

TigerLink

January 2015, Revived Volume 17



RANTHAMBHORE FOUNDATION

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TigerLink is a knowledge centre, providing access to up-to-date information on the tiger. The journal *TigerLink* collates and analyses news on the tiger across its range countries with particular focus on India, and seeks to support and strengthen on the ground initiatives and influence governments. It serves as an information base for the media, policy-makers and all organisations and individuals concerned with tiger conservation.

We regret if any error has been inadvertently printed in this document.

We welcome any relevant information and feedback. Mail us at : tigerlinknetwork@gmail.com

Published by **Ranthambhore Foundation**

Editor: **Prerna Singh Bindra**

Deputy Editor: **Aditya Chandra Panda**

Editorial Assistant: **Vaishali Rawat**

Assisted by **Mridula Nirmal**

Cover Photograph: **Aditya 'Dicky' Singh**, <http://www.ranthambhore.net/>

(The photograph of the tigress 'T 19' with her three cubs was taken in December 2014 in Ranthambhore.)

Printed by: **Hi-Tech Graphics**

Produced by Ranthambhore Foundation, B-2/2324, 4th Floor, Vasant Kunj, New Delhi 110070
Telefax: +91-11-26893085 Email: ranthambhorefoundation@gmail.com; www.ranthambhorefoundation.org



TIGERLINK

A Network of Concerned People and Organisations
Across the Globe to Save the Tiger

NEWS

REVIVED VOL-17

JANUARY-2015

Dear friends,

January 2015 is very important for India's Tigers. Dr Rajesh Gopal after 13½ years will relinquish charge of Member Secretary NTCA on 31st January and a new incumbent will take over on 1st of February.

There was a minor controversy in the selection process as the likely incumbent has several years of experience in zoo management. Fortunately, or unfortunately, the experience criteria fixed by the Government of India for selection includes zoo management as a part of wildlife management.

Anyway, it is expected that the tiger will be in the safe hands also in future.

The second most important matter is the announcement of four yearly estimation of tiger population in India. The whole world is eagerly waiting for the result. The Management Effectiveness of tiger reserves has been evaluated repeatedly in the last decade, and the results of the most recent exercise are also expected to be released.

There have been other efforts on the tiger front, by giving emphasis on parks which have a viable tiger population and thus securing these populations. In few cases new areas have been added to the existing reserve. This is the need of the hour, as there are many reserves where tigers have reached 'saturation level', and adding new areas abutting the reserve will give space to overflowing population of reserves like Ranthambhore, Corbett, Kanha, Nagarhole, Tadoba, Kaziranga etc. Unless new areas are added in the vicinity of these parks, those tigers moving out will create conflict, and put dispersing tigers in very vulnerable position.

Another thrust area has been to create new tiger reserves. Some of the new reserves do not currently have a viable population, but the situation is expected to improve, and the habitat will be conserved by bringing it under the fold of Project Tiger.

I congratulate the managers who have tackled well all burning issues related to tigers in their own jurisdiction. I feel it is necessary that we develop protection mechanism for tiger areas having viable population in particular.

It is my considered opinion that protection of tigers, co-predators, prey-base and habitats, are the most important issues, and where we lag behind. The following are few of the reasons why:

- Who protects and how? Most of the states have more than 50 per cent vacancy in front line staff strength.
- 30 per cent of staff is over 55 years of age, and hence not really fit for field work.
- No fresh recruitment in last 25 years in most of the states, and none forthcoming.
- No daily wage workers are to be hired.
- Fund is not the issue, but lacking zeal or vision is missing in the top level. States like Rajasthan have 'work charge staff' to carry out duties of front line staff but the government has decided not to recruit even 'work charge' staff.

With this current situation, only God knows how the forests and wildlife will be protected?

"Tiger numbers announced. India has 2226 tigers.

Six Tiger Reserves worth Rs. 1.5 L. cr - Valuation study by IIFM"

**PK Sen
Executive Director**

The new year starts with another milestone in India's tiger conservation efforts: the 3rd all India tiger estimation results will be announced on 20th January, (the day *TigerLink* goes to press). By all indications, the tiger population is stable, and has, in fact, increased substantially. Most of us are well-versed in the tiger situation in the 'A-list reserves' like Kanha, Corbett, Nagarhole, Pench and Tadoba to name a few. Other reserves have moved up on the tiger map: Melghat, Satpura, Annamalai, all with stable tiger populations. After the shameful extinction of tigers, Panna's big cats are now flourishing. Lesser known parks, troubled by extremism, lawlessness like Valmiki, Nagarjunasagar, Simlipal have clawed their way out of the difficult times and are well on their way to recovery. Tigresses are raising cubs, and recruitment is a sure sign that the area is undisturbed, that tigers feel—relatively—safe.

Many factors contributed to this recovery, and I would put in a word for the park management and staff, especially those who are on ground zero, in the most difficult of times. For the moment I will focus on another key factor—voluntary relocation, which has created inviolate habitats for wildlife. I repeat again, voluntary relocation of those staying within core critical tiger habitats to outside of the park, in places largely of their choosing. I stress this point, for there has been very bad press, particularly in the western world, which talks of tribals and communities being evicted to make way for tigers. I cannot speak for all the relocations over the years, but I can vouch for most in recent years. I have travelled to the remotest of reserves, and met with people living within. Fact is, communities living in remote forests are eager, if not desperate to move out. I fear those who write about evictions tend to extrapolate one situation to all relocations, and are far removed from reality, unaware of the hardships of living in remote forests, in constant conflict with wildlife, deprived of basic facilities like health care, education, electricity, roads. They have aspirations; they seek education, opportunity, a future for their children—and have petitioned governments and courts, seeking to live outside, and join the mainstream of society.

There are other reserves which are in deep trouble...like Udanti-Sitanadi, Achanakmar (both in Chhattisgarh) decaying, I fear, due to apathy, the former increasingly under the grip of naxals. Kaziranga, celebrated as one of best protected parks, is besieged by poaching, while Manas, also in Assam, is under siege by insurgents. And while I worry for Kaziranga, my heart aches for Manas, which fails to get the attention it deserves.

My biggest concern is the steady erosion of rules and regulations that govern wild habitats, including Protected Areas, weakening of conservation policies—

all geared to accommodate an aggressive growth agenda, and increasing demand for land—forests—for roads, power projects, mining, industry, infrastructure.

The worst blow, however, comes from the proposed amendments on all laws that govern the environment—including the Wildlife (Protection) Act, 1972 and the Forest Conservation Act, 1980. A high level committee headed by TSR Subramanian was appointed to review the laws, and give recommendations for amendments.

If the foundation—the legal framework that secures forests and wildlife, there is little hope.

The analysis of the report, released end-November, has been detailed inside; suffice to say while the text is lyrical, the intent, worrying. The overriding objective here appears to be to enable and facilitate speed in giving clearances for infrastructure, industry etc. with the report specifically citing the need to make “doing business easier in the country”. Amendments to that effect have been suggested. I will just focus on two: One is the dilution of no-go areas, to include only Protected Areas (which are anyways meant to be 'no-go'), and forests with over 70 per cent canopy. Limiting the definition of 'no-go' to just one parameter is dangerous, and is likely to allow a lot of ecologically important and rich bio-diversity area to be up for grabs. This puts at risk vital eco-systems like grasslands, wetlands, deserts, scrub forests, mangroves, etc. It has dangerous implications for tiger habitats outside PAs. Allow me to illustrate: Take Sundarbans, the only mangrove forests that harbours tigers. Does Sundarbans pass the test of 70 per cent canopy? No. Only about half of the mangroves is protected, but tigers, with little notion of manmade boundaries, roam outside the park too.

Even within this 'no-go', activities and projects relating to “national interest” may be permitted. What, precisely, is national interest? The committee fails to define this, thus leaving a gaping loophole with tremendous potential for exploitation. One can give innumerable examples where this well-meant term has been exploited to serve vested interests—an instance that comes to mind is the proposal for construction of a viscose yarn factory by a private firm within a verdant sanctuary, citing that this was “in national interest.”

All I can say is saving wildlife is of paramount national interest, given that natural forests and wildlife habitats are the source and catchments of most of our rivers which ensure our water security, without which there can be no development, or life.

Prerna Singh Bindra

NATIONAL NEWS

Tiger stats out soon

The findings of the all India Tiger Estimation conducted by the National Tiger Conservation Authority (NTCA) and Wildlife Institute of India in association with state governments and Non-Government Organisations are expected to be announced by January-end. This is the third such exercise carried out nationally using revised scientific methodology that implements a combination of statistical modelling methods involving camera trap sampling for carnivores, sign surveys and prey population estimation every four years in a three-phase exercise. The last exercise conducted in 2010 revealed a mean tiger population estimate of 1,706. The results of the intensive annual 'Phase IV' exercise carried out in core/critical tiger habitats shall also be included.

The results of the tiger reserve Management Effectiveness Evaluation exercise for the year 2014 shall be released along with the tiger population estimation figures.

Project Tiger to get a new boss

January 31st marks the end of the longest ever stint—nearly 14 years—at the helm of India's Project Tiger, for Member Secretary, NTCA, Rajesh Gopal as he retires on that date. The National Tiger Conservation Authority, under the Wildlife Protection (Amendment) Act, 2006 was established during his tenure.

Gopal's tenure saw one of the lowest moments of Project Tiger, with the local extinction of tigers in both Sariska and Panna Tiger Reserves, and also the government's initial denial, making a terrible situation, worse. But it also saw the revival of new populations of tigers relocated to these reserves from other parks, a pioneering initiative.

Some key initiatives undertaken during his tenure, include establishing the revised scientific methodology for estimating tigers involving camera traps, introduction of the Special Tiger Protection Force (though this is yet to take off in most reserves), the addition of over 15 new reserves, and also significantly, a major boost to the voluntary relocation of villages from core critical tiger habitats with enhanced packages for relocation as per the recommendations of the PM appointed Tiger Task Force. Now, after an eventful and remarkable career as head of Project Tiger and MS (NTCA), he will pass on

the baton to BS Bonal, currently Member Secretary of the Central Zoo Authority.

Bonal has managed the Kaziranga and Manas tiger reserves in Assam for about seven years and is an IFS officer of Assam cadre 1980 batch. He has also served in both the Guwahati and the Delhi Zoo. Due to his seniority, his candidature was chosen over 1981 batch IFS officer Shree Bhagwan, who is often described as the 'architect of Tadoba', Central India's thriving tiger reserve.

Conditions for appointment to the post of the MS (NTCA) dictate that the concerned officer should be at the rank of Principle Chief Conservator of Forests, and have 28 years of service. IFS officers of 1979 to 1982 batches were eligible, with Bonal and Bhagwan were the only two contenders.

The appointment notification, however, has still not been issued at the time of going to press.

Source: 'A zoo official set to head top tiger office', Vijay Pinjarkar, *TNN*, 4, December 2014

Panna doomed by river linking

Contrary to her frequent, emphatic statements to speed up and prioritise river linking, Uma Bharti, Union Minister of Water Resources, River Development and Ganga Rejuvenation threw up a surprise when she said that the “Government will not proceed with interlinking of rivers if environmental consequences are adverse,” on 27th November at the valedictory function of India Rivers Week.

We hope... for there is little in doubt about the huge environmental, ecological and social impacts of the river linking project, which has been placed as a placed as a priority project by the government.

As Prime Minister Narendra Modi-led National Democratic Alliance government moves ahead full steam on its ambitious river-interlinking projects—unfinished business from the earlier, Vajpayee-led NDA government—its very first project, the Ken-Betwa link in Madhya Pradesh, is expected to submerge about 5,000 hectares—over 10 per cent—of the Panna National Park. The area to be diverted is core/critical tiger habitat.

Background

The idea to link India's numerous rivers germinated during the first NDA government in 2002. Then Prime Minister Atal Bihari Vajpayee wanted to connect rivers to transfer water from 'surplus' areas to water deficit areas. The National Water Development Agency

(NWDA) had identified 30 links, including the Ganga and the Brahmaputra, in a bid (though not backed by any serious, comprehensive scientific study or analysis) to address India's water scarcity. However, the plan was shelved under the 10-year UPA rule. With the BJP-led NDA government coming back to power at the Centre in May 2014, the plan has now got a new thrust.

Ken-Betwa River-link

The Rs 9,393-crore Ken-Betwa project to kick-off the river interlinking scheme already has a cabinet nod. On 7th August, Uma Bharti's ministry, to which the NWDA reports, moved a proposal to the MoEFCC to seek forest clearance for the project.

To link the two rivers, the ministry has proposed building a dam on the Ken River near Daudhan village in the Chhatarpur district of Madhya Pradesh, at the upstream of the existing 99-year-old Gangau dam. From here, the 'surplus' water—591 million cubic metres—of Ken River will be diverted to Betwa River through a 220-km canal. Betwa will receive this water at Baruasagar, a 600-year-old-pond constructed by the erstwhile Chandel rulers in Jhansi district of Uttar Pradesh.

The Detail Project Report claims that six lakh hectares of extra land will be irrigated through this project in rain-fed areas such as Bundelkhand, while another 60,000 hectares en-route the canal will also benefit. It is also expected to generate 60 MW of power while providing drinking water for several villages and towns through the interlinking canals. Panna, Chhatarpur and Tikamgarh districts in MP and Jhansi, Mahoba and Banda districts in UP will benefit from the project.

Both Bharti and Madhya Pradesh Chief Minister Shivraj Singh Chouhan have repeatedly asserted that they want to see quick progress on the project. While Bharti has said that her ministry aims to complete all major river links in the next 10 years, Chouhan has said that Ken-Betwa linking is a top priority project.

However, there appears to be some concern that MP will bear the brunt of project in terms of submergence, reduction in volume of water, displacement of population and loss of wildlife habitat, while UP apparently is the major beneficiary for downstream irrigation benefits. In fact, in 2005, the then district magistrate had written a letter questioning the wisdom of the project, and requesting that it be revisited. He said that transferring water from the Ken to Betwa would only reduce the water available in Ken

that would have been used for Panna district, which is one of the most water deficient areas in the state with only five per cent of the area being irrigated. He pointed out that large parts of Panna district would be inundated and also raised concerns about submergence of parts of the Panna Tiger Reserve.

Impact on Panna Tiger Reserve

The linking is expected to submerge 9,000 hectares, half of which is forest. About 80 per cent of forests required for the project fall in the tiger reserve on either side of the Ken River.

The proposed dam site is located about 2.5 km upstream of the existing Gangau dam in Gangau Wildlife Sanctuary, which borders the Panna National Park. A major portion of the proposed reservoir and infrastructure lie within the core and buffer areas of the Panna Tiger Reserve. The DPR estimates the direct submergence of 58 sq km from the core of the Panna Tiger Reserve, with a total submergence of 200 sq km out of the 2,000 sq km tiger reserve. Another 70-80 sq km of revenue and drawdown area of the existing Gangau dam frequented by wildlife, would also be submerged.

It may be pointed out that it won't only be the area earmarked for diversion that will be impacted, but will lead to other ancillary construction and activities along with influx of labour workers, gravely threatening inviolate, prime tiger habitat.

The fact that Panna's tiger population was rebuilt after tremendous efforts by the park management after tigers went locally extinct appears to be forgotten. The state, supported by the Centre, has also made considerable expenditure to rebuild Panna. With concerted efforts by the staff, led by Field Director Rangaiah Sreenivasa Murthy, backed by the state government, the NTCA and the Wildlife Institute of India, Panna has made a dramatic turnaround. About 18 villages have been rehabilitated from within the core/critical tiger habitat and protection efforts have been stepped up. All these efforts have borne fruit—Panna today has over 20 tigers including five breeding tigresses, and they occupy the entire 576 sq km of the reserve with some spilling over into the buffer and the wildlife corridors outside the reserve.

An adult tigress, Panna-222, has settled in the Palkoha-Sukwaha area of Kishangargh range and tigers named Panna-411 and 412 occupied the area of Bhusor between 2012 and 2013—all of which are expected to drown.

There is talk about mitigation measures (how, when

the habitat itself vanishes?), and of tigers being translocated 'elsewhere'. Well, frankly, in a land-scarce country like ours, there is no 'elsewhere', especially inviolate areas, where tigers can breed, and thrive. Tigers are apex predators; they are territorial and cannot be ferried around. We haul them to Panna, and when they settle and breed, we are now considering dumping them someplace else. It doesn't work, however noble the intent.

Linear projects such as canals have a disastrous impact on tiger landscapes. The canal network proposed by this destructive project extends across a length of 221 km. Panna harbours other endangered wildlife such as wolf, sloth bear, caracal, chowsingha, vultures hyena, gharial—to name a few. In fact, there were plans to expand the current 578 sq km critical tiger habitat, given its small size, but now it may be virtually obliterated. Incidentally, this is the only tiger source population in the Vindhya Range.

Displacement

The proposed Doudhan dam will submerge ten villages—Sukwaha, Borkuan, Ghughari, Basudha, Kupi, Shahpura, Doudhan, Pilkoha, Kharyani and Maniyari of Bijawar subdivision of Chhatarpur district. Land needed for acquisition is an estimated 60 sq km, and the cost of resettlement, Rs 333 crore. Around 1,600 households will be displaced. In its resettlement and rehabilitation plan, the government has claimed 779 households living within the tiger reserve would be rehabilitated under a voluntary relocation plan meant for villagers who choose to leave the reserve for conservation of tigers and get Rs 10 lakh as relief. This rehabilitation package is not for people displaced by infrastructure projects who are covered under a 2013 land acquisition law.

Local resistance is already brewing. *India Today* reports that villagers are uninformed about the project, have not been visited by any authorities and are vehemently against the dam.

The myth of surplus waters

The claim of providing water to a "deficient" Betwa basin seems hollow when 85 per cent of their defined deficient areas lie upstream of where the water would flow from. Himanshu Thakkar of South Asia Network for Dams, Rivers and People said that the entire project is based on the assumption that Ken basin has surplus water. "But nowhere does the DPR explain the basis of the assumption. Our analysis shows that the water balance figures have been manipulated to show that

Ken is a surplus, and Betwa is a deficit basin, whereas in reality there is little difference between the situations in two basins."

