sensitive Zone (ESZ) for Bannerghatta National Park in Bengaluru
Halting the Hunting of Endangered Species

WCT partnered with NGOs in 2013 to halt the Amur Falcon *Falco amurensis* massacre in Nagaland. Over 140,000 birds had been killed by villagers in less than a month. A campaign, that was launched to sensitize the local communities and influence the state government to protect the falcons, has put an end to organised falcon hunting in 2013.

Encouraging Habitat Restoration

From 2012 and 2016, WCT supported Linelife for Nature, a local NGO, to restore Keoladeo Ghana National Park (popularly called the Bharatpur Bird Sanctuary). The spread of an invasive weed, *Prosopis juliflora*, had severely endangered the nesting sites of waterbirds. Over 100 hectares of the wetland were restored, and phenomenally, the year 2016-17 recorded the highest bird population in the previous 25 years!

Helping NGOs to Scale-up

By providing seed funding and technical support, WCT is able to build a strong on-ground presence and scale-up region-specific conservation and development work. WCT provides funding to over 60 grassroots NGOs.

Catalysing Release of Confiscated Turtles

WCT supported Mayur Kamath, the Honorary Wildlife Warden of Mumbai, in releasing turtles that were confiscated by the Maharashtra forest department in Sundarbans Tiger Reserve. Of the 156 turtles, 126 were Black-spotted Pond Turtles *Geoclemys hamiltoni* (Vulnerable) and the remaining were Narrow-headed Turtles *Chitra indica* (Endangered).

Donating a Rapid Response Unit to ECO-PRO

ECO-PRO, in close association with the Maharashtra Forest Department, conducts wildlife rescues and mitigates human-wildlife conflict around the Tadoba-Andhari Tiger Reserve. The WCT-donated 4WD Rapid Response Unit has greatly enhanced ECO-PRO’s ability to rescue snakes, large carnivores and crocodiles among other wildlife.

Helping NGOs Reach Out to Students

WCT supports NGOs working for children with learning difficulties. At WCT’s Anandgarh facility, set up by Aide et Action in Bhopal, students come in for personalised classes before regular school hours. In Rajasthan, the WCT-supported Gramin Shiksha Kendra sends resource persons to schools around the Ranthambhore Tiger Reserve to assist teachers in devising innovative ways of teaching.

Grant for the Conservation of Fishing Cat

WCT awarded a grant to a wildlife biologist to help conserve the only tropical wetland cat species in South Asia – the Fishing Cat *Prionailurus viverrinus* – in the Howrah district of West Bengal. Her award-winning efforts have helped safeguard marshlands and increase conservation awareness. Her work encouraged four village governing bodies to ask the State Biodiversity Board to recognise their area as a Biodiversity Heritage Site.
Other Projects

**Outreach Programme Organised by TREE**
WCT supported ‘The Planet and You’, an outreach programme conducted by the Trust for Environmental Education (TREE). This conservation education programme targeted students from 21 schools in the districts of Virudhunagar, Tiruchirapalli and Pudukkottai in Tamil Nadu.

**Supporting Animal Welfare Efforts**
WCT has been consistently supporting the efforts of The Bombay Society for the Prevention of Cruelty to Animals (BSPCA). WCT also supported the Thane Society for the Prevention of Cruelty to Animals (Thane-SPCA) in setting up a bird rescue centre at the Karnala Bird Sanctuary in Maharashtra.

**Student Conference on Conservation Science**
WCT co-funded the Student Conference on Conservation Science (SCCS) in Bengaluru from 2013 to 2016. SCCS is India’s premier conservation conference where students, researchers, scientists, and experts from across the country share their work and debate on important conservation issues. Several workshops are conducted during the conference to provide conservation insights to the participants.

**Reducing Firewood Collection in Bandipur**
Around 200 villages, harbouring 35,000 families, surround the Bandipur Tiger Reserve in Karnataka. Estimates suggest that a whopping 350 tons of firewood was being collected by villagers on a daily basis. Namma Sangha has been working to reduce their dependence on the forest, and has provided LPG connections to around 30,000 families. WCT has donated two vehicles to Namma Sangha to ensure efficient distribution of LPG cylinders.

**Himalayan Homestay Programme**
WCT has provided financial support to the Himalayan Homestay programme run by the Snow Leopard Conservancy India Trust in Ladakh. This programme aims to provide alternate livelihood options to villagers who face livestock depredation by snow leopards.

**Homestays at Kaas**
Kaas plateau, located in the northern Western Ghats, is famous for its mass flowering in the months of August and September. Hundreds of thousands of tourists and nature lovers visit the area during these months to enjoy this spectacle. WCT has supported the state government initiative of establishing homestays in local villages to ensure that the villagers benefit from tourism and in return act as guardians of the plateau.

**Electrifying Remote Villages with Solar Power**
WCT has supported a project targeted at providing solar micro-grids to Khamda, Kinnikheda, Khokmar, Rakhia and Kund—five extremely remote villages with no electricity in the buffer zone of the Melghat Tiger Reserve, Maharashtra. With help from Bank of America, WCT electrified a total of 237 household connections amounting to 51.7 KV. This programme will go a long way in empowering the villagers and reducing their dependence on the forest.

**Firearms Training for Frontline Forest Staff**
WCT has been funding workshops on arms use and maintenance at the Pakke Tiger Reserve since 2015. The Pakke forest department organises the workshop with the help of army personnel from 11 Garhwal Rifles for the frontline forest staff of the Pakke Tiger Reserve, Arunachal Pradesh, the Nameri Tiger Reserve, Assam, and a few other protected areas.
Other Projects

TERI Fellowships
The TERI University is India’s leading institution in the field of sustainable development. WCT has provided funds to the university to support fellowships for Masters students pursuing research in the fields of Biodiversity Conservation, Climate Change, and Conservation of Water Resources.

University Tie-ups
WCT has collaborated with the Mumbai School of Economics and Public Policy and the Department of Applied Psychology, University of Mumbai, to gain technical inputs and guidance for our Conservation Behavior division. Several Masters students are being guided by WCT staff for their dissertations.

Mentoring Masters Students
WCT conducts both theory and practical sessions on Wildlife Population Estimation for the Masters programme in Biodiversity, Wildlife Conservation and Management at the Bhavan’s College, Andheri, Mumbai. The field sessions for the students are conducted at the Pench Tiger Reserve, Maharashtra.

Endowment Fund for Masters Programme
WCT provides an endowment fund for the Masters Programme in Wildlife Biology and Conservation at the National Centre for Biological Sciences (NCBS), Bengaluru. Fifteen students graduate from here every two years. The conservation output of the alumni is evident from nearly 150 scientific papers and several prestigious awards. Also, several alumni are involved in on-ground conservation of highly-endangered species and ecosystems.

Grant For Genetic Research at NCBS
Genetic monitoring using microsatellite markers is helping us understand the demographic and evolutionary changes occurring in wild populations. Recent studies have opened up avenues in terms of the best available marker set for a given species. WCT has provided a grant to the National Centre for Biological Sciences (NCBS) to identify Single Nucleotide Polymorphism (SNP) markers suitable for identification of individual tigers from fecal samples.

Ex Gratia Support for Families of Forest Staff
As a token of solidarity, WCT provides financial aid to the families of frontline forest staff suffering from chronic illnesses or injuries while performing their duty. We also supplement the state forest department’s efforts by providing ex gratia financial support to the family of deceased forest staff. Additionally, we also support the treatment of the staff of other conservation NGOs.

Ecological Assessment of Erstwhile Closed Areas
Rajasthan had designated a unique category of Protected Area called Closed Area (CA). These wildlife rich areas enjoyed protection under the Wild Life (Protection) Act, 1972; however, an amendment to this Act has resulted in the loss of their legal status, thus degrading many CAs. WCT supported the Rajasthan Forest Department in understanding the ecological status and relevance of CAs so that efforts can be made to convert critical CAs into Community Reserves.

Spreading Awareness among Local Communities
WCT continues to support NGOs working at the grassroots level to spread awareness among people living in remote forested areas regarding the positive spin-off of tiger and forest conservation on their well-being, using slide shows, exhibitions and street plays.
Other Projects

**Electrifying Schools in the Buffer Zone of Kanha Tiger Reserve using Solar Energy**

WCT installed 19 solar power systems benefitting 38 buildings including schools, hostels and anganwadis in extremely remote villages in the buffer zone of Kanha Tiger Reserve, Madhya Pradesh. These schools and their hostels either had no electricity or inadequate, erratic supply. We hope that the drastic improvement in the living conditions of the students would rub off on their grades.