The farce of EIA

The Environment Impact Assessment (EIA) Report of the Ken-Betwa river link has come under heavy criticism, as a shoddy, unscientific, incomplete and inconsistent piece of work. The EIA does not have a project layout map, sections like biodiversity impact assessment, impact of destruction of substantial part of Panna Tiger Reserve, surrounding forests and livelihoods of the people dependent thereon, options assessment, hydrological viability assessment, disaster potential assessment, and downstream impacts, to name just a few issues.

In fact, it says that the linking will benefit Panna Tiger Reserve, "the reservoir may prevent encroachments of the park and invasion by livestock so that a relatively more secure and compact habitat is formed on the right flank of Daudhan dam which may be beneficial." (the EIA Executive Summary, para 58).

The EIA has also hugely reduced the area to be affected in Panna Tiger Reserve and in the surrounding forests compared to the figures given in the Feasibility report of the project, without any explanation. The EIA does not take into account the biodiversity that will be destroyed in the forest because of the project. Endangered and vulnerable species such as the gharial, crocodiles, vultures, in Ken basin find no mention in EIA. The EIA is also keeps mum about the existence of Ken Gharial Sanctuary in the downstream area, which will be destroyed due to the project.

In addition to the forest clearance, the project will require wildlife clearance from the National Board for Wildlife as well as consent from villagers with rights over forest lands under the Forest Rights Act, 2006.

It will also need to get the Supreme Court's permission since it involves diversion of land within a protected area.

Source: 'Madhya Pradesh pays 'price' but UP to get benefits of river linking project', Rahul Noronha, *Hindustan Times*, September 9, 2014; 'Linking rivers - delinking life', Kishore Rithe, *Sanctuary Asia*, December 2014; 'Will first river-interlinking project washout Panna reserve?', Mayank Agarwal, *DNA India*, 24 August, 2014; 'Ken-Betwa Rivers Linking Project: A great dream with some deceit', Piyush Babele, *India Today*, September 19, 2014; 'Union Minister Uma Bharti at IRW: 'Government will not proceed with interlinking of rivers if environmental consequences are adverse'', SANDRP Wordpress, November 27, 2014; 'Why Ken-Betwa EIA by AFCL is unacceptable', *SANDRP Wordpress*, December 21, 2014; 'Analysis of the Ken Betwa River Link Proposal', Himanshu Thakkar & Bipin Chandra Chaturvedi, *SANDRP*, October 2005.

NBWL being systematically emasculated

Ever since it came into power after the May 2014 general elections, the BJP-led NDA government at the Centre, has made a focused attempt to leash in the National Board for Wildlife (NBWL), making it practically ineffective in order to facilitate industry, investments and the growth objective.

Over the years, this remarkable institution which had stalwarts at the helm has been eroded in its power and its pro-active conservation role, despite the efforts of some committed members. It has come under severe criticism of being a 'clearance committee', especially in the last few terms—readers will remember the infamous 25th meeting of the NBWL's Standing Committee where the then minister cleared about 40 projects, overriding objections by members.

This time, the bar dipped even lower.

The current NBWL (the term of the previous Board expired in September 2013) constituted on 22nd July, 2014 comprised of just three members, in blatant violation of the law. It also had on board one serving government officer and one retired forest officer on board, sparking criticism regarding its independence (Refer "NBWL toothless; apex court intervenes", *TigerLink*, Revived Vol. 16, October 2014). The matter went to the Supreme Court, with wildlife enthusiast CB Singh of Pune filing a petition to the court's Green Bench. On 25th August, the Bench stayed the NBWL from executing any decisions taken by it in the 31st meeting of its Standing Committee held on 11th and 12th August. (Refer "Apex Court stays NBWL decisions", *TigerLink*, Revived Vol. 16, October 2014). In the meeting, the board had cleared virtually all of the 130 or so proposals that were placed before it.

On 31st October, the government requested the court to vacate its stay on the functioning of the Board since it had corrected "all shortcomings" in the constitution of the NBWL, and formulated a board with additional members. The MoEFCC additionally nominated four NGOs and eight expert members to the Board. These include WWF-India, Bombay Natural History Society, Aaranyak (Assam), Nature Conservation Society (Jharkhand), Dr RJ Rao (Pro-Vice-chancellor, Jiwaji University, Gwalior), VB Sawarkar (Former Addl Director, Wildlife Institute of India) SS Bisht, (former Director, Project Elephant & CWW & PCCF, West Bengal), PR Sinha (Former Director, Wildlife Institute of India).

In response, the Supreme Court, on 21st November lifted its order that restrained the National Board for Wildlife from executing any decision taken by it.

What fate of tigerland?

Some of the projects approved in tiger reserves and tiger landscapes by the NBWL's Standing Committee in its 31st meeting are listed below:

- Extension of underground mining by Hindustan Copper Ltd. Malanjkhanda, Madhya Pradesh in the Eco Sensitive Zone—8 km—from Kanha Tiger Reserve.
- Three limestone mines cleared within 6 km of Mukundra Hill Tiger Reserve in Rajasthan.
- Proposal for survey and investigation for construction of Humbarli Pumped Hydroelectric Project (2 x 200 MW) in Koyana Wildlife Sanctuary (part of Sahyadri Tiger Reserve), Maharashtra.
- Construction of Kanchanpur Railway Station and laying of two additional lines at the station in Katni-Singroli section passing through Sanjay Dubri Tiger Reserve, Madhya Pradesh.
- Diversion of 0.81 ha of forest land from Dudhwa National Park for laying of Optical Fiber Cable along Palia-Dudhwa Road and Dudhwa to Chandan Chowki, district Lakhimpur Kheri, Uttar Pradesh.
- Diversion of 7.68 ha of forestland from Mahananda Wildlife Sanctuary—which has a breeding population of tigers—for widening of NH-31A from Sevoke-Gangtok.
- Diversion of forest land for the four-laning of NH-7, which cuts through the Kanha-Pench corridor. NTCA was directed by the Supreme Court to prepare a proposal for the mitigation measures for the NH-7 widening, and the Wildlife Institute of India was mandated with this task. WII prepared the same, and made a presentation before the technical committee of the NTCA. After long deliberations, the recommendations were finalised and submitted to the Supreme Court. It is reported that the National Highway Authority of India (NHAI) did not accept the proposal in totality. Reportedly, NHAI is citing lack of funds for not taking in the suggested mitigation measures. However, the additional amount required for the mitigation measures (about Rs 500 crore) is just about 0.1 percent of NHAI highways budget. This project was given the nod by the Standing Committee, NBWL, though whether they imposed the conditions as mandated by the technical committee of the NTCA is not yet known.
- Diversion of 1.0125 ha of forest land from Sariska TR for laying of Optical Fibre Cable work between

Alwar, Kushalgarh Tiraha and Thanagazi

- Recommended the establishment of 1050 MW Thermal Power Plant by M/s KVK Nilachal Power Pvt. Ltd in Kandrei village, Athagarh, at a distance of 3.5 km from the boundary of the Kapilash Wildlife Sanctuary. This area has both tiger and elephant movement.
- The fencing and setting up check posts along Dampa Tiger Reserve, which borders Bangladesh. This is contiguous tiger habitat, and Mizoram had strongly objected, arguing that this would impede the movement of tigers and other wildlife. They also did not want to fragment, or degrade the habitat of the state's only tiger reserve—the last of Mizoram's pristine forests.
- Proposal of diversion of forest land from Dudhwa Tiger Reserve for construction of a new road from Gaurifanta to Chandanchauki on Indo-Nepal border.
- Proposal for construction of both residential and office complex of the Intelligence Bureau within the buffer of Dudhwa Tiger Reserve. Also proposed in the buffer is staff quarters, office and chowki of the customs department.

TN opposes clearance to new dam

The SC, NBWL in its 31st meeting also recommended the Kerala government's proposal for conducting an Environment Impact Assessment (EIA) study for a new dam on Mullaperiyar within 10-km radius in the Periyar Tiger Reserve. Exactly four months later on 13th December, Tamil Nadu Chief Minister O. Panneerselvam urged Prime Minister Narendra Modi to direct the MoEFCC to have the clearance withdrawn. Reacting to information available on the ministry website, the TN Chief Minister, in his letter to Modi, explained how a five-member Constitution Bench of the Supreme Court, in its judgment in May had "categorically held" that the Kerala government was prohibited from building a new dam. The SC relied on the report of the Supreme Court's Empowered Committee, which concluded that the existing dam was found safe and the proposal to build a new dam "requires reconsideration" by the Kerala government. The CEC had also found that the Mullaperiyar dam was "hydrologically, structurally and seismically safe" to raise the water level to 142 ft. initially.

Accusing the Kerala government of "not revealing the entire facts" while obtaining the permission, the TN Chief Minister pointed out that the Supreme Court had

even dismissed the review petition of Kerala. Any request from the Kerala government to the Union Ministries of Water Resources or the Environment and Forests ministry on the construction of a new dam on Mullaperiyar should not be acted upon by any agency of the Union government, the TN Chief Minister urged.

The new proposal has raised grave concern among wildlife conservationists. "I will never agree for construction of a new dam in a tiger reserve as it would submerge crucial tiger habitat," Project Tiger's former director and Executive Director, Ranthambhore Foundation Director, P K Sen told *TOI*.

Industrialisation is now wildlife research!

The role and the authority of the NBWL on all wildlife matters is steadily being eroded by a series of guidelines issued over the past few months. It may be mentioned here that NBWL's core Standing Committee is empowered to regulate activities in and around Protected Areas. Significantly, the government has tried to minimise the need for project proponents and states to approach the NBWL for consideration and scrutiny of projects within PAs and their Eco Sensitive Zones.

It must be said that the Centre's ingenuity here is impressive—to facilitate industrial project seekers it has clubbed preliminary surveys of such projects along with activities such as wildlife photography, film making and research by interpreting surveys as "scientific research" and there by empowering Chief Wildlife Wardens to permit these. Existing guidelines under the Wildlife Protection Act, 1972 allow that "The Chief Wildlife Warden may, on application, grant to any person a permit to enter or reside in a sanctuary for all or any of the following purposes—investigation or study of wildlife and purposes ancillary or incidental thereto, photography, scientific research, tourism and transaction of lawful business with any person residing in the sanctuary."

This, the ministry said, would make the process of securing wildlife clearances more efficient and "save a series of steps of clearance for survey alone".

In another step, the government has asked states to identify protected areas where there is no scope of demarcating eco-sensitive zones or where "zero" eco-sensitive zone is required. This defeats the very purpose of an ESZ, as the idea is that development activities will be regulated and land use planned to ensure a balance of both ecological needs, as well as socio-economic development.

Wildlife clearance de-linked from forests

The MoEFCC relaxed the process of granting forest clearances by allowing project developers to secure clearances in areas around tiger reserves, national parks and sanctuaries, without awaiting the nod of the National Board for Wildlife, as the process of securing a forest clearance has been de-linked from the assessment of the impact on wildlife by the board. This will help projects within demarcated eco-sensitive zones and a 10-km range of wildlife zones secure clearances.

Earlier, the Supreme Court had mandated projects within a 10-km radius of wildlife parks and sanctuaries be cleared by the wildlife board, as these could have a deleterious impact on biodiversity. Subsequently, it was made mandatory to secure a wildlife clearance before the impact of the project on forests, in its entirety, was assessed by the Forest Advisory Committee (FAC). This, however, won't be the case anymore. The government has justified the de-linking, saying the two assessments — on wildlife and forest — fell under two separate laws and weren't legally connected.

Source: 'Apex court lifts its order restraining Wildlife Board', *The Indian Express*, 22, November 2014, New Delhi; 'Govt dilutes green norms further, scraps Wildlife Board clearance for projects', Nitin Sethi, *Business Standard*, September 17, 2014; 'WWF, BNHS selected by Narendra Modi government for National Board for Wildlife after Supreme Court criticism', Mayank Aggarwal, *DNA*, 12, September 2014; 'Centre pleads in apex court: Vacate order on NBWL', *The Indian Express*, 1, November 2014; 'Mining projects cleared near protected wildlife areas', Chetan Chauhan, *Hindustan Times*, 3, December 2014; 'Bowling to states' demands, govt relaxes environmental rules around sanctuaries', Somesh Jha, *Business Standard*, 8, October 2014; 'TN opposes nod for study on new dam', *The Hindu*, December 14, 2014; 'Centre okays Kerala study for new Mullaperiyar dam', Julie Mariyappan, *TNN*, Dec 24, 2014.

'Development' ... but what about the forest?

The clearance regime: 6 months, 650 approvals

The first six months of the Narendra Modi government saw what can only be called a large-scale assault on rules, laws and institutions meant to protect the environment, forests and wildlife. The government has minced no words in repeatedly assuring that "environment and forest hurdles will be eased to facilitate businesses, investments. The Minister of State for Environment, Forest and Climate Change Prakash Javadekar said that he wanted to put the environment ministry in "autopilot" with transparent, policy-based decision making.

He informed the Rajya Sabha that the "Ministry of Environment, Forests and Climate Change has accorded environmental clearance to 241 projects

during the tenure of the present government." This was about 100 days after the NDA government came in power. The clearances are supposed to bring in fresh investment worth Rs 2,00,000 crore and give infrastructure sectors like roads, power plants and oil exploration a boost.

In the first three months of the NDA regime, the Forest Advisory Committee (FAC) approved the diversion of a massive 7,122 hectares of forestland for development projects, allowing diversion of forestland equal to what it did in the first year of Jairam Ramesh as environment minister, as per the data compiled by the Centre for Science and Environment.

The momentum has not ceased.

On the first day of 2015, Javadekar announced that his ministry has handed out 650 green clearances since May 2014 to fast-track projects worth thousands of crores. "We are giving clearances without even looking at the faces of project promoters," Javadekar said in an interview to NDTV. "We have cleared projects that had been stuck for many years," he added, giving the example of the National Wildlife Board, he said, "we took 130 decisions in a single day." (see under 'NBWL being systematically emasculated') On criticism for giving out too many clearances at the cost of the environment he said that "no compromise has been made in a single case. We are protecting the environment. Our philosophy is development without destruction."

However, this claim has been challenged for the many clearances accorded, included those by the NBWL on projects in and around Protected Areas—many of which will have devastating effect on wildlife. Just one instance is the 3,000 megawatt Dibang plant, which will mean clearing some 4,000 hectares of pristine forests—including tiger habitat. It has been rejected twice by the FAC, and also by the Standing Committee of the NBWL. Its submergence is expected to touch the borders of Kamling sanctuary, and also have downstream impacts on Mehao Wildlife Sanctuary and Dibru-Saikhowa National Park—both tiger habitats, besides being rich in other biodiversity. The daily fluctuations of the water level caused by the dam will devastate aquatic wildlife and that of the grasslands around.

Javadekar shared that the government is preparing to put in place "a new green regime in 2015," a major change being changes to environment laws, the amendments to which will be introduced in the upcoming budget session of Parliament. (Read: "Endangered: India's environment laws")

While the Modi government has been more overt in stating its policy priorities and choices, the Congress-led United Progressive Alliance had also made its share of environmental compromises during its decade in power. For instance, the creation of extra-judicial bodies, like the Cabinet Committee on Investment, which could override decisions created significant conflicts of mandate and jurisdiction. Almost in continuation—though far more aggressively (by their own admission)—in less than a year of coming to power, the new government has taken several drastic steps to dilute existing environmental norms. We detail some of these below, while the rest—dealing with proposed amendments to environment laws and matters concerned the National Board for Wildlife, are tackled in different sections under 'National'.

Speedy clearance for roads, mines

The MoEFCC allowed a major relaxation for faster execution of all 'linear' projects including roads, rail, power transmission lines, water supply lines and laying of optic fiber cables. All such projects can start soon after getting in-principle approval from local authorities such as district forest officer (DFO). Environment minister Prakash Javadekar conveyed this to road transport minister Nitin Gadkari. Javadekar has said that the relaxation is aimed at "speedy execution" of such projects, which involve "linear diversion" of forest land. The environment minister explained that this in-principle approval may be deemed as "working permission" for tree cutting and commencement of work, "if the required funds for compensatory afforestation, net present value (NPV), wildlife conservation plan, plantation of dwarf species of medicinal plants, and all such compensatory levies specified in the in-principle approval are realised from the user agency."

Similarly, the MoEFCC has also allowed for divisional forest officers (DFOs) to give away forest land to miners for activities ancillary to mining that the DFO believes are "temporary in nature and does not require felling of trees". A decision to this effect has been taken by the environment ministry, doing away with the need for a clearance from the Centre or even a clearance from high-level authorities in the state. The directive was passed on 7th October, 2014 by the MoEFCC and the Prime Minister's Office was informed of the changes. Till date, the project proponents were required to apply to the central government for the entire patch of forest. They needed to take consent

based on a detail of what all activities would be carried out in the forest patches and their impact on the biodiversity of the area.

The new circular will now allow the miners to hive off their projects in parts and only seek clearance from the Centre for the specific patch that gets mined or requires tree felling for other purposes. The DFOs, if satisfied to this extent that other patches will not require felling of trees, have been empowered to hand over rest of the forest land at their discretion.

The decision of the government has the forest bureaucracy unhappy. "This will give the states an unchecked power to give away forests without appropriate cross-verification. The potential to misuse this clause is too high," said a senior forest official in the ministry. "At a time when we should be looking at the impact of a project holistically on biodiversity and forests, we are permitting piece by piece clearance this way," he added. It is well-known that once the project proponent has invested, and already started the project—which the current procedure will allow—there is undue pressure to clear the project, and rare is the case that any gets rejected. Besides, it is unclear what is meant by mining which is 'temporary' in nature? The circular is in direct contravention of the Forest Conservation Act, 1980, which provides that no state government can give away forest land for 'non-forestry purpose' without the approval of the Centre. It defines 'non-forestry purposes' as the 'breaking up or clearing any forest land' except when done to conserve the forests. The government has interpreted this to mean that in case miners and others are not cutting trees and breaking up or clearing forest land, they do not require a central government nod to use forests.

Power to states

There are other moves to ease the process of granting green approvals. A significant one has been to exempt some types of projects—including expansion of mining projects from environmental clearance and public consultation. Another key focus has been delegate power to the states. "We have decided to decentralise decision-making," Javadekar said. "Ninety percent of files won't come to me anymore." While in principle there can be little objection to a process of decentralisation, in practice environmental regulation of projects with significant impacts is best done by a federal regulator, as is the practice in most countries – a regulator which not only has overriding jurisdiction, but also has national accountability

through the parliament. It is also well-known that revenue starved and investment-hungry states forced into competition with each other would be even more vulnerable to corporate pressure than the central government.

Javadekar, however, maintained that they were not phasing out important environmental protections, just “those which, in the name of caring for nature, were stopping progress.”

There have been a lot of other decisions that dilute norms that govern forests, coastal zone regulations, wildlife and environment—some of which were detailed in the previous issue. A major dilution proposes removing green scrutiny for roads and other infra projects 100 km from international borders, and in areas affected by left-wing extremism. Many tiger habitats transcend international borders. The forest of east-central India represent one of the most fecund and contiguous tiger landscapes of the country. These are impacted by left wing extremism.

Source: 'Prakash Javadekar clears 240 projects in 3 months', Chetan Chauhan, *Hindustan Times*, September 11, 2014; 'Cleared 650 Projects in 7 months, Environment Minister Prakash Javadekar Tells NDTV', Shweta Rajpal Kohli, *NDTV*, January 02, 2015; 'Javadekar eases green norms for linear projects', Dipak K Dash, *TNN*, Jan 1, 2015; 'Environment ministry to clear controversial Demwe hydroelectric project', Kumar Sambhav, *Down to Earth*, January 31, 2012; 'What do recent changes to the environmental clearance process mean for us?', Kanchi Kohli, MyLaw.net, December 26, 2014; 'Ministry Against Environment & Forests?', PeoplesDemocracy.in, January 4, 2015; 'Legal cover to post-1980 plantations may soon go', Chetan Chauhan, *Hindustan Times*, January 5, 2015; 'Want to put environment ministry on autopilot: Javadekar', *Zee News*, October 18, 2014; 'Misconstrued dichotomies', Meghna Krishnadas & Nandini Velho; 'A Hundred Days Closer to Ecological and Social Suicide', Ashish Kothari, *Economic & Political Weekly*, September 27, 2014; 'Modi government cuts through red tape to make working easier in India', Vikas Dhoot, *ET Bureau*, Oct 17, 2014; 'India approves projects in dash for growth, alarming green groups', Tommy Wilkes, Reuters, 10, October 2014; 'Narendra Modi, Favoring Growth in India, Pares Back Environmental Rules', Ellen Barry & Neha Thirani Bagri, *The New York Times*, 4, December 2014; 'Forest Rights Act diluted for projects', Chetan Chauhan, *Hindustan Times*, 29, October 2014; 'Divisional forest officers can give land for temporary mining projects', Nitin Sethi & Somesh Jha, *Business Standard*, 29, October 2014; 'Legal cover to post-1980 plantations may soon go', Chetan Chauhan, *Hindustan Times*, January 05, 2015; *TigerLink* inputs.

No new roads in protected areas: MoEFCC

In a welcome move, the MoEFCC on 22nd December, 2014 issued guidelines not to construct new roads in the protected areas of the country. Signed by ML Srivastava (File No. 6-62/2013 WL), the guidelines say that the “principles provided in the report of the sub-committee have been adopted as generic principles.” A copy of the letter has been sent to the Joint Secretary, Ministry of Road Transport & Highways, Shipping, the Principal Chief Conservator of Forests (Wildlife), as

well as the Chief Wildlife Warden of all states/union territories.

These were issued in pursuance of the report of the sub-committee on guidelines for roads in the Protected Areas of the country, and were accepted by the Standing Committee of the NBWL. The sub-committee was constituted in 2013 under the chairmanship of M.K. Ranjitsinh, a member of the National Board for Wildlife. Other members of the sub-committee included CWW, Maharashtra, CWW, Madhya Pradesh, MS NTCA, Prerna Singh Bindra, member, NBWL, MD Madhusudan, Member, NBWL, Wildlife Institute of India, with DIG (wildlife), MoEF as the Member-Secretary.

The subcommittee in its report said, "Roads in protected areas break forest contiguity, impinge on forests and well-worn migratory paths of animals, break tree cover and canopy and slice vegetation - all of which gravely impacts wildlife. Unless great vigilance and checks are provided, roads provide conduits for illegal extraction of timber and forest produce and for poaching, particularly at night, from vehicles."

The subcommittee had recommended that roads within PAs, should not be widened or upgraded and should be maintained in the best possible manner without changing the status of the road, so as to cause minimal problem to commuters. The report also suggested, for already existing roads, a ban on night traffic, strong regulations to control timing and traffic volume for all roads through PAs, speed restriction by imposing speed limits and speed breakers, no use of horns or littering, forest check posts at entry and exits points amongst other recommendations.

However, the guidelines issued by the Ministry have allowed for a major loophole, stating that "cases of widening of the existing roads, if unavoidable due to reasons of purpose and alignment" could still be considered before the Standing Committee. The term 'unavoidable' in the report hasn't been defined and has a vast potential for misuse, especially given the fact that many regulations governing linear projects like roads, railways, canals etc in forests are being diluted, with the increasing thrust on building infrastructure to propel growth. It also says, “cases of resurfacing and strengthening of existing Highways, not involving widening within Protected Areas will be possible without reference to NBWL's Standing Committee. This may be misinterpreted to mean that the status of the roads is allowed to change in a PA,

without referring to the NBWL.

Prerna Singh Bindra, a former member of the board's standing committee, said it was "excellent news" that the government had taken on board all recommendations of the sub-committee, including not allowing roads in PAs, which she said were "agents of doom for wildlife", in the protected areas and wildlife habitats. "Besides wildlife mortality by accidents, roads fragment habitat and bring in ancillary development. I notice that there still remains scope for widening roads within protected areas, which can have equally grave consequences for wildlife. PAs, which cover less than five per cent of the country, are heavily stressed and must remain sacrosanct if we are to conserve wildlife," she added.

Source: <http://www.moef.nic.in/sites/default/files/wl-141113.pdf>, 'Don't allow protected areas in sanctuaries, says MoEF expert panel', Aakriti Shrivastava, *Down to Earth*, Nov 26, 2013; 'No 'road life' for protected areas', Roopak Goswami, *The Telegraph*, Jan 7, 2014; *TigerLink* inputs.

IG for NTCA regional office

Over three years after it was inaugurated, the Central India (Nagpur) regional office of the NTCA finally, with the appointment of an Inspector General of Forests, Debabrata Swain, from Orissa, on 28th August, has an officer leading it. Swain has earlier served as field director of Similipal Tiger Reserve. Till now, the show was run at the office by an Assistant Inspector general of Forests (AIG), Ravikiran Govekar.

The Central India office is meant to oversee tiger reserves of four states—Madhya Pradesh, Maharashtra, Chhattisgarh and Orissa. The absence of a senior officer combined with dysfunctional regional offices elsewhere in India meant that the AIG had to run the office and remain on tour at the same time across many states in India, not only under his jurisdiction, but also of the Guwahati regional office.

The first regional NTCA office was established at Nagpur, and has under its jurisdiction 15 tiger reserves in four states. An AIG at Guwahati has also been appointed. The regional offices are supposed to plan, monitor, and provide guidance in the field management to tiger reserves.

Source: 'After 3 years, NTCA gets regional head', Vijay Pinjarkar, *TNN*, 10, September 2014.

New tiger reserve in Chhattisgarh?

The NTCA has given in-principle approval for creation of Guru Ghasidas-Tamor Pingla Tiger Reserve in Chhattisgarh. It has sought a final proposal from the state administration in this regard. The proposal to

notify Guru Ghasidas National Park as a tiger reserve was proposed in June 2011 by the then MEF Jairam Ramesh to Chief Minister Raman Singh. The proposed reserve, comprising the national park and the Tamor Pingla Wildlife Sanctuary lies between two important tiger reserves—Bandhavgarh in Madhya Pradesh and Palamu in Jharkhand. It is also contiguous to the Sanjay Dubri Tiger Reserve of Madhya Pradesh.

The area was surveyed by the Wildlife Institute of India in 2010. Though the prey population in the habitat is low at present, it has considerable diversity. With good management and protection under Project Tiger, the area has a potential for supporting a viable tiger population along with the Sanjay-Dubri tiger reserve. “This would ensure the largest landscape within this part of central India for tiger conservation,” Ramesh had said in the letter and sought a proposal from the state.

Source: 'NTCA approves tiger reserve in Chhattisgarh', *PTI*, 23, November 2014, New Delhi.

FOCUS

Endangered: India's environment laws

The High Level Committee (HLC) constituted by the Union Ministry of Environment, Forests and Climate Change (MoEFCC) to review the environment laws in the country has recommended formulating a new “umbrella” law to streamline the process of environment clearances for development projects in the country.

The committee set up on 29, August 2014 was initially expected to submit its report within two months, then granted an extended tenure ending 28, November 2014. However, the committee submitted its report 10 days before on 18, November 2014. Union Minister for Environment, Forests and Climate Change (MEFCC), Prakash Javadekar lauded the report calling it a “historic achievement” and said that the ministry would expedite consultations with all stakeholders for the timely implementation of the recommendations. He said the government was trying to frame rules so that infrastructure projects do not remain mired in litigation, and added that his ministry wanted to ensure that policy-based decisions were taken in a transparent manner.

The MoEFCC is trying to ensure that amendments to six green laws are tabled in the Budget session of Parliament, likely to start at the end of February 2015. The ministry is examining the report and is likely to

give its comments by January end.

Key environment laws set to be amended

The committee, headed by former Cabinet Secretary TSR Subramanian, was constituted in August this year to review India's key environment laws—Environment Protection Act (EPA), 1986, Forest Conservation Act (FCA), 1980, Wildlife Protection Act (WPA), 1972, Indian Forests Act, 1927, Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981—to “bring them in line with current requirements” and “objectives. These legislations along with several notifications and guidelines issued under them have been the backbone of a system to regulate, manage and monitor environmental impacts of development in the country since the 1970s as well as protect and conserve wildlife and its habitat. A key feature of the environment laws is that they require industries to fulfill certain conditions to safeguard the environment and take approval of the authorities before developing a project, and also regulate the use and diversion of forests, wild habitats and Protected Areas for non-forest activities. The environmental laws under review and their notifications have earlier been reviewed by government-appointed committees based on judicial pronouncements, institutional practice and expert recommendations.

According to the Executive Summary of the HLC's report, the committee has drafted their recommendations based on seven key principles: primacy to conservation of the environment, a push for reconstruction where degradation has taken place, transparency in environment management, use of technology for speedy and accountable decision-making around project approval, effective monitoring of environment compliance, increase in the capacity of environment management, reduction in litigation and elimination of ambiguity.

The committee has recommended substantial changes in the legal framework for environment regulation, and some basic features are listed below:

Statutory structure for environmental governance

- The HLC recommends a new 'umbrella' law, The Environmental Laws (Management) Act, 2014 (ELMA), which will subsume existing legislation, and potentially undo existing judicial pronouncements on environmental issues, and also do away with all existing authorities created under

the Environment Protection Act, 1986: “The provisions of this Act shall prevail over anything to the contrary contained in any judgment or order of any court or tribunal and other enactments, including the environmental laws dealt with under this Act.” This could mean nullifying many historic judgements which have had far reaching impact on protecting forests and wildlife. This could also mean dissolving the Supreme Court-appointed Central Empowered Committee (CEC) on forestry issues. The CEC has played a crucial role on matters related to forests and wildlife and has made many crucial interventions in protecting tiger and wildlife habitats. It will substantially weaken the National Board for wildlife, and could possibly do away with it. It is pretty much certain that the ELMA shall supersede the WPA and FCA which will be an unmitigated disaster—these laws are the backbone of protecting wildlife and its habitats.

- A completely new structure of environmental governance: National Environment Management Authority (NEMA) and State Environment Management Authority (SEMA) to replace the Central Pollution Control Board & State Pollution Control Boards. The role of NEMA is to recommend environment clearance to projects with high potential environmental impacts, presently done at the Central level; while SEMA will do the same for projects with medium potential environmental impacts, currently done at the state level. Both these bodies will act as fulltime processing, clearance and monitoring agencies thereby replacing the existing regulatory bodies such as Forest Advisory Committee and Expert Appraisal Committee. NEMA and SEMA will be given statutory status to deal with all Environmental Acts administered by the government.
- A new project clearance mechanism based on a 'single window' concept with huge emphasis on web based technology, rather than on ground verification and surveys. Emphasis on the whole is on fast-tracking clearances, technology and 'management' of the environment.
- The ELMA Act will work on the “utmost good faith” principle where the project developers would be required to disclose everything about the project and self-certify the facts; concealing facts will draw heavy punishment.
- Appeals to the proposed Appellate Board against decisions of NEMA, SEMA would have to be made

within 30 days of a clearance order as against the current system which allows for three months.

- The creation of a new all India service, the Indian Environment Service, has been proposed. It also proposes a National Environment Research institute “on the lines of the Indian Council of Forestry Research and Education” to bring in the application of high-end technology in environment governance.
- Monitoring will be web-based, technologically assisted and with minimal need for site visits. The committee stresses an ironically-named tool “Mandatory Provision of Voluntary Disclosure”!
- The ambit of public hearing has been restricted only to issues of the environment, resettlement and rehabilitation. It also places restrictions on who can partake in the public hearing.
- The judicial role of the National Green Tribunal to be reviewed.
- The panel has also advised the government to firm up a legal definition of what constitutes 'forests'. Only those green areas notified as forest before October 25, 1980 — when the FCA came into force — should be treated as forest for purposes of approval and clearance.
- The HLC has suggested that projects of national importance, including large power or mining projects, needed to be fast-tracked. In this regard, it has also said that in case of linear projects, like construction of roads, railways, or laying of pipelines, the need for public hearing, as part of the Environment Impact Assessment, could be waived off.

Forests (Conservation) Act, 1980

Over half of our tiger population—and much of our critically endangered wildlife—is outside tiger reserves and Protected Areas. Hence, the recommendations regarding forests, and the Forest (Conservation) Act, 1980, are of crucial importance. The following are highlights of what is proposed:

1. The MoEFCC may redefine forest at an early date.
2. The committee recommends identification and notification of “no go” forest areas—primarily with over 70 per cent canopy cover and Protected Areas, which it says, should not be disturbed except in exceptional circumstances, and only with the prior approval of the Union Cabinet.
3. The emphasis is on afforestation. For diversions of

forest land, it advises the area for compensatory afforestation in revenue land should be doubled from the current one hectare for each hectare of forestland diverted to non-forest use for development projects, and three times in degraded forest land. It reckons that the Net Present Value (NPV) of forest land is currently underestimated and should be increased five times. It also calls for delinking compensatory afforestation with the project after completion of financial obligations.

4. Streamline' the process of forest clearance. Under this, the committee proposes a series of changes which include replaced geo-reference maps with topo sheets, cutting down of time in various processes including making of project-specific wildlife plans, outsourcing physical verification of forest areas under the supervision of DFO and doing away with certain procedures of the Forest Rights Act.
5. Use of GIS, ICT and other advanced technology for forestry management

Wildlife (Protection) Act, 1972

The modifications suggested for the WPA are given below:

- The committee asks for a revision of listing under the Schedules of WPA, especially to include in Schedule I species threatened by wildlife trade. An expert group to be appointed for the same.
- To incorporate a separate chapter on CITES in the Act.
- Permission of central government for alteration of PA only essential if the state proposes to reduce the area/boundaries of an existing PA, not increase it.
- Giving statutory recognition to wildlife management plans under the Act. One reason stated for the same is that such wildlife management plans would be “of immense use when examining the need for a project linked wildlife plan in respect of proposals for diversion of forest land.”
- The need for Eco-Sensitive Zones around PAs is emphasised for “harmonised wildlife conservation” and in view of escalating human-wildlife conflict. MoEFCC to take immediate steps for demarcation of ESZs around all PAs, and states to send proposals in time bound manner. It may be mentioned here that the MoEFCC has also suggested that states may identify protected areas where there is no scope of

demarcating eco-sensitive zones or where "zero" eco-sensitive zone is required.

- Prohibition on manufacture and possession of leg hold traps
- Final settlement of rights in PAs. For this the officers entrusted with the task have been given a period of two years.
- Strengthening the forensic facility of the Wildlife Institute of India and granting it expert status.
- To authorise officers of the Wildlife Crime Control Unit to file complaints in courts, and delegation of powers to concerned agencies to facilitate faster and higher rate of persecution in wildlife crime.
- Banning use of plastics and polythene bags in PAs
- Park Director to have powers to approve applications for bonafide research.

Critique

It is widely accepted that environmental laws need to be streamlined and unnecessary, cumbersome procedures and complex, duplicated provisions in various laws need to be revised. However, any amendment, and indeed reform, must be aimed to strengthen wildlife protection and effective governance of India's forests and environment. It is also important to point out that two laws: the Wildlife (Protection) Act, 1972 and the Forest (Conservation) Act, 1980 have played a vital role in securing natural forests and wildlife habitats which are also the source and catchments of several hundred rivers which ensure our water security without which there can be no meaningful economic development.

In its preamble, the HLC acknowledges that "In the race for development, which ideally ought to improve the quality of life of the citizen, the relationship with environment is often lost sight of. That environment is sacrosanct; that the purity of air, water and land has been inherited by a generation in mortgage for children of tomorrow; that it is implicitly imperative for each generation to leave the environment to the next generation in a better state than they found it." It speaks of declines in wildlife populations, of filthy rivers and polluted cities and increasing intensity and frequency of disasters like the catastrophic floods of Srinagar or Uttarakhand.

The report also makes a relatively sound diagnosis of the problems of environmental governance of the country. "The state—arbitrary, opaque, suspiciously tardy or in-express-mode at different times, along with insensitivity—has failed to perform."

Yet, while all this sets a good tone and raises hopes, the report has failed in being a "strong, nuanced, unbiased review of the law," and it is clear that the understanding of the laws and their import, is cursory. Indeed while making a perfunctory nod to grave environment and wildlife concerns, the overriding objective appears to be to enable and facilitate speed in giving clearances for infrastructure, industry and other projects to meet the objective of faster economic growth.

As much as the law itself, it is therefore important to question, what was the provocation for hasty-reforms in environment laws? Minister after minister have made it abundantly clear that the present government views such legislation as an obstacle to economic growth. The report specifically cites the need to make "doing business easier in the country".

But are the environment regulations really an obstacle? The Subramanian committee itself admits that "99 per cent of cases were cleared".

Contrary to public perception, the UPA government was by no means the custodian of the nation's environment; in the nine years between 2004-2013, it cleared a whopping 7.36 lakh hectares of forests, for industrial and development projects, oil and mineral exploration etc. Between 2007 and 2014, power plants with a capacity of 250,000 MW were cleared, twice what the Planning Commission estimated was needed by 2022.

The TSR report has come under heavy criticism from environmentalists and civil society—the time frame was unrealistic, there was dismay over the lack of clarity on the terms of reference and the manner of public consultations; besides the content and spirit of the recommendations and the overarching law that it proposes.

One major issue was that the key objective of the committee to bring "laws in line with current requirements to meet objectives" was unclear. It failed to state what the 'current requirements' pertain to: What requirement? Environmental, social or economic requirements? Whose requirements? What objectives? Whose objectives? The committee did not even attempt to clear the air about these issues, though questions were raised repeatedly.

Of the time frame to do the review noted journalist

Darryl D'Monte writes, "The first thing that strikes one about the report of the high-powered committee to review six top environmental laws, is the sheer audacity of preparing it in just three months. It hardly does justice to the complexity of national and state-level legislation to do this in such indecent haste. This negates the arduous work that has gone into drafting these laws. Green laws are not, as is often thought, a whim on the part of some autocratic leader, but a much-delayed response to flagrant violations on the ground, people's struggles, and catastrophic declines in wildlife populations."

After much criticism, the committee's tenure was extended by a month. The public response, limited to 200 characters per law, was thereafter amended to allow for a longer email option. The public consultations were reported as being selective, and not democratic. In the meetings the committee had with the public in Bhubaneswar and Patna, environment groups said that there was no advance notice about the consultations. In Mangalore, it lasted an hour. The consultation in Bangalore on 27th September lasted 40 minutes and ended with the members of the committee walking out. However, there were patient hearings for experts and NGOs—invited by the MoEFCC—in New Delhi.

The wildlife chapter of the report, and the understanding of wildlife is sketchy and piecemeal. The recommendations also miss the elephant in the room—habitat destruction and fragmentation, as the key cause of wildlife population declines, perhaps because conserving habitats is perceived to be a 'roadblock to development'.

It has instead chosen to focus on poaching, illegal wildlife trade and human-wildlife conflict; which of course is much—needed. However, even these, particularly human-wildlife conflict have been addressed only in a perfunctory manner. Both wildlife crime and conflict are very complex issues, whose gravity we need to take on board and devise a strategy to address it. One remedy is to remind states that they are free to shoot animals (such as wild boar, etc) which cause damage to agriculture as per "legal position", suggesting that they may take appropriate action based on given legal provisions.

The good news, is that Protected Areas are hands off, designated no-go areas, where, says the report, "no activity will be permitted which threatens the environment and biodiversity of these areas." But isn't that anyway the case for PAs? Forest cover with over

70 per cent canopy is also recommended to be 'no-go'.

The devil is in the finer print which clearly states that "there will however be one exception. Where there are considerations of national interest and issues relating to safeguarding the territorial integrity of the country, activities may be permitted in such areas subject to the prior and specific approval of the Union Cabinet."

What, precisely, is national interest? The committee fails to define this, leaving a gaping loophole with tremendous potential for exploitation.

The committee also has restricted wildlife only to Protected Areas, whose sanctity is acknowledged. However, a significant proportion of our wildlife is in forests and even rural landscapes outside of PAs. Confining wildlife, especially large, wide-ranging species like tigers and elephants to tiny islands that our reserves are, is practically condemning them to extinction in the long run.

The 'no-go' areas have shrunk, now restricted to PAs (which are already no-go) and forests with over 70 per cent canopy. Forest cover with tree density cover of 70 per cent are called Very Dense Forests and constitute only 2.54 per cent of the total forest cover of the country, according to the Forest Survey of India (FSI) report 2013, Secondly, very few areas exist outside Protected Areas that have a canopy density of more than 70 per cent. In fact, the FSI regards areas with 40 per cent canopy density as dense forest. Clearly, the HLC has no objection for diversion of dense forests (between 40 to 70 per cent) in the country.

The original 'no-go area' plan (or inviolate areas) included wildlife corridors, lands with high biodiversity value (regardless of forest cover), landscape integrity, and areas which were river catchments.

There is the obvious limitation of having just one parameter to define the value of a forest—there are forests of lesser canopy cover which are biodiversity rich. A rainforest, for instance, with dense canopy is very rich in biodiversity, but the optimum density of tigers in such rainforests as compared to Kanha, which has vast grasslands would be much lesser. Would one then say that key habitats such as grasslands, so vital for prey and tigers, have no value? What of grasslands outside of PAs which hold so many of our endangered, and endemic, species? And other vital eco-systems like wetlands, deserts, scrub forests, mangroves and coral reefs? Limiting the criteria of

no-go areas to only canopy cover defined at 70 per cent is likely to allow a lot of ecologically important and rich bio-diversity area to be taken out of the no-go category.

Another problem here: If say, in a 100 sq km forest area, about 20 per cent has 70 per cent and above of canopy and the rest are grassland or scrub forests—what does one do then? Protect that one-fifth of the area, while the other part, equally rich in biodiversity, is up for grabs? And if the forests that surround it are destroyed, there is no scope for the 20 percent canopied fragment to survive.

There is another strange, and worrying suggestion of “respect for cultural traditions.” The sentiment behind it is appreciable, but the consequences—disastrous. For example, it extols nag-panchmi, where “snakes are worshipped during five days in the 'Shravan' month, as a thousand year-old tradition. It is to be noted that the snakes are never harmed—indeed are worshipped during this period.” Snakes are never harmed? Thousands of snakes are caught from the wild, and stuffed with milk—not their natural diet—which kills them gradually, painfully. The report goes on to recommend “a dispensation in the various Schedules should be permitted to take into account such local practices, and reflect them in their approved schedules, through gazette notification, subject to no harm or injury to animals.” The very act of removing an animal from its natural habitat, even if temporarily and with the best of intentions, is harmful, if not fatal, to the animal, its species as a whole and the ecosystem that it is removed from.

The committee stressed on the creation of a new all India service, the Indian Environment Service, but has not touched upon is the issue of frontline staff, whose difficult working conditions, and plight is well-known. The frontline staff is the backbone of wildlife protection, and improving the rules governing their service conditions—appointment, training, posting, promotion; or their welfare has not found a mention, even though it was strongly suggested to the committee.

Some of the most damaging recommendations regarding the procedure for forest diversion includes removing the requirement of physical/field verification involving ground truthing till stage I approval under Forest (Conservation) Act, 1980 is obtained.

A major flaw, if not an injustice, is that the report

fails to take on board the people affected—millions who are impacted when development projects swallow their land or livelihood. This is evident in the paring down of public hearing component in Environment Impact Assessments:

- Public hearing is limited now only to environment, resettlement and rehabilitation,
- It can be dispensed with if local conditions are not conducive, or if the project site is away from settlements (a major issue in hydel projects where impacts are downstream—and miles away from the project),
- It can also be dispensed with if the projects are in industrial zones or complexes, for power, mining and linear projects, if the projects are of “national or strategic importance”.

The fact that the over-arching new law, ELMA is based on the principle of “Utmost Good Faith” or Uberrima Fides where the NEMA, SEMA and the Ministry will put absolute faith in whatever studies, impact assessment reports and compliance reports that the proponent submits, has come under heavy criticism. There is absolutely no justification for using the principle of “Utmost Good Faith” in the environmental realm, one reason being that it is well-established that most EIAs are fraudulent and compliances do not exist. We also know that monitoring is the weakest link in environment governance, and taking the proponent at his word about the information he provides at the time of clearance or monitoring is not workable, justifiable or acceptable.

The only place where the committee mentions accountability is with reference to speed of clearance, failing which the Chairperson of NEMA will be held accountable. There is no accountability demanded either about failing to address impacts on ecology, wildlife or on people.

Some of India's environment laws have been enacted after Supreme Court judgments, bitter struggles or major disasters such as the Bhopal gas tragedy. Some, like the Wildlife Protection Act have been drafted as a means to stem the alarming decline in wildlife; the Forest Conservation Act to protect forests from being pillaged and destroyed to meet the endless need for industry, infrastructure, urbanisation. Laws have been abused, and circumvented, yet it merits repetition that the WPA has played a key role in stabilising our wildlife populations and conserving PAs. Similarly FCA has slowed the process of destruction of forests. The implementation, on the other hand, leaves much to be

desired but this is never a subject for any high-level assessment. It is feared that this move to overhaul green laws will give unabashed legitimacy to what earlier used to be willful disregard of the law. The new government wants to overhaul, and do away, with regulatory regime to favour industrial growth, which will have its own grave consequences, and is undoubtedly a “sure recipe for ecological disaster.”

Note: At the time of going to press the TSR Subramanian committee report is being reviewed by the Committee on Environment, Science and Technology of the Rajya Sabha. The panel started consultations on the Subramanian committee recommendations with its chairman Ashwini Kumar explaining that it was within the ambit of the committee to reconsider recommendations made to the government. “There has been a lot of debate in the media over the Subramanian committee recommendations diluting the environmental regime. We wanted that the MPs should be appraised of the report,” Kumar explained after a meeting in which a group of civil society organisations told a parliamentary standing committee on 9th January that the report should be “junked”.

“The Subramanian committee recommendations should be junked,” Ritwik Dutta, an environmental lawyer told the committee. Another civil society member said there was unanimity that the committee recommendations, if accepted by the government, will destroy environmental regulation and forest cover in the country.

Eight civil society organisations including WWF-India, Centre for Wildlife Studies-Bangalore, Centre for Science and Environment and The Energy and Resources Institute met with the Parliamentary committee.

The standing committee will seek the ministry's comments in its next meeting.

Following this meeting, environment minister Prakash Javadekar said that, “The high-powered committee has submitted a report which we have accepted for consideration. The acceptance is for consideration and not in totality and we are now discussing it. It is now in the public domain and the standing committee is also doing the examination. We want some good suggestions.”

Javadekar added that the high-powered committee was appointed as after a certain period of time, one needs to review whether the intended benefit has

been accrued and whether the intended development or environment protection has happened or not and what are the bottlenecks. He said the Environment Ministry which had got the tag of a “roadblock ministry” in the previous government, has seen a saga of turnaround as the Ministry is focusing on sustainable development and development without destruction and delay. Though how this “development without destruction” was being achieved was left unsaid.

The Ministry will also focus on aggressive afforestation and focus on creating a carbon sink—a huge, and costly fallacy as not only are afforestation drives spectacular failures with less than 10 per cent survival rate—and thus colossal wastes of money, they are of zero biodiversity or ecological value. The best, most cost-effective method to having carbon sinks is to conserve our existing forests, waterbodies and grasslands.

Source: Prerna Singh Bindra; with inputs/insights from 'Finding the right reasons for reform', Manju Menon & Kanchi Kohli, *India Together*, Nov 29, 2014; 'Green law to subsume existing authorities mooted', Nitin Sethi & Somesh Jha, *Business Standard*, November 29, 2014; 'An unequal battle', Meena Menon & Sruthisagar Yamunan, *The Hindu*, November 2, 2014; 'TSR Committee offers a frail framework to robust laws', Swati Bansa, *India Water Portal*, 11 December 2014; 'Subramanian panel suggests overhaul of green laws', Nitin Sethi, *Business Standard*, November 21, 2014; 'Green law to subsume existing authorities mooted', Nitin Sethi & Somesh Jha, *Business Standard*, November 29, 2014; EIA Resource and Response Centre, Goa; 'Modi government rushes to push green reform', Somesh Jha, *Business Standard*, January 3, 2015; 'Environment gets the axe', Darryl D'Monte, *DNA India*, 2 January, 2015; 'Legal cover to post-1980 plantations may soon go', Chetan Chauhan, *Hindustan Times*, January 05, 2015; 'The High Level Committee Report on Environmental Law: A Recipe for Climate Disaster and Silencing People's Voice' by Ritwick Dutta; 'Lawyers Initiative For Forest and Environment', Debi Goenka, Conservation Action Trust Manoj Mishra, Yamuna Jiye Abhiyan, Himanshu Thakkar, South Asian Network for Dams, Rivers and People, 'Junk report on 5 green laws, NGOs tell House committee', *Hindustan Times*, January 10, 2015; 'Govt discussing TSR Subramaniam committee report', Meenakshi Verma Ambwani, *BusinessLine*, 10 January, 2014, '2.43 lakh hectares of forests cleared for projects during UPA regime', Nitin Sethi, *The Hindu*, January 25, 2014, 'Barack Obama's Republic Day trip', Jairam Ramesh, *LiveMint*, Jan 12, 2015.

On the frontline of wildlife protection

India's tigers owe a lot to the frontline forest staff, who guard our endangered wildlife and habitats serving in the remotest of regions often without even basic facilities. Their job carries a fair amount of risk—their lives on the line not just from wild animals, who can sometimes be unpredictable and strike when surprised, but mostly from poachers, timber smugglers, mining mafias, encroachers and the fury of mobs in several situations—particularly human-wildlife conflict. Over the past few years, there has

been an alarming rise in the number of such cases being reported from wildlife habitats across India.

This is true not just of India, but is a global issue. Fifty-six rangers have lost their lives in the line of duty in the last 12 months, 29 of whom have been killed by poachers, according to information released by the International Ranger Federation, which has been monitoring ranger deaths since 2000. Since 35 countries participated in this survey, the actual number could be much higher. More than 1,000 rangers have been killed worldwide and many more injured over the last 10 years.

Unfortunately, the role of frontline staff in protecting our eco-systems and natural heritage is rarely recognised. Equally worrying is the fact that they are not equipped, empowered or trained to take on their increasingly hostile and risky task.

Given below is the news regarding a few of such incidents from across the country in recent months.

Enraged villagers attack Bandhavgarh staff

A young tiger in the forests of Bandhavgarh mauled, and killed, a man on 24th October, 2014. Sources say that on spotting the tiger, the victim, a retired teacher shouted, and tried to hit the tiger with a stick. The tiger reacted and attacked, killing the man in the process.

The death of the retired teacher, who ventured deep inside the park, incited unrest and anger, with the locals demanding that the tiger be declared as a man-eater, and killed. The demand, supported by local politicians, was resisted by forest officials and conservationists, as this was an accidental killing. "This tiger is not a man-eater. The killing does not appear to be his fault, it appears to be accidental. But we will investigate how it happened," said MP's Principal Chief Conservator of Forests Narendra Kumar. "The person went to the restricted forest area and panicked at seeing the tiger sitting on a cliff. The tiger attacked him only after he tried to frighten him." He assured that a proper investigation will be done before taking a decision on the demand of locals to declare the young tiger a man-eater. He assured that all efforts were being taken to monitor the tiger. Added Fayaz Khudsar, a wildlife biologist, who has worked in tiger reserves in Madhya Pradesh, said the tiger did not enter a village and attack the person. "It was not deliberate."

Forest staff said that the young tiger was moving in and around the core-and buffer of the reserve, probably in a bid to carve out its territory. It had not entered any

village or even attacked cattle.

Villagers, however, were in no mood to reason—and claimed that this was the fourth incident of an attack by a big cat. They set the forest office at Khitoli village (near Bandhavgarh), on fire after the incident, and torched two jeeps and a dozen vehicles owned by the forest department. The villagers also set afire a few forest posts and a police post in Khitoli and pelted stones causing injuries to two policemen, said Additional Superintendent of Police Rameshwar Yadav. The mob attacked policemen and forest personnel, including local forest range officer while keeping some of them hostage. Some local journalists were also hurt. Extensive damage has been caused to forest department property. Khitoli village falls in Barhi forest range and is close to Bandhavgarh Tiger Reserve.

Prohibitory orders under Section 144 of CrPC were clamped to bring the situation under control. Madhya Pradesh police arrested 29 people on arson charges.

Forest rangers, family attacked at Satkosia

About 15 villagers of Jagannathpur village vandalised the range complex at Pampasar and beat house at Jagannathpur inside Satkosia Tiger Reserve (Orissa) on the night of 29th December 2014, apparently on the false pretext of an elephant attack on a biker, who sustained minor injuries. The villagers broke into the entry gate of the Reserve and damaged about a dozen vehicles apart from the newly established awareness centre. The ruffians also attacked the forest staff at both the campuses and including a lady forest guard at Jagannathpur. They forcibly entered in to the residence of Bodaik, forester, at Pampasar and misbehaved with his wife and child.

The staff of Satkosia Tiger Reserve has threatened to stop protecting the Reserve unless they are given adequate protection. Field Director, Satkosia Tiger Reserve AK Nayak after interacting with the forest staff assured them that he would take all possible measures for the arrest of the culprits at the earliest. He took up the matter with the Superintendent of Police, Angul and DIG of Police, Talcher for quick action. The police reacted quickly and during a midnight operation on 30th December, apprehended five assaulters.

The incident only further stresses the need for providing immunity to forest authorities and staff for use of Service Weapons while protecting forest and wildlife resources under relevant provisions of the law

(Sec. 197, Cr. P.C.) as has been done in few states such as Assam and Karnataka. The wildlife department has requested the government for such immunity to forest staff working within two tiger reserves of the state i.e. Similipal and Satkosia.

After the incident, the field director directed the DFOs, Satkosia Wildlife Division and Mahanadi Wildlife Division to take immediate steps to arm the staff posted at sensitive locations to defend themselves against such attacks.

The need for establishing a Special Tiger Protection Force for Satkosia Tiger Reserve on the line of Similipal Special Tiger Protection Force has become all the more imperative after this incident.

Mining mafia attack deputy ranger in Rewa

A deputy ranger, VP Tripathi, was brutally assaulted in the Rewa district of Madhya Pradesh on 1 January, 2015 by the mining mafia. He had gone to probe a complaint of illegal sand mining. This was just a week after forest officers, investigating illegal sand mining around the Son Gharial sanctuary, were also assaulted. Sand mining around the Son River (which flows through the Son Gharial Sanctuary) is a major threat to the endangered gharials in the sanctuary which straddles Uttar Pradesh and Madhya Pradesh.

Forest guard shot in Pench

A Special Tiger Protection Force (STPF) forest guard with Pench Tiger Reserve was shot at by suspected poachers on 14th October 2014. The incident occurred in Kolutmara range of West Pench around 9am, when forest guard Satish Shendre was on patrolling round along with two *van majoors* (forest labour) or contractual forest staff. On spotting two trespassers in Amti forest area in Ghatpendhri, Shendre asked the suspects to stop but instead one of them shot at Shendre. The bullet pierced Shendre's left shoulder. Sources said Shendre did not get treatment for nearly two hours as the vehicle in Kolutmara did not have diesel. When East Pench RFO CS Bobde learnt about the incident he left for the spot and reached two hours later. A profusely bleeding Shendre was then shifted to Parsheoni primary hospital, from where he was admitted to Government Medical College & Hospital at Nagpur.

It is a shame, indeed, that there was no fuel in the vehicle to rush the injured guard to forest staff to hospital. Why we are unable to provide even the basic facilities to the guards for their safety and welfare is

inexplicable, and unpardonable.

Forest guard, rhino killed at Orang

Accused also forest staff

A homeguard, who had been working as frontline forest staff in Orang since the past three years died in an encounter with poachers, who killed a rhino at Orang National Park on 31st December, 2014. Sushil Seal, 28, died after a group of four poachers opened fire at him and three of his colleagues near Khetting beel under Belsiri forest camp of the park. Although Sushil's colleagues returned fire, the poachers managed to escape under cover of darkness and heavy fog.

Later during a search operation in the area, a carcass of a pregnant rhino was recovered with its horn missing. A pistol, 12 empty cartridges of .303 rifles and two live cartridges of 7.65mm pistol were recovered from the incident site.

Sushil hailed from Silbori Hajong Basti, located near the park. Since he was a temporary worker, his family will not be eligible for pension, insurance or any such compensation.

It may be mentioned here, that with this incident, three staff of the park have met with unnatural deaths within just 40 days of this attack—one when a boat capsized during patrolling.

This incident, while especially brutal, is even more tragic—and shameful—given the involvement of another contractual worker of the park. This incident also revealed the nexus between forest staff and poachers.

The Assam forest department on January 3, 2015 arrested a casual worker, Giasuddin Ahmed at Orang National Park for his alleged involvement in the killing of the homeguard and for having nexus with rhino poachers. Condemning the incident, the conservator of forest, Mangaldoi division, Sushil Kumar Daila said that Giasuddin, who has been working as a casual worker in the park for some years, was hand-in-glove with a group of poachers who killed a rhino at Orang on 31st December. Officials said there was clear evidence against Giasuddin, who not only helped the poachers but also killed his colleague. The poachers had also been identified.

A senior forest official said it was a matter of shame that "one of our own" was found involved in the killing of rhinos. He added that such a case undermined the contribution and sacrifice of the forest staff to protect

wildlife.

We have highlighted here only incidents in or around tiger reserves—the attack by the mining mafia on the deputy ranger was in district Rewa, and not very far from Bandhavgarh. Such attacks have become all too frequent. Whether they face mob fury in human-wildlife conflict situations, or are attacked by poachers, timber smugglers. The brutal death of a beat officer and assistant ranger, who were stoned and hacked to death by red sander smugglers in Andhra Pradesh in December 2013 comes to mind.

With conflict increasing, such attacks and mob-like situations have become routine, and it is important that we recognise their contribution, and equip, empower and enable our frontline forest staff to meet the new challenges in their task.

Sources: 'Forest guard attacked for resisting illegal sand mining', *Hindustan Times*, April 9, 2014; 'Tiger kills man in Madhya Pradesh tiger reserve', Chetan Chauhan, *Hindustan Times*, October 24, 2014; 'Bandhavgarh tiger attack: 29 villagers arrested for arson', *TNN*, Oct 26, 2014; 'Tiger kills teacher in Panpatha forest in Madhya Pradesh', *PTI*, October 25, 2014; 'Orang worker arrested', *The Telegraph*, January 3, 2015; 'No headway yet in Orang poaching probe', *The Assam Tribune*, January 1, 2015; 'Rhino, guard killed in Orang', *The Telegraph*, December 31, 2014; 'Rhino, forest guard killed at Orang park', Jan 1, 2015, *TNN*; 'Mining mafia attack deputy ranger in Rewa', *TNN*, Jan 2, 2015.

NEWS FROM THE STATES

ANDHRA PRADESH

Tiger reserve in Tirupati?

In a welcome move, the Government of Andhra Pradesh is taking steps to notify the Tirupati and Kadapa forests of the Seshachalam Hills in the southern part of the state as a tiger reserve. The large tract of dry deciduous forests in the Eastern Ghats is contiguous to the Nallamalais which has the nation's largest tiger reserve, Nagarjunasagar Srisailem.

Source: 'Andhra Pradesh plans new tiger reserve', *Deccan Chronicle*, September 9, 2014

ASSAM

Assam proposes Orang Tiger Reserve

The Assam forest department has moved the National Tiger Conservation Authority seeking the tiger reserve tag for Orang National Park. If the proposal is accepted, the park would be the fourth tiger reserve in the state after Manas, Kaziranga and Nameri. Sources in the forest department said the proposal was likely to find favour with the NTCA since it had in the past indicated that Orang National Park deserves to be a

tiger reserve.

The Mangaldoi Wildlife Division, under whose jurisdiction the park is, has already submitted the proposal to the PCCF (Wildlife) RP Agarwal. The 79.28 sq km park has a high tiger density of 25 tigers 100 per square km, as per a 2013 census.

According to the proposal submitted to PCCF by Mangaldoi divisional officer Sushil Kumar Daila, the National Park is proposed to be notified as the core, and the stretch of the Brahmaputra between Orang and Kaziranga, along with Laokhowa and Burhachapori wildlife sanctuaries, can be secured as a buffer zone. Daila said the total area of the proposed Orang Tiger Reserve will be 790.17 sq km, including 44.06 sq km of Burhachapori and 70.10 sq km of Laokhowa wildlife sanctuaries and 596.73 sq km stretch of the Brahmaputra serving as a tiger corridor.

Daila pointed out that Orang tigers have been facing the biggest threat from retaliatory killings by fringe villagers and if the park is notified as a tiger reserve, it would help address the conflict. In the past 10 years, at least 13 tigers of Orang have been killed by poisoning. The WII-NTCA report in 2010 on status of tigers in India had also underscored the significance of Orang-Kaziranga tiger corridor stating that "the Kaziranga tiger population is contiguous with that of the Rajiv Gandhi Orang National Park connected through island systems of the Brahmaputra. This is the single largest population in this landscape comprising about 125 tigers." The report advocated connecting the "stepping stones" between Orang and Kaziranga as part of the long-term tiger conservation strategy.

Daila said the park gets inadequate funds for protection and management, and if declared a tiger reserve, the park will gain from funding for its overall protection and management requirements. The staff who are entrusted with the onerous task of protecting its flagship species — tiger and rhinoceros—will also get much deserved additional incentives in the form of project allowance and other welfare measures.

Source: 'Assam's smallest national park seeks tiger reserve tag', Pullock Dutta, *The Telegraph*, 22nd September, 2014; 'Orang likely to become fourth tiger reserve in Assam', *TNN*, Sep 12, 2014.

Manas bears brunt of insurgency

Manas National Park in Assam is again bearing the brunt of insurgency; it was shut down by the local administration for tourists, after the army and security forces launched an operation against the anti-talk faction of the National Democratic Front of Bodoland (NDFB) in and around the park.

The recent counter-insurgency operation came in the wake of the NDFB faction's series of attacks on innocent civilians in three districts of Assam-Kokrajhar, Sonitour and Chirang districts that left 81 people dead and over two lakh homeless. The army and paramilitary forces intensified operations particularly along the Indo-Bhutan border in Bodoland Territorial Areas Districts (BTAD) and along the Assam-Arunachal Pradesh border against the NDFB faction.

"We had to close the park after December 25 last year as the security forces had intensified their operation along the Indo-Bhutan border," said a park official. The park was closed to tourists, visitors inside the park had to be evacuated, and those in lodges around the park, asked to restrict their movements.

Park officials worry that with the current circumstances, the park may be dragged back to the days in 1990s, when insurgency had ravaged Manas. The attack will seriously hamper conservation activities, and a worry is for the frontline staff who stay in remote locations within the park, lacking even basic facilities or any means of protecting themselves.

The tourism department of the Bodoland Territorial Council (BTC), which maintains the eastern side of the reserve, might face a revenue loss up to 70 per cent compared to last year's collection. This is especially worrying as tourism on this side of the park is largely an initiative of the local communities, who also have undertaken the onus of protecting the park with a network of conservation volunteers who patrol the park. The conservation volunteers are supported mainly by the BTC and a consortium of local NGOs. This is expected to hit their livelihood, and has also raised concerns that security fears will reduce tourist inflow and revenue in the long run.

It is learnt that the total revenue collection in 2013-2014 is almost Rs 60 lakhs from tourists; the highest ever since the formation of BTC in 2003. "The closure is also going to hit resort owners and other business associated with the tourism in the park," said Partha Pratim Das, adviser, BTC's tourism department.

Manas, one of the 'original' tiger reserves of 1973, harbours a number of endangered species such as wild buffaloes, rhinos, Bengal Florican, hispid hare, pygmy hog, golden langur—to name a few. It was declared a World Heritage Site in 1985. Its downslide began soon after, as it bore the brunt of armed insurgency and political unrest. Forest chowkis were burnt, foresters were killed, and department elephants shot. All the park's rhinos were wiped out,

elephants, tigers and other wildlife slaughtered ruthlessly. By some reports, the illegal wildlife trade and timber smuggling also helped finance the insurgency movement. Given the situation, in 1992 Manas was listed as a 'World Heritage Site in Danger'.

Manas overcame this terrible ordeal, recovering with tremendous efforts by the state, park management, staff and assisted by the centre and NGOs. It earned a place off the 'in danger' list after 19 years, but given the current situation, it could find itself back "in danger".

In May 2013, there was another bout of violence in the region. Over 5,000 villagers surrounded and mobbed the Bansbari Range of Manas causing extensive damage, and staff was compelled to fire in self-defence. Another camp in the national park, Narayangudi was burnt and destroyed, and park vehicles targeted. Vehicles of conservation NGOs working the region were also attacked. All arms from forest staff in Manas NP were withdrawn.

Manas Heritage status hangs afire

The International Union for Conservation of Nature has put Manas Tiger Reserve in the 'significant concern' category.

The World Heritage Site Committee report notes that continued effort is required to avoid a return to insurgency and insecurity that prevailed in the early 90s, leading then to the site's inclusion in the Danger List. The report acknowledged that management actions had been slowly improved through sustained efforts of the state, backed by international expertise, including decisions by the World Heritage Committee and IUCN/UNESCO monitoring missions.

On their part, park officials said that collaboration with Bhutan has been ongoing and the second trans-boundary survey on tigers has suggested an increase in big cat population.

The significant points in the IUCN report are given below:

1. The report expressed utmost concern regarding the deterioration of the security situation and said that any further deterioration, associated with the reported surge in poaching and concerns regarding encroachment could create the conditions to re-inscribe the property on the List of World Heritage Site in Danger. Unchecked encroachment has doubled to eight sq km from four km, with in a year or two, especially in the Bhuyanpara range in the core/critical tiger habitat of Manas. The report

specifically requests the state to take urgent measures to address these new encroachments and ensure that the degraded areas are rejuvenated.

- Special attention is drawn to the frontline forest staff, as the report urges the state to ensure that forest guards are adequately equipped and trained to protect the park against poachers and maintain effective patrolling, in order to secure the recovering populations of rhino and other wildlife, as well as for the swamp deer planned to be trans-located to the sanctuary. This was important given the recent poaching of nearly one-third of the recovering rhino population.
- The report has taken serious note of the proposed Mangdechhu hydroelectric plant in neighbouring Bhutan, and cites it as a serious threat to the park. The IUCN reiterated its request to Bhutan to submit a copy of the Environmental Impact Assessment of the project, including an assessment of potential impacts on the Site, and cumulative impacts in relation to the existing Kurichu dam, in conformity with IUCN's World Heritage advice note on Environmental Assessment.

The project will be 12-times bigger than the existing Kurichu hydroelectric dam and will have potentially devastating impacts on the riverine ecology as well as the fragile grasslands and forests of Manas.

Source: 'Committee Decisions' of The World Heritage Committee, 38 COM 7B.65 Manas Wildlife Sanctuary (India) (N 338), 'Manas National Park In Assam Losing Its Sheen', Anup Sharma, *The Pioneer*, January 5, 2015; 'Assam violence: Manas National Park closed for tourists', Amarjyoti Borah, *Down to Earth*, Dec 26, 2014.; 'Report calls for peace in Manas - IUCN study says park still has 'serious concerns' about security', RoopakGoswami, *The Telegraph*, 8, October 2014, with inputs from *TigerLink*

Star reserve Kaziranga in IUCN trouble

Concerned by increasing threats to the Kaziranga Tiger Reserve, the International Union for Conservation of Nature has downlisted it to the 'significant concern' category, along with Manas.

The IUCN has classified Kaziranga National Park in the category for the first time, which means the site is threatened and/or showing signs of deterioration. IUCN's World Heritage Site Committee report has placed on record the fact that though Kaziranga had seen tremendous conservation success for decades, it now requires "enterprising and adaptive management strategies" to tackle larger threats.

"The changing dynamics of the surrounding

landscape, particularly with regard to the anthropogenic elements, will create increased pressure on the ecological integrity of the site. The current poaching crisis has shown the inevitable intensification of threats, current and potential, and will necessitate enterprising and adaptive management strategies," it said. "While poaching is not a new phenomenon, there are phases of high and low levels. The spurt in such incidents since 2012 is a cause for concern," it added. According to news reports, 32 rhinos were killed in Assam in 2013 and 41 in 2014, most in Kaziranga.

Implemented by the IUCN's World Heritage Programme and World Commission on Protected Areas, the report provides the first global assessment of conservation prospects for natural World Heritage sites.

Pointing out that Kaziranga faced both internal and external pressures, the report also lists spread of invasive species (Mimosa), livestock grazing, highway traffic, unplanned tourism infrastructure and seasonal flooding as additional current threats which have direct bearing on the wildlife and its habitat. "Likewise, potential threats to the site which may pose challenge include the changing demographic and economic profile of the local population, illegal fishing and stone quarrying adjacent to the park, tourist pressure and river bank erosion. The predominantly anthropogenic drivers of these threats have long-term implications for the site from a conservation perspective," it said.

On protection and management, the report said the park benefits from government support at both national and regional levels as well as involvement of national and international conservation organisations. However, there is a need for a long-term strategy for dealing with tourism-related issues, research and monitoring for habitat and wildlife, human-wildlife conflicts and boundary issues relating to addition areas of the park.

"The Kaziranga National Park is considered as one of the better managed Protected Areas in the country and elsewhere, owing both to its enabling framework and demonstrable success in conservation. However, after decades of conservation success the recent spike in rhino poaching in the site is of particular concern," IUCN's World Heritage Outlook specifically said.

Officials say that they are putting in their best efforts to counter poaching, and the frontline staff are protecting rhinos at great risk, and several poachers have been arrested. The state has issued orders under

Section 197(2) of the CrPC, which grants immunity to forest officials and staff for use of service weapons on duty. The order also extends to include members of Assam Forest Protection Force—an exclusive force in the state for the protection of forests.

Source: 'Kaziranga on downslide: Report', Roopak Goswami, *The Telegraph*, 6, October 2014; 'Kaziranga: Poaching, highway traffic, unplanned tourism ring alarm bells in IUCN', Samudra Gupta Kashyap, *The Indian Express*, 10, October 2014; 'Rhino found dead in Kaziranga park', *PTI*, January 6, 2013.

Barasingha shall rut again in Manas

Nineteen eastern swamp deer or barasingha have been translocated from Kaziranga Tiger Reserve to Manas Tiger Reserve in Assam. The capture process was initiated on 9th December, and the swamp deer were released in a specially prepared soft release enclosure in Manas on 27th December. Exterminated from its former range, the only surviving eastern swamp deer population in the state was left in Kaziranga. A second population was considered necessary to restore the species across its former range and to strengthen its future.

A team of experts from Assam Forest Department, Wildlife Trust of India and Assam College of Veterinary Science monitored the entire process and is part of an ongoing project supported by the Oil and Natural Gas Corporation.

Source: '19 swamp deer translocated from Kaziranga to Manas', *PTI*, 28, December 2014

KARNATAKA

Experiment with conflict tiger a disaster

A conflict tiger catch-and-release exercise went horribly wrong in Karnataka and resulted not only in the loss of further human life, but also in the animal having to be shot. This incident only reinforces the fact that arbitrary catch-and-release exercises for large carnivores in conflict with humans are unscientific and dangerous. The fact that the standard protocols, specifically prescribed for such scenarios by the NTCA, were ignored by the state forest department makes the matter inexcusable.

On 19th November, a captured subadult tiger of Bhadra Tiger Reserve, believed to have killed a woman in the Chikmagalur district, was released with a radio collar in the Bhimgad Wildlife Sanctuary, 300 km away. A tiger had also been filmed boldly chasing a vehicle in a coffee estate in Chikmagalur, and later, it would prove to be the same tiger that was relocated.

Forest officials ignored warnings by renowned tiger

expert and NTCA member K Ullas Karanth who said that it was not safe to release the animal. They maintained that it was safe and a large contingent of forest personnel was camped in the site of release to monitor the animal and prevent further conflict. Unfortunately, the GPS transmitter fitted around its neck malfunctioned and it became impossible to track the tiger. The backup VHF transmitter failed in the hilly terrain.

Nervous villagers reported seeing the tiger in various places. One villager raised an alarm when a tiger tried to take his cow at Tirthakunde village, but others believed it must've been a leopard. On 22nd December, a student of Visvesvaraya Technology University (VTU) on the outskirts of Belgaum city spotted a tiger on the campus grounds while out for a morning jog. The local DFO dismissed this too as a leopard.

On Christmas Eve, a 23-year-old pregnant woman disappeared while she had gone to a stream to fetch water. Her family found blood stains and broken bangles strewn around and launched a search. Late that night, villagers found the tiger guarding her body. They chased the cat away and retrieved the corpse. Was it the same tiger? Forest officials later confirmed the tiger that killed the woman and the one at VTU were indeed the same animal they had released.

Orders to kill the tiger were issued.

About 300 armed personnel from the forest department, police, and paramilitary forces went looking for the tiger. Trap cages were deployed. With radio collar technology failing, four Soliga tribals from southern Karnataka tracked the tiger the age-old way: by reading paw prints, scratches, and other signs. Four days after the woman was killed, the tiger was shot dead on 29th December.

Why had the tiger been released and on whose advise? According to media reports, the tiger's release was actively advised by Sanjay Gubbi and the state home minister's son, Rana George, both of whom are members of the state wildlife board. Rana was also part of the local committee that recommended the tiger's relocation. All action was taken based on their advice, without considering the technicalities and importantly, the consequences of the release.

The issue took on political overtones, with the leader of opposition in the state assembly demanding that the Criminal Investigation Department investigate if the forest officials had been negligent.

On 17th November, two days before the forest department released the animal into Bhimgad Wildlife

Sanctuary, Karanth had written to the NTCA and Chief Wildlife Warden that the tiger captured near the attack site (in Chikmagalur district), and the tiger filmed chasing a vehicle three days prior to the attack, was the same sub-adult tiger identified as Bhadra_S5146 in their camera trap database. "Given that Bhadra_S5146 had possibly stalked and hunted the woman and has shown aggressive behaviour towards humans earlier, it is clear that... [it] has lost its instinctive fear of humans. Releasing it back into the wild, anywhere, therefore poses significant potential risk of it killing humans again. Therefore, my strong advice is not to release this particular animal. Having killed a human, it is best held in captivity, and, being a young animal it will adapt reasonably well, I believe. Even releasing it with a radio-collar is not advisable because of all the trauma of captivity, the animal will become wary and will not be easy to capture again if it resumes human predation."

Unfortunately for the victim and the tiger, this prediction came true.

What did the forest department achieve by releasing this animal? The exercise traumatised villagers for more than a month and tragically cost the life of a young woman. Neither has it done any good to tiger conservation. Villagers near Shivamogga town are now demanding the removal of a tiger that killed a cow. The exercise has been a PR disaster, so to say, as far as garnering community support for conservation is concerned. The misguided effort to give another chance to one tiger has ensured that both people and tigers have lost.

Source: 'Tiger shot dead after killing another woman', Janaki Lenin, *the guardian*, 29, December 2014; 'Tiger who killed a woman in Chikkamagaluru released at Bhimghad sanctuary', *Deccan Chronicle*, November 20, 2014; 'Tiger's release puts people at risk: UllasKaranth', VijaykumarPatil, *The Hindu*, November 25, 2014; 'Tiger released, but recapture imminent', VijaykumarPatil, *The Hindu*, November 20, 2014; 'Locals fearful of suspected killer tiger released near their village in India', Janaki Lenin, *The Guardian*, 4 December, 2014; *TigerLink* inputs

Comment: *This incident reaffirms the fact that in cases of human-wildlife conflict, particularly concerning large carnivores, scientifically prescribed protocol cannot be compromised by kind hearted emotions. The fact that such an irresponsible experiment was carried out by a government department is inexcusable, and begs investigation and accountability. Several times in the past, forest departments have ignored pleas by researchers and conservationists not to arbitrarily capture and release wild cats in conflict scenarios. Invariably, this has led to further conflict or merely a relocation of the conflict.*

The long term answer to minimising human-wildlife conflict lies in minimising the human-wildlife interface. Unless large, contiguous stretches of habitat, rich in prey base and free of human presence are secured, human wildlife-conflict will remain the proverbial two steps backward for every step forward in conservation.

NGT stays hydel project

The National Green Tribunal's (NGT) south zone has stayed the clearance given by the MoEFCC for Phase-I of a mini-hydel power project in the tiger habitats of the Western Ghats in Karnataka. The project was proposed by Sri Maruthi Power Gen (India) Pvt. Ltd. in the reserve forests of Kaginahare and Kenchanakumari in Sakleshpurtaluk. The state government had forwarded the project proposal to the ministry, despite clear opposition from the Karnataka forest department.

Prashanth Y, a wildlife enthusiast from Bangalore, had moved the tribunal challenging the ministry's clearance for the controversial project. The NGT, in its order dated 20th November, stated, "The tribunal is satisfied that a *prima facie* case is made out for granting an order of interim stay of Phase-I clearance issued by MoEF" and posted the next hearing on the matter for 21, January 2015. Justice M Chockalingam and expert member R Nagendran gave this ruling.

The Karnataka government had sent the proposal in February 2014 for diversion of 10.6897 ha of forest land in favour of the private company to generate 18.9 MW of power. Dipak Sarmah, the then Principal Chief Conservator of Forests, had recommended rejection of the proposal. However, Forest Minister B Ramanath Rai and Chief Minister Siddaramaiah are said to be in favour of the project. Rai had given his opinion, in writing, in favour of it in December 2013, which it is reported, had the support of the Chief Minister.

Source: 'Green tribunal stays MoEF clearance for phase 1 of mini-hydel project', Sathish GT, *The Hindu*, December 12, 2014

Illegal sand extraction at Nagarhole

Sand extraction continues unchecked on the fringes of Nagarhole forests in Hunsurtaluk as authorities display a lack of coordination in curbing the illegal activity. Though there was a "crackdown" and the extraction halted when the issue was reported around the last week of October, business is now back to usual.

Sources said that not less than 60 to 80 truckloads of sand were being extracted daily and this was evident in Koanahosahalli, Koluviage, Chikkahejjuru, Udagnuru, Megathuru, Sindenhalli, Abburu, and

RANTHAMBHORE FOUNDATION

Education Project Report October 2014 to December 2014

Ranthambhore Foundation is actively organising education and awareness programmes with teachers children of 40 schools around Ranthambhore National Park in Sawai Madhopur.

In this quarter between 1st Oct to 31st Dec 2014, 273 teachers and 7,553 students have participated in nature camps, environmental

awareness rallies, quizzes, drawing and debate competitions that were organised during wildlife week.

The authorities of Forest Department, Sawai Madhopur, were kind enough to allow 350 students and 33 teachers to visit the National Park and the children were shown different aspects of National Park management.

Abstract of teachers and student participation in Education & Awareness Programme during October to December 2014:

S. N.	Details	Number	Schools	Participants			
				Boys	Girls	Teachers	Total
1	Ranthambhore Nature Camp	10	10	155	56	25	236
2	Special Teacher's Meeting	1	24			35	35
3	National Park Visit (Educational Tour)	14	14	255	95	33	383
4	Environmental Competition	2	39				5540
5	Films Show	10	10	Total Students			2343
6	Environmental Quiz & Drawing	27	27	4247	2087	186	6520
7	Environmental Awareness Rally	1	1	450	556	27	1033

Sanitation Programme

Ranthambhore Foundation has constructed 29 toilet sets and 74 urinals in 19 schools around Ranthambhore National Park where different activities are being carried out. This is a humble way of educating school children of the importance of health and hygiene. This activity has received appreciation from all quarters including the authorities of the Ranthambhore Tiger Reserve, the "gram panchayat" (local village bodies) and the medical officer.

We started working on this programme from April 2014. This activity got further encouragement when the Prime Minister of India called upon the nation to participate in

clean India Programme on 15th of August 2014, from the rampart of 'Red Fort' while addressing the nation on India's Independence Day.

Ranthambhore Foundation's cattle breeding programme around village Kundera is running successfully and getting appreciation from all corners.

In one of the gatherings of top conservationists, the Field Director of Ranthambhore Tiger Reserve stated that in most of the villages around the National Park, the impact of improved breed of cattle can be seen by reduced grazing inside National Park to the tune of 90 per cent.

HEROES OF ENVIRONMENT AND WILDLIFE CONSERVATION CONFERRED WITH RBS EARTH HEROES AWARDS FOR 2014

The Royal Bank of Scotland (RBS) a subsidiary of the RBS Group, announced the winners of the RBS 'Earth Heroes' Awards for 2014. Seven individuals/institutions from the field of wildlife and conservation, who have demonstrated exemplary work on the ground, were chosen by an independent jury, for the RBS Earth Heroes Award. The jury panel, comprising active wildlife enthusiasts, environmentalists and conservationists, reviewed nominations received from across the country.

Mr. N. Sunil Kumar, Head of Sustainability, India RBS N.V., and Director, RBS Foundation India, said, "This year 'Earth Heroes' Award event has unveiled awe-inspiring stories of people, who successfully contributed to

environment conservation through years of constant perseverance with different activities and projects. As in previous years, it has been extremely difficult to make the decision and honour the most inspiring and impactful work, as each one of the efforts is remarkable. We are humbled to honour the winners for their efforts in the preservation of our planet for future generations."

The Chief Guest of the function was Shri. Prakash Javadekar, Hon'ble Minister of State (Independent Charge) for Environment, Forests and Climate Change. All the winners were awarded citations and a cash prize each at the RBS 'Earth Heroes' Awards 2014 ceremony on 4th November, 2014 at Indira Gandhi National Centre for Arts (IGNCA) in New Delhi.

The winners of the 2014 RBS 'Earth Heroes' Awards are:

NO.	WINNER	AWARD CATAGORY
1	Dr. Erach Bharucha	RBS Earth Hero' Award
2	Kenneth Anderson Nature Society (KANS)	RBS Earth Guardian' Award
3	Pangti Village Council	RBS 'Save The Species' Award
4	Dr. Goutam Narayan	RBS 'Save The Species' Award
5	Mr. Dhritiman Mukherjee	RBS Inspire' Award
6	Mr. Sujoy Banerjee	RBS Green Warrior' Award
7	Mr. PS Somashekhar	RBS Green Warrior' Award
8	Padmaja Naidu Himalayan Zoological Park	Special Mention



The Royal Bank of Scotland (RBS) is playing an active role in India in supporting conservation by providing sustainable livelihoods among the communities that are dependent on critical ecosystem resources in the tiger/protected area landscapes and other locations in the country. The projects, supported through RBS Foundation India are helping poor households enhance their incomes from alternative sources of livelihoods thereby paving way for constructive rapport between communities and park managements. The experiences in the field have revealed some of the exemplary work undertaken by individuals and institutions in making a difference to our land and people. RBS acknowledges their effort and extend support to them through its annual conservation awards, the RBS Earth Heroes Awards.



IN SEARCH OF STRIPES ALONG THE KANHA-PENCH CORRIDOR

As dawn approaches, bringing with it the crisp winter nip of late October, somewhere in the deep forests of Central India, inhabitants are waking up to the soothing rays of the sun. Along with the native creatures of the forest, nestled in a clearing, a small team of biologists are warming up over their morning cuppa, to kick start their arduous but exciting workday. Sitting by a bonfire, as the team discuss their plans for the day in hushed tones so as to maintain the harmony of the jungle, their conversation is interrupted only by the occasional call of an Indian cuckoo in the background.

Scenarios such as this are commonplace in the forest stretch between Kanha and Pench Tiger Reserve, where WWF-India's tiger monitoring team, that oversees the Satpuda-Maikal Landscape (SML), has taken up the challenging task of conducting a tiger occupancy survey. Having conducted the first survey in 2010, the team had returned four years on, to repeat the monitoring exercise again.

The Kanha and Pench tiger reserves in the heart of Central India's highlands are well-renowned strongholds of the Indian tiger. The 16,000 km² contiguous forest patch that stretches between these two tiger reserves, is known to house a rich faunal heritage, making it one of the most crucial tiger conservation units in the world. This corridor also supports a few traditional forest dwelling tribal communities, sees diverse land use (large tracts of agricultural land, community managed forests, several small scale industries and so on) as well as a variety of forest protection regimes.

Estimations show that there are about 601 tigers in Central India. Of them, more than 120 have been recorded to inhabit the Kanha-Pench

landscape itself. This includes the Kanha Tiger Reserve, the Pench Tiger Reserve and the forested area connecting the two. Kanha's 2,609 km² has recorded the presence of about 60 tigers (range 45-75), while Pench, in its 1,987 km², is said to support a population of 54 (range 44-65) tigers. (Jhala et al. 2011). Sadly enough, till 2010, there was no concentrated study of tigers and other wildlife in this corridor despite the general knowledge that it housed the most important meta-population of tigers in Central India.

The tiger monitoring team of WWF-India's SML Programme conducted an extensive survey on tigers, co-predators and prey in the Kanha-Pench corridor in 2010, partnering with National Conservation Authority (NTCA), Wildlife Institute of India (WII) and Madhya Pradesh Forest Department. The study was a first of its kind to throw light on the actual rate of tiger occupancy here, highlighting the connectivity, linkages and conservation action required for the area.

In 2014, from October 15 to November 30, the team returned to the corridor to repeat their monitoring exercise with the partnership of the NTCA, WII and support of the Madhya Pradesh government. This survey was conducted with the help of Dr. Jimmy Borah, senior tiger coordinator, WWF-India, and the team comprised of four biologists, two supporting field officers, two field assistants and one driver.

Monitoring a vast expanse of forest such as this is no simple task. Covering remote forests where unpaved roads and lack of accessibility posed significant obstacles, made the completion of the study within a stipulated



timeframe, a major challenge. Each day of the survey demanded a 60-75 km travel on foot, sometimes through rough terrain, looking for telltale signs of tiger trails in thick forest areas and river beds. Once one area was completely scanned, the team moved to camp in the next area.

Describing the kind of hurdles that came their way, Jyotirmay Jena, the leading biologist of the survey cited an example: “One day, we started our field work early in the morning and were supposed to cover eight beats. As planned, the team divided into two groups and decided to meet at one point after finishing the work. But just after the team dispersed, one of the vehicles broke down. The other team had moved ahead, and we realised that we were stranded with no network and no human habitation near by. We had to spend around 11 hours, huddled in our vehicle with barely anything to eat or drink, and just a single matchbox to keep us warm in the biting cold. We were expected to return by 4 pm for lunch and when we did not, our second team began a search for us. We were rescued at 8 pm and it took us till 11 pm to finally return to the camp – exhausted with the unexpected turn of events and frustrated at having been unable to do our day’s work.”

The team managed to cover approximately 1,000 km on foot – and about 140 man days – by the end of 30 days. The survey recorded the presence of the tiger, leopard, wild dog, sloth bear, jackal, hyena in the corridor, with the camera traps recording rare footage of some of these elusive animals.

Tridip Sharma, a biologist who was part of this survey, aptly explained the excitement: “The nature of the task was extremely demanding, however, a fleeting glimpse of wildlife, a rare camera trapping, or just the sighting of a

pugmark was motivating enough to continue with renewed vigour.”

Sprih Harsh, another biologist, added that she learned the necessity of teamwork while working in the deep forest, away from human settlements. “Working in tandem, sharing each other’s experience on the field every day, cooking and eating together and constant communication helped us sail through the testing days and allowed us to enjoy and enrich ourselves with the experience.”

The 2010 survey, covered 79 forest beats and found tigers in 21 beats, leopards in 59, dholes in 25, sloth bears in 48 and Hyena in eight beats. Tiger occupancy was found to be 76 percent in the forest corridor.

The survey also noted severe developmental pressure, and burgeoning conflict and resource dependency due to human settlements – 440 villages were found within five km of the forest periphery.

This time around, in an attempt to expand our study, our team covered twice the number of beats it surveyed in 2010. The team is currently engaged in data analysis and survey in other part of the landscape.

WWF-India also invited nature lovers/wildlife enthusiasts/students to participate in the survey and support in tasks like data collection. Mr. Ramsundar, an I.T. professional from Chennai who volunteered at Balaghat, said, “It was a wonderful experience working in the forests of Kanha-Pench corridor. The area is rich in biodiversity and has tremendous potential. The data collection process has enlightened me to a great extent and I would want to participate in similar activities regularly now on.”



Sunset from Gangulpara camp in the Kanha-Pench corridor;
Pankaj Sarkar/WWF-India



A forest barrier in the Kanha-Pench corridor;
Jyotirmay/WWF-India



Working in the field;
Ramsunder/WWF-India



Mounting a camera trap;
Jyotirmay/WWF-India



Relaxing after work in the field;
Ramsunder/WWF-India

Billenahosahalli villages. Unchecked sand extraction close to the forest vicinity, besides degrading the ecosystem, could encourage potential poachers and loggers to gain entry to the forest.

The areas where the extraction is taking place are a few metres from the park and disturb elephant movement. "Conflict levels will increase as denied this passage, elephants will be forced to seek alternative paths and get into human habitation.

The district administration and forest department blame each other for the lack of regulation, displaying a case of inter-departmental non-coordination.

Sand is transported to Hunsur, Tithimathi, Mysore and even across the border, though supply outside the State has been banned.

Source: 'Sand extraction goes unchecked on the fringes of Nagarahole', R Krishna Kumar, *The Hindu*, 5, November 2014

Cauvery threatened by water project

The Principle Chief Conservator of Forests and Chief Wildlife Warden Vinay Luthra said that the Karnataka Forest Department would oppose the Mekedaatu water plan since it is expected to submerge about 2,500 acres of forest land falling within the Cauvery Wildlife Sanctuary.

Spread over 1,027 sq km, the Cauvery Wildlife Sanctuary harbours tigers, elephants, leopards, gaurs and a host other species, including the endangered mahseer. It is a critical link to both, the BRT Wildlife Sanctuary, MM Hills Wildlife Sanctuary and the adjoining forests in Satyamangalam region providing a large contiguous habitat. The region is a proposed tiger reserve. Significantly, the Cauvery Wildlife Sanctuary has an elephant population in excess of 680 while the adjoining Chamarajanagar forests have elephants in the range of 690 to 900, and Kollegal forests have between 380-425 elephants, making the area an important elephant habitat whose protection was imperative for the long-term conservation of the species.

The state had called for a Global Expression of Interest to build a balancing reservoir at Mekedaatu. According to Major Water Resources Minister MB Patil, the project would help stock about 48 TMC of water to meet potable water demands of Bangalore and adjoining areas.

A day after neighbouring Tamil Nadu filed a petition before the Supreme Court seeking a stay over Karnataka's decision to build a balancing reservoir at Mekedaatu, the Karnataka Forest Department also

took objections to the proposed project.

"As of today we have not received any communication about the project. We too have read about it in the media. But when we get an official communication, we will oppose the project as it would not only submerge forest area in the Cauvery sanctuary but will fragment important elephant and tiger corridors. Such a situation prevails in Hassan district as forest lands were fragmented into small patches following the building of dams. This has sharply increased the human-elephant conflict," Luthra said.

Contrary to the stand of the forest department, Chief Minister Siddaramaiah said that the government will not step back from its decision to build the reservoir at Mekedaatu.

Source: 'Mekedatu Project Will Endanger Wildlife: Official', *The New Indian Express*, 20, November 2014; 'Forester objects to the Mekedaatu water plan', *Bangalore Mirror*, 20, November 2014; 'Foresters' thumbs down for Mekedatu, no proposal anyway', *Deccan Chronicle*, 20, November 2014; 'Cauvery Wildlife Sanctuary a critical habitat for conservation', R Krishna Kumar, *The Hindu*, 21, November 2014

Bandipur ESZ monitoring panel pending

It has been two years since the central government notified the Eco-sensitive Zone (ESZ) around Bandipur but the monitoring committee to ensure the compliance of the notification, is yet to be set up.

The committee will have to oversee the implementation of the Zonal Master Plan for the Bandipur ESZ. This plan provides for restoration of denuded areas, conservation and management of water bodies, watershed management, soil and moisture conservation and other aspects of the environment. The plan also has to demarcate all the existing worshipping places, village settlements, types and kinds of forests to significant changes in land use.

A senior official of the forest department said that setting up of the committee was being delayed at the government level due to the issue of appointing non-official members to it.

"The nomination of government officials is provided for in the gazette notification. But it is the nomination of non-officials drawn from NGOs or specialists on wildlife matters that is delaying the setting of the committee. We have sent a reminder to the government on its early constitution. The committee is a must to take a collective decision or else decisions will not only be questioned but will be unilateral in nature," said the official. The Regional Commissioner of Mysore is slated to be chairperson of the committee. Meanwhile, a senior wildlife biologist said that in the

absence of the monitoring committee, the rules pertaining to the ESZ notification could be misinterpreted.

Source: 'Bandipur ESZ monitoring panel yet to be set up', R Krishna Kumar, *The Hindu*, 9, September, 2014.

Politicians force illegal roads in TR

An NTCA report revealed that roads are being widened by the PWD in Dandeli-Anshi Tiger Reserve. This is in direct violation of the Wildlife (Protection) Act, 1972 and orders of the Supreme Court. An independent enquiry by the NTCA also revealed the role of politicians influencing local government officials to undertake developmental works inside the reserve.

"The report was submitted to the Member Secretary, NTCA, MoEFCC, in June. But construction and other such activities inside the tiger reserves are continuing with scant regard for law," a conservationist pointed out.

In his report, the Assistant Inspector General of Forests of NTCA, notes that, "The local forest officials frankly conceded that all the projects have been executed by the line departments without any approval from the competent authority. Further, they informed that many roads passing through forest areas are being upgraded by widening and black topping in all the divisions of North Kanara district without seeking any approval from the competent authority as envisaged in the guidelines issued by the MoEFCC under Forest (Conservation) Act 1980 & WLPA. Since no such permissions were sought in the adjoining forest divisions, the local ministers/political leaders expect the same from the officials of Dandeli-Anshi Tiger Reserve as well.

Source: 'Karnataka politicians order widening of roads and laying of pipelines through core areas of tiger reserves', Aravind Gowda, *Mail Online*, December 5, 2014.

KERALA

State seeks 500 ha of Periyar

The Kerala government is planning to ask the central government to hand over 500 hectares of forestland from the Periyar Tiger Reserve in the Pampa-Sannidhanam region for the development of pilgrim facilities of the Sabarimala temple. Clearance has been sought for executing the second phase of the action plan for cleaning the Pampa, and financial assistance for the Nilackal-Pampa monorail project.

The decision was taken at a high-level meeting held at the behest of Devaswom Minister V S Sivakumar on

5th November for preparing a project report to be submitted to Prime Minister Narendra Modi for declaring Sabarimala a national pilgrim centre. It demands 500 hectares of land and adequate financial support for making Nilackal a base camp, and Rs 1,250 crore for implementing the Sabarimala master plan.

The government will request the inclusion of Sabarimala in the central government's pilgrimage rejuvenation and spiritual augmentation drive and seek to include the hill shrine and adjoining areas in pilgrim tourism projects. Projects such as addressing power problems, and setting up of a multi-specialty hospital at Pathanamthitta have also been included. The report would seek funds for Kunnar dam augmentation and also for a Veda Tantric University at Nilackal.

The shrine is located inside the 777 sq km reserve and occupies about 40 hectares in the core area of the reserve.

Land has previously been transferred from the reserve to the Travancore Devaswom Board (TDB), which administers the temple. Interestingly, *India Today* notes that Sabarimala is the main source of TDB's income and helps TDB maintain its 6,000 employees, 24 schools, five colleges and 42 elephants. The state, says the board, also earns more than Rs 2,000 crore every year during the festival from various taxes imposed on the pilgrims.

While the temple may be confined to small part of the reserve, the impacts are felt far beyond with lakhs of people trampling through the forests—carrying, and throwing plastics, polythenes, bottles, cigarettes and other trash. They lop branches to cook, increasing risks of forest fires. Such massive intrusion disturbs wildlife and degrades the habitat. Writes Janaki Lenin in *Firstpost*, "Sabarimala, one of the largest forest temples in the country, receives more than 50 million people over 60 days. Assuming each human produces about 150 grams of poop a day, that's 9,000 metric tons. Even with 300 toilets, those septic tanks are woefully inadequate and fill up within a few days. Where does the excess go? Dumped in the River Pampa. At peak season, the State Pollution Control Board recorded the river's coliform content at 1,14,000 per 100 milliliter in the year 2010. In comparison, the permissible level is 500 per 100 milliliter.

Source: 'State seeks 370cr aid for Sabarimala', *TNN*, Nov 6, 2014; 'Sabarimala: Kerala to seek 500 ha forestland', *The Hindu*, November 6, 2014; 'Reserved for god Periyar Tiger Reserve land transferred to Sabarimala temple, fragile ecosystem under threat', M.G. Radhakrishnan, *India Today*, November 7, 2005; 'Religion vs

conservation: When will pilgrims stop polluting our forests?', by Janaki Lenin, *FirstPost*, Mar 18, 2012.

Rising water threatens Periyar

Tamil Nadu's insistence of keeping water level of the Mullaperiyar dam above 142 feet may submerge significant parts of the Periyar Tiger Reserve, and surrounding forests. The Government of Kerala is even considering moving the National Green Tribunal over the matter citing adverse ecological impact resulting from keeping the water level above 142 feet.

Disclosing this at a press meet in Thiruvananthapuram, Kerala Forest Minister Thiruvanchur Radhakrishnan said the government would seek legal opinion on saving the ecological system of the area, which is part of the Periyar Tiger Reserve. According to him, 1.75 sq km of evergreen forests have already been inundated following rise of water level from 136 ft to 142 ft. "The biggest repercussion would be the damage incurred to Periyar Tiger Reserve. If the claim of Tamil Nadu to raise the water level to 152 ft is accepted, around 11.17 sq km land will go under water," he said. He said that the state would not take steps against the directive of the court of law. "The court order can be corrected only by another court order," he said.

The Supreme Court had in early 2014 rejected Kerala's demand for a new dam in place of the old one and upheld Tamil Nadu's stand to raise the water level upto 142 feet.

Source: 'Rising Waters Threaten Wildlife in PTR', PB Jayasankar, *The New Indian Express*, 21, November, 2014; 'Govt to approach Green Tribunal', *The New Indian Express*, 23, November, 2014; 'Kerala Thinking of Approaching Green Tribunal Over Mullaperiyar Dam Issue', *Press Trust of India*, 22, November 2014.

Wayanad frontline staff trained

The Kerala Forest Department and Wildlife Conservation Society-India organised a two-day workshop on wildlife monitoring techniques for the entire frontline staff of Wayanad Wildlife Sanctuary in December 2014. More than 150 frontline staff up to the level of Range Forest Officers posted in the sanctuary were trained on the use of camera traps and line-transect methods to particularly study tigers and their prey. Contiguous with three Tiger Reserves - Mudumalai in Tamil Nadu and Bandipur and Nagarhole in Karnataka, Wayanad WLS harbours a multitude of wildlife, including tigers and elephants. It spreads over 344.4 sq km area within the Nilgiri Biosphere Reserve. Roy P Thomas IFS, Deputy Conservator of Forests, Wayanad division, said "This

training is going to make a change in the capacity of the frontline staff of the sanctuary and is definitely going to empower them to undertake the density study of the tigers in the sanctuary."

TigerLink

MADHYA PRADESH

Awareness trek in Kanha-Pench corridor

'Walk in the tiger steps', a 130km trek for seven days between Kanha and Pench tiger reserves through forest corridors turned out to be a big hit with support pouring in from the grassroots for conserving our national animal. At least 50 participants from across the country led by Chittaranjan Dave, landscape coordinator from World Wide Fund for Nature (WWF), roughed it out in the jungles walking through one of the most important corridors providing connectivity for wildlife between two source tiger populations from November 23 to 29. "We were successful in creating socio-political awareness on the need for securing tiger habitats outside the protected areas by drawing attention of locals, as well as the national and global conservation community," Dave said after the seven-day event.

The walk started on 23rd November, after a brief talk by Kanha field director JS Chauhan, who joined the walk for two days. Chauhan said there was enough evidence of tiger presence, and rich floral and faunal diversity, in the corridor and to protect it, local communities must be enlisted. "We identified 43 villages that have weak corridor links. Community development will be taken up in these villages under an integrated plan," he said. There was interaction with local villagers, who raised some issues and discussed their problem with the forest officials.

Participants learnt about forestry operations and protection measures in the corridor and had an interaction with Balaghat CCF Pushkar Singh, who joined the walk with his staff. On the trek, he showed one of the oldest teak plantations in Central India where a teak tree with 4.7 metre girth is still surviving. "Such events will help forest department consolidate effort to address community issues and simultaneously protect corridor forest from illegal activities," said Singh. During night halts, the WWF team organised food and movie shows through which villagers were asked to support tiger conservation efforts in all possible ways.

On November 29, field director of Pench Sanjay Shukla and deputy director Kiran Bisen and others joined the

trek. On the occasion, WWF donated a school van for the children of frontline staff posted in Kanha Tiger Reserve.

Source: Kanha-Pench walk, a giant step for tiger conservation, Vijay Pinjarkar, *TNN*, Dec 2, 2014.

“Shut Panna mines by 2017”

The recommendations of an environment impact monitoring panel—headed by the Chief Wildlife Warden and formed on the orders of the Supreme Court—dictate that the diamond mines near the Panna Tiger Reserve be shut down by June 2017. Field Director of Panna Tiger Reserve RS Murthy, who is a member of the monitoring committee, said, “Our recommendation is in line with earlier apprehensions that mining activity in the tiger reserve will affect wildlife, especially the population of tigers. We have informed the National Mineral Development Corporation (NDMC) about our recommendation and have sought a detailed mining closure plan from them.”

This is not the first time that a phase-wise closure of the mine has been suggested over a definite period. In 2005, the State Board for Wildlife of Madhya Pradesh had given mining clearance to NMDC with the condition that it should phase out its operations by 2020. Following this, in 2006, the Central Empowered Committee appointed by the apex court had remarked in its report on Panna that it was undesirable to allow mining indefinitely within Protected Areas and asked for a deadline for closure.

During the last decade, Panna's diamond mines have been closed thrice for want of environmental clearances and other related issues. The longest period for which it remained closed was from 28th August, 2005 to 19th June, 2009. After the mine was closed in 2005, the NMDC moved the Supreme Court against the order. The SC then appointed a seven-member committee that visited the Panna mines and surrounding areas in 2008 to take stock of the ground reality. In September that year, the Supreme Court revoked the ban on diamond mining in Panna, turning around its 2002 directive.

Source: 'Close diamond mining in Panna tiger reserve by 2017: Panel', NeerajSantoshi, *Hindustan Times*, 22, September 2014

HC: notify Ratapani Tiger Reserve

The Madhya Pradesh High Court sent a show cause notice to the state government on 14th October, seeking an explanation for undue delay in notification of the Ratapani Tiger Reserve despite receiving an “in-

principle approval” from the centre in 2008. The Jabalpur bench has asked the CWLW to submit an explanation on the issue in response to a PIL filed by wildlife activist Ajay Dubey. Ratapani Wildlife Sanctuary covers an area of 907 sq km. Important species found in the sanctuary include tiger, leopard, hyena, sloth bear, pangolin, wild dog, four-horned antelope, long-billed vultures and white-backed vultures to name a few.

Field staff has been consistently reporting the presence of breeding tigers, a fact corroborated by camera traps deployed which show evidence for the same. The census conducted by the state in 2006 indicates 17 tigers. The park is very close to the capital city of Bhopal, and is contiguous to forests abutting Bhopal (Kerwa- Ratapani corridor). The Singhori Wildlife Sanctuary also shares a 4.5 km long border with Ratapani WLS. Overall, Ratapani forms a block of about 1,000-1,200 sq km of tiger habitat.

Source: 'Madhya Pradesh HC slams government over delay in notification of Ratapani as tiger reserve', P Naveen, *TNN*, 14, October 2014

MAHARASHTRA

Tigress drowns in well

A tigress died due to drowning in a well in the Shivni Range of forests under the buffer zone of the Tadoba Andhari Tiger Reserve (TATR) on 15th December. The carcass of the tigress was found floating in the well of a farm belonging to a resident of Shivni village and the matter was reported to forest officials. This is the second incident of a large carnivore drowning in a well at TATR within a week. On December 11, a leopard had died in similar incident in Varwat, also in TATR buffer zone.

As per records, at least 15 incidents of tigers, leopards and bisons falling into the farm wells and tanks have been reported since November 2007. There are reportedly over 5,000 wells without parapets in and around Tadoba.

Source: 'Fully grown tigress dies due to drowning in a well on a farm', *Zee News*, 16, December 2014; Tigress drowns in farm well near Tadoba Mazhar Ali, *TNN*, Dec 17, 2014.

New tourism zone in Tadoba

In a bid to boost ecotourism and biodiversity conservation, Tadoba-Andhari Tiger Reserve (TATR) has started a 50-km-long wildlife safari in the reserve's buffer zone from Kolara gate. This is the second such safari in the buffer zone after Agarzari (Navargaon Chowki) near Moharli. Agarzari is on the

fringes of Tadoba, and has earned Rs 11.5 lakh from ecotourism since 2012 when it was started by the villagers.

“On the lines of Agarzari, tourism will be run by five Eco-Development Committees (EDCs) set up in the above villages. Entry will be given from Kolara gate and tickets will be issued by the EDC members,” said GP Garad, Field Director, TATR. He added the tourism revenue would be shared between EDCs and Tadoba Conservation Foundation in the ratio of 80:20. “We have trained 20-25 guides who will accompany tourists on the route.

Source: 'Tadoba opens tourism in Kolara buffer', Vijay Pinjarkar, *TNN*, 20, November 2014

Long term tiger study in Tadoba

For the first time, the Wildlife Institute of India (WII) has initiated an exercise to radio collar tigers in the Tadoba Andhari Tiger Reserve (TATR) as part of the research project titled 'Long-term monitoring of tigers, co-predators and prey species in TATR and adjoining landscapes'. The state government had, last year, cleared the Rs. 1.64 crore project that is to be implemented by the WII on a 70:30 cost sharing basis between the state government and the National Tiger Conservation Authority. The project is aimed at studying the population density in addition to the abundance and demographic structure of tigers. It will be conducted in two phases and also includes capacity building of local staff for managing human-wildlife conflict. A couple of leopards will also be radio collared as a part of the project. The TATR landscape is one of the most important landscapes in Central India and is crucial for long-term conservation of tigers in the region. It has witnessed very high human-tiger conflict cases over the years.

Source: 'After Jamni tigress, male Gabbar radio-collared in Tadoba', Vijay Pinjarkar, *TNN*, 20, October 2014; 'WII experts radio-collar tiger in Tadoba', Vijay Pinjarkar & Mazhar Ali, *TNN*, 10, October 2014

Irrigation colony in Pench vacated

The core area of Pench Tiger Reserve, Maharashtra has been freed from an irrigation colony within the park. After the interim orders from the Nagpur bench of Bombay High Court on 19th November, the Irrigation Department on 6th December handed over the colony occupying 15 ha inside the core area of Pench Tiger Reserve to the Forest Department.

The direction had come from a division bench of Justice BR Gavai and Justice VM Deshpande on a writ petition filed by Kishor Rithe, member of Nature

Conservation Society, Amravati.

Source: Satpuda Foundation

Comment: *Similarly, a mini township of 2,600-odd houses, a school, a college and an irrigation-engineering academy has been thriving illegally for more than three decades in Corbett National Park. Spread over roughly 150 hectares of Corbett, the colony was set up during the 1970s by the Uttar Pradesh Irrigation Department when the Kalagarh dam was being constructed. Despite a High Court order in 1999, it has not been vacated.*

On 2nd December, 2013, the Supreme Court, upheld the 2004 report of its Central Empowered Committee to return the encroached New Kalagarh irrigation colony to the Corbett Tiger Reserve, and set a six-month deadline for the state government to ensure compliance and report to the court.

One year on, the colony flourishes, with no action by the state.

It is learnt that the Chief Secretary, Uttarakhand called a meeting with the UP government in early January, in which it was decided that the irrigation colony would be handed back to the Corbett National Park as per the orders of the Supreme Court within six months of the meeting.

ORISSA

Making way for Similipal's tigers

After the successful relocation and rehabilitation of the hamlets of Bahagarh and Upper Barhakamuda (UBK) from the core area of Similipal Tiger Reserve, the large village of Jamunagarh, also called Jamuna, has expressed its eagerness to avail the same package and move into mainstream society at a new location outside the reserve. This will create inviolate habitat within the reserve for tigers to thrive in.

Thirty-four families living in enclosures inside the inviolate tiger habitat of the reserve at Bahagarh and Upper Barhakamda opted for the rehabilitation package on offer by the Government of India and chose to relocate to a site of their choice at Asankudar near Thakurmunda, Mayurbhanj, on 7, December 2013.

The villagers belong to the nomadic hunter-gatherer Khadia tribe that were settled in trenced enclosures at UBK and Bahagarh in the 1970s by the then—and legendary—field director of Similipal, Saroj Raj Choudhury.

After their voluntary consent was expressed *vide* gram sabha resolutions, they were relocated as per the

nationally applicable package of Rs. 10 lakhs per family, available to those opting to relocate outside Protected Areas. Most of those living inside remote forests are opting to move out due to lack of basic facilities and the immense hardship they face. They also exert severe negative impacts on fragile ecosystems that they co-inhabit, along with large carnivores and mega herbivores.

On 2, November 2014, the village of Jamuna with 62 families consented in writing at a gram sabha meeting held with the district administration and park management.

This move will entirely free the richest part of the park from human presence.

The relocation of villages has shown immediate positive effects on wildlife, particularly tigers, in the reserve. This has supplemented the excellent protection and management initiatives of the tiger reserve management that has seen visible improvement since reforms were put in place by the Orissa government following the left wing extremist attack on the reserve in 2010.

Among the most visible impacts of the relocations have been the increased movement and boldness of tigers on the main patrolling roads in the reserve, even by daylight. With human movement in the core/critical tiger habitat being heavily curtailed, frontline staff information and camera trap evidence has shown tigresses successfully bringing up relatively large litters of cubs (numbering three to four) to adulthood. Such successful breeding over the past five years has resulted in a healthy tiger density of over six tigers/100 sq km—equivalent to some of India's best tiger reserves in the Central Indian Tiger Landscape. This figure was arrived at through intensive tiger estimation exercises involving camera trapping as per the prescribed guidelines of Phase IV annual tiger estimation procedure of the NTCA. The exercise has revealed 25 individual adult tigers in a sampled area of 400 sq km.

Two other villages, Kabatghai and Bakua remain. Of these, Kabatghai has expressed keenness to move out too.

Source: Aditya Chandra Panda

RAJASTHAN

Blatant mining inside Sariska's core

The Central Empowered Committee of the Supreme Court has asked the Rajasthan government to immediately stop mining activities allowed around

Sariska in “blatant violation” of the court's orders and name the officers responsible so that “appropriate action” can be taken against them.

The decision to allow mining activities within one kilometre of the Sariska Tiger Reserve and Jamua Ramgarh sanctuary was taken at a meeting chaired by then acting Chief Secretary of Rajasthan CS Rajan on 4, December 2013.

According to the forest department, there are 84 mines within one kilometre of Sariska Tiger Reserve and Jamua Ramgarh Wildlife Sanctuary. While barring mining around national parks and sanctuaries, the SC, in its August 2006 order, ruled that as an interim measure, a one-kilometre radius be maintained as a safety zone.

The law prohibits mining activity in the Sariska Tiger Reserve, but disagreement among departments over land revenue records has allowed 12 mines to continue even in the core area of the reserve.

Mining and forest department records accessed by *The Indian Express* show that 12 marble mines are located in Khasra* 166, near Palpur village, which was notified as part of the tiger reserve in 1975. It falls within the 881 sq km core critical habitat. A ground check confirmed that six of the 12 marble mines in Tilwad forest block under Tehla range of Sariska are currently operational, while the rest await renewal of licences.

When *The Indian Express* checked the sites, blasting work was on and trucks were busy carrying away loads. Dumping of debris from the quarries has created artificial hillocks on forest land.

Nine mines have been operational since the 1980s, barring the 1992-1996 period when a Supreme Court order shut all mines in and around Sariska. Three more mines were permitted from 2001-2005. These are “legal” mines because successive Sariska managements have ruled that Khasra 166 does not fall within the tiger reserve.

When questioned, RS Shekhawat, Field Director of Sariska said, “How can there be mining inside the tiger reserve? I have to check the specifics of this area (Khasra 166). Mines could not have continued anywhere if the area was inside the Sariska core.” Shekhawat's argument has a history. In 2005, following a petition filed by the Alwar-based Bandhua Mukti Morcha, the then Field Director of Sariska wrote to the Supreme Court's Central Empowered Committee (CEC) that Khasra 166, where the mines were operational, was not the same Khasra* 166 notified as part of the reserve.

Khasra numbers often change in land settlements over a period. And the Sariska management has maintained that the mines occupy Khasra 166 as per the 1957 land records while Khasra 166, notified as part of the tiger reserve according to the 1922 land records, is a different area. But records submitted in 1992 by the Field Director of Sariska to a Supreme Court-appointed committee tasked with demarcation of the tiger reserve boundary, show that Khasras 1, 7, 165 and 166 of Palpur village were notified as tiger reserve as per the 1957 land records.

Also, land records at the Rajgarh tehsil office state that Khasras 1 and 166 were identified as per the 1957, and not 1922, land records for transfer to the forest department. As per tehsil records, Khasra 166 was split and renumbered 285, 286, 290-293 and 293/417 in 1989. The latest records with the Rajasthan Mining Department bear this out. The list for mines in Palpur shows that 12 mines occupy a total of 21.3 hectares in new Khasras 285, 286, 290-293 and 293/417 of 1989—or Khasra 166 of 1957—inside the tiger reserve.

The mining department also marked the quarries on the same map of Sariska submitted to the Supreme Court by the tiger reserve management in 1992. All 12 mines sit, either fully or in part, on Khasra 166 on that map—the same area that the Sariska management does not acknowledge as part of the core.

Despite reminders since 2012 when Sariska's buffer zone was notified, the National Tiger Conservation Authority (NTCA) is still to receive a map, demarcating the reserve boundaries on ground, from the Sariska authorities.

When his comments were sought, OP Meena, Additional Chief Secretary (Forests), Rajasthan, directed the queries to the mining department. “I think the boundary has been marked in Sariska. As far as mines are concerned, only the mining department can provide details,” he said.

*A khasra is a legal document used in India that specifies land details, mostly for agricultural land.

Source: 'Supreme Court panel slams Rajasthan govt, orders mining ban in areas near Sariska', Jay Mazoomdaar, *The Indian Express*, 27, October 2014, New Delhi; 'Behind land record files, 12 mines thrive in Sariska heart', Jay Mazoomdaar, *The Indian Express*, 1, November 2014

TAMIL NADU

Wildlife crime workshop

TRAFFIC-India convened on 28th November, a capacity building programme to strengthen wildlife law

enforcement for enforcement officials from three adjoining States viz Tamil Nadu, Karnataka and Kerala. The 120 participants included officials from the departments of police, forests, customs, Railway Protection Forces, Special Task Force, and the postal department, indicating the wide interest in wildlife protection and conservation.

Together, the three States are home to seven tiger reserves. “The threat from poaching for illegal trade in this region is largely due to its geographical location at the junction of three States where poachers have the opportunity to operate across provincial borders,” said Shekhar Kumar Niraj, Head of TRAFFIC-India.

This capacity building programme was organised with a specific view to strengthening protection of animals including the tiger, leopard, elephants, bears plus several lesser known species that inhabit this rich yet vulnerable biodiversity hotspot of the Western Ghats.

The participants received hands-on training in detecting wildlife poaching and controlling scenes of crime. They also received training on the detection of crime relating to plant and timber species, while further practical training was given on the use of modern technology such as deep search metal detectors for locating snares. Training sessions were also conducted on the use of cyber forensics, intelligence collection and collation, species identification, DNA fingerprinting and wildlife forensics, and sessions on legislation and jurisprudence toward achieving higher conviction rates.

The capacity building programme was organised by TRAFFIC in collaboration with the Tamil Nadu Forest Department and WWF-India.

Source: www.wwfindia.org

UTTAR PRADESH

Agencies unite to mitigate border road threat

The Sashastra Seema Bal (SSB) and the Uttar Pradesh Public Works Department have joined hands with the UP forest department to draw up a conservation plan which involves elevating road stretches at 16 sites — a total of 31 km will be elevated — and realigning three stretches to secure wildlife movement between of India and Nepal, for a proposed road on the Indo-Nepal border.

Sources said the proposed changes to the border road plan will increase the project cost by 20-30 per cent.

Conceived during the term of the first UPA

government, the 961-km road from Uttarakhand to Bihar will connect all SSB border outposts. In 2010, the Ministry of Home Affairs cleared the 640-km UP stretch with a budget of Rs 1,621 crore.

The devastating impact of a road in the rich Terai forests, a prime tiger and elephant habitat, cannot be stressed enough.

Work has reportedly already begin in 12 segments of the road that do not involve forest land. The remaining 16 segments cut through the Dudhwa National Park, three sanctuaries and three forest divisions, home to a rich population of globally endangered wildlife including tigers, elephants, rhinos, Bengal florican, swamp deer etc.

The original road alignment would have made it a physical barrier, blocking movement of animals. To avoid habitat fragmentation and delay in project implementation, all parties concerned — user SSB, builder PWD, regulator Forest Department and environmental groups WWF-India and WWF-Nepal — came together in 2013 to find a solution.

S P Saxena, Chief Engineer of the Uttar Pradesh PWD, said: “This road is a must for the country's security and these forests and wildlife are our national asset. We have agreed on a set of measures though these will be expensive.”

The elevated roads propose to have underpasses six metre high and 30 metre wide, spacious enough for elephants.

Rupak De, Chief Wildlife Warden, Uttar Pradesh, said: “It was important for different interest groups to sit together and find a middle ground. We have to finalise site-specific details and then set up a joint monitoring committee to ensure compliance during construction.”

Dipankar Ghose, Director, Species and Landscapes, WWF-India, is cautiously optimistic: “The conservation benefits justify additional costs and we hope financial considerations will not come in the way of this landmark consensus. Also, India is financing a similar road project in Nepal that will run close and almost parallel to this road. Unless the two governments come together to incorporate similar measures in that project, all the good work on the Indian side may not be enough to secure this landscape,” he said.

The associated and ancillary development projects and other activities that follow a road is also equally worrying.

Source: '3 government agencies, NGO unite to save wildlife along border road', Jay Mazoomdaar, *The Indian Express*, October 21, 2014

UTTARAKHAND

Corbett: Tiger Reserve or Municipality?

The urban development department's decision to declare an area—Kalagarh Irrigation Colony—in Corbett National Park as a Nagar Panchayat or a municipality has left the forest department shocked. While some officials have termed the move as “unprecedented”, others say it is the “worst form of vote bank politics”.

The urban development department has already issued a notification to receive objections from public within one week before declaring the area, where around 7,000 people are currently living, as a Nagar Panchayat. D S Garbyal, secretary, urban development department said “The issuance of a notification of bringing Kalagarh colonies under the ambit of Nagar Panchayat has been aimed at providing civic amenities which include schools, hospitals, water and electricity the people living there.”

It seems to have escaped the urban development department's notice that the area in question is within a National Park, and that such an activity is against the WLPA, and Supreme Court orders.

The Kalagarh Irrigation Colony is flourishing illegally inside Corbett, and the decision also appears to be in contravention with last year's Supreme Court directive to remove illegal encroachers from Kalagarh. The Kalagarh irrigation colony is spread over 150 hectares of Corbett, and has not been vacated despite a High Court order in 1999; it has in fact, been expanding.

On 2nd December, 2013, the Supreme Court, upheld the 2004 report of its Central Empowered Committee to return the encroached New Kalagarh irrigation colony to the Corbett Tiger Reserve, and set a six-month deadline for the state government to ensure compliance and report to the court.

In a meeting held recently between the forest officials and UP irrigation department, the latter had agreed to give around 300 hectare land in its possession in Kalagarh to the Uttarakhand forest department. A timeline to remove the illegal colony as per the Supreme Court order was also set.

Source: 'Decision to set up Nagar Panchayat in CNP shocks forest dept', Seema Sharma, *TNN*, Jan 12, 2015, *TigerLink* inputs

Tiger killed on tracks

A tiger was killed by a train in Uttarakhand in the last week of November on the tracks between Ramnagar and Kashipur. Villagers spotted the carcass and

informed concerned authorities. Expressing his distress, the Chief Wildlife Warden DVS Khati said he would hold an inquiry as railway authorities had not informed forest officials of the accident. He ruled out fencing off the area or asking the railways to reduce the speed of trains in this stretch. “Since this is an army area on one side with agricultural land on the other, there is no possibility of fencing off the stretch. This is not reserve forest area, so railway authorities cannot be asked to lower the speed of trains. However, we will advise caution, and recommend some measures like using horns, which would alert animals,” he said.

The dangerous impacts of railway tracks through large mammal habitats have been repeatedly highlighted in issues of *TigerLink*. Not only do these cause tragic loss of individuals of highly endangered species, they fragment and degrade forest habitats and restrict wildlife movement.

Source: 'First tigress death on railway track in U'khand', Seema Sharma, *TNN*, 28, November 2014; with *TigerLink* inputs

State delays notifying tiger reserves

It has been nearly three years since the then Chief Minister of Uttarakhand, Vijay Bahuguna announced that Rajaji National Park would be declared a Tiger Reserve, but the state has yet to issue the final notification. Rajaji has received the final approval from the NTCA, the state on its part has also issued the final notification of the park, and consulted with local villagers. The delay in notifying the reserve, therefore, seems inexplicable.

Meanwhile, Rajaji reels under various threats—severe anthropogenic pressures from van gujjars, the proximity of the pilgrim towns of Hardwar and Rishikesh, as well as state capital Dehradun. Additionally, busy highways and a railway line runs through it, and within the park there is an army ammunition dump. Given these threats, it is all the more important that the park be given the status of a tiger reserve, as this will help bring in funds, and other technical support to the park.

Rajaji is the western edge of the Terai or the Shivalik-Gangetic landscape, identified as one of three most important tiger landscapes in India, and is the north-westerly limit of India's national and National Heritage animal—the tiger and the elephant. Rajaji also has the highest prey densities in the country, over 20 sambar per kilometre. A multitude of factors such as availability of inviolate space, a healthy prey biomass coupled with a small breeding tiger population provide excellent opportunity for tiger

conservation in Rajaji. However, recovery of tiger population across the park requires active management intervention, focused attention and sustained funding; which can only be achieved by bringing Rajaji under the umbrella of National Tiger Conservation Authority.

Another sanctuary awaits the nod of the state for a tiger reserve. Recognising the potential of Nandhaur Valley in the Haldwani forest division, the state notified this reserve forest as a sanctuary in November 2012. Last year, the idea of declaring Nandhaur WLS as a tiger reserve was mooted. A team of officials from the National Tiger Conservation Authority (NTCA), including its Member Secretary Rajesh Gopal visited Nandhaur to see how the process could be facilitated for granting the tiger reserve status to the said sanctuary

Nandhaur WLS covers 279 sq km (inviolate with no human habitation) of the larger landscape of about 800 sq. km., nestled between the Gola and Sharda rivers, and provides a crucial link between the western and central Terai Arc Landscape (TAL). Nandhaur is a critical link in the larger TAL; on the east it is contiguous to Pilibhit Tiger Reserve through Kilpura-Khatima corridor and then onto the Shuklaphanta Wildlife Reserve of Nepal, but its connectivity in the west to Corbett is broken by the Gola corridor, which is heavily mined for boulders.

An exercise by WWF-India in collaboration with the Uttarakhand forest department estimated about 11 tigers in the Nandhaur valley, with an immense potential of revival into a significantly larger population. Other wildlife of Nandhaur includes tiger, elephant, Himalayan black bear, sloth bear, leopard, serow, goral, sambar, the golden mahseer, great hornbill etc. Notifying Nandhaur as a Tiger Reserve will go a long way in ensuring better protection for this crucial tiger habitat. However, the state is yet to commit a tiger reserve status for the sanctuary and the proposal still hangs in the balance.

A *TigerLink* report

A website to report forest crimes