**Assisting the Government in Voluntary Resettlement Programmes**

WCT supports the voluntary resettlement program of the government for creating inviolate spaces for wildlife. WCT has provided facilities such as hand pumps for drinking water, borewells for irrigation, medical camps, toilets, and community halls in villages that have voluntarily relocated out of the core areas of tiger reserves including Tadoba-Andhari, Nagarahole, Sahyadri, Melghat and Ranthambhore.

**Facilitating Participation of Veterinary Doctors in International Training Programmes**

WCT supports the participation of veterinary doctors working with the forest department and even Deputy Conservators from tiger reserves in the course on ‘Chemical and Physical Restraint of Wild Animals’ conducted by the Zimbabwe Veterinary Association Wildlife Group at the Malilangwe Wildlife Reserve in Zimbabwe, Africa.

**Save Our Tigers Campaign**

WCT partnered with NDTV and Aircel on the ‘Save our Tigers’ campaign in 2010, 2012 and 2014. In the first two seasons, the campaign involved 12-hour telethons on NDTV 24x7, which had a viewership of over 100 million across 70 countries. From the funds raised through the telethons, WCT designed and deployed 43 Rapid Response Units (RRUs) in 34 tiger reserves in 2010, and equipped over 650 protection huts in tiger reserves across India in 2012.

**Workshop on the Ecology of the Endangered South Asian River Dolphin**

WCT co-funded a workshop on monitoring and studying the ecology of the endangered South Asian River Dolphin Platanista gangetica in Kahalgaon, Bihar. The workshop focused on statistically robust methods for estimating dolphin populations; the hydrological and geomorphological dynamics of riverine habitats; the acoustic behaviour and sensory ecology of the dolphin; and the social, cultural, political, and economic factors affecting dolphin conservation.

**Facilitating Reintroduction of Gharial in Harike-Beas River System**

The Government of Punjab wants to reintroduce Gharial in the Harike-Beas river system. WCT’s wildlife veterinarian partnered with the TSA-India team that conducted a capacity building workshop and inspected potential release sites for their suitability. The day-long workshop at the Chhatbir zoo was aimed at improving Gharial husbandry and imparting technical training for the phase-wise reintroduction programme.

**Nisarg Anubhav Programme for Tribal Children**

WCT joined hands with the Maharashtra Forest Department to provide hands-on nature education to students from schools situated in the buffer zone and corridors of the Pench Tiger Reserve, Maharashtra. Over 400 students learned about the benefits of forests, importance of conservation, and the causes of human-animal conflict. The students also went on guided safaris to get a first-hand experience of wildlife.

**You Are The Wild**

WCT in its quest to spread conservation awareness created a two-minute video titled “You Are The Wild.” Miss Universe 1994 Sushmita Sen lent her voice to the video that aimed at bringing out the link between forests and humans. The video was aired in several hundred theatres across India just before movie screenings.

**Facilitating Participation of Veterinary Doctors in International Training Programmes**

WCT supports the participation of veterinary doctors working with the forest department and even Deputy Conservators from tiger reserves in the course on ‘Chemical and Physical Restraint of Wild Animals’ conducted by the Zimbabwe Veterinary Association Wildlife Group at the Malilangwe Wildlife Reserve in Zimbabwe, Africa.
Tiger Tech - New Age Solutions for Co-existence
WCT President was appointed on the jury to assess the innovation and efficacy of conservation-oriented projects prepared by teams, which comprised engineering students, NGOs and the general public. ‘Tiger Tech 2018’ was organised by the Melghat Tiger Reserve to channelise the youth’s passion for conservation to seek technological solutions to problems faced by forests and wildlife. Over 85 projects from the field of architecture, computer science and engineering were submitted from across India.

Equipment Conservation NGOs - Nature Conservation Society (Melghat)
WCT supported Nature Conservation Society, an NGO working in Melghat Tiger Reserve, by equipping its newly constructed research cottages and dormitory at the community centre for tribals. The research cottages and dormitory were equipped with solar roof-top systems and solar water heating systems.

Equipment Conservation NGOs - Agumbe Rainforest Research Station (AARS)
WCT donated a 4WD Mahindra Thar vehicle to AARS to facilitate timely rescue of the King Cobra Ophiophagus hannah, among other wild animals, thereby helping in reducing the ever-increasing human-wildlife conflict. AARS has been running a successful King Cobra conservation and rescue programme for several years. However, in the absence of a 4WD vehicle, the staff was forced to rescue snakes on motorcycles, exposing themselves to life-threatening situations.

Equipment Conservation NGOs - Sahyadri Nisarg Mitra
In December 2016, WCT donated a Force Gurkha 4WD vehicle to Sahyadri Nisarga Mitra, a Chiplun-based NGO, for conducting field surveys, studying the behavioural ecology and abundance of the highly endangered Indian Pangolin Manis crassicaudata, assisting in the vulture monitoring programme across Raigad district, and promoting the citizen science project ‘E-mammal’, which seeks to involve school children in studying and collecting vital data on mammals in their neighbourhood.

School for Aquatic Wildlife Biology and Conservation
WCT supported the "School for Aquatic Wildlife Biology and Conservation"—a course offered by the Turtle Survival Alliance (TSA), India, in collaboration with the Madhya Pradesh Biodiversity Board at the National Chambal Sanctuary. The week-long course exposed ecologists, conservationists, veterinarians, students and forest officials to the ecology, research, husbandry practices, and conservation strategies employed when working in an aquatic environment.

Supporting Budding Conservation Biologists
WCT regularly assists research students with financial or time constraints by lending equipment on returnable basis, so that they can carry out field work within stipulated time frame without compromising on quality. The structure of MSc programmes puts tremendous pressure on students if they are unable to secure adequate funding on time. WCT assists such students so that they are able to do justice to the project they envisioned.

Conservation Photography Exhibition
WCT co-sponsored a photography exhibition by seasoned conservation photographer Aditya ‘Dicky’ Singh in New Delhi in February 2018. The aim of the exhibition was to create awareness about tigers and other wildlife issues; and profits from the sale of prints were to be used for conservation projects around the Ranthambhore Tiger Reserve.

Protecting Pakke Tiger Reserve
WCT has been strengthening the protection efforts at Pakke Tiger Reserve, Arunachal Pradesh, by providing rations for forest guards and watchers. In January 2017, WCT co-funded the three-day Pakke-Paga Festival, which was jointly organised by the forest department and local communities, to popularise the role of communities in conservation. Visitors were urged to adopt a hornbill nest with a minimum annual contribution of INR 5,000/-.
India’s forest cover constitutes a fifth of its geographical area. However, half of these forests are heavily degraded due to the ever-increasing human pressure. Over 300 million people depend on India’s forests for subsistence and as many as three million live inside our 50 tiger reserves. A whopping 65% of all Indians are farmers, of which 85% are subsistence farmers! As much as 30% of our population is dependent on fisheries for its daily protein intake or livelihood. Hence, the security of our water systems and forests is extremely crucial for both urban and rural economies.

Science has proved beyond doubt that the biggest benefit from a forest comes from its ability to replenish rivers and lakes. However, it is also true that only 0.008% of all water on Earth is surface water—water that flows in rivers or is stored in freshwater lakes. All terrestrial life, including humans, depends on this minuscule quantity of water for survival. Unless we are able to eliminate or slow down forest degradation and fragmentation, we will face acute water crisis, leading to social unrest and a rapidly deteriorating law and order situation.

Humans have dominated this planet only for a few thousand years. However, in doing so, they have caused irreversible damage to it. The onus and the capacity of correcting this too lies with them. My team at the Wildlife Conservation Trust (WCT) is trying to find scientifically robust and socially relevant solutions to guide the on-ground conservation of natural ecosystems of the Indian subcontinent. For this, we partner with the government, universities, scientists, educators, corporates, other non-profits and local communities. Let’s join hands to make this marvellous blue planet a better place for unborn generations of both people and wildlife.

Dr. Anish Andheria
President
Wildlife Conservation Trust
11th Floor, Mafatlal Centre,
Nariman Point, Mumbai - 400021,
Maharashtra, India.
Tel: +91 22 4925 5555

www.wildlifeconservationtrust.org
www.facebook.com/WCTIndia
www.twitter.com/WCT_India
www.instagram.com/wctindia
admin@wctindia.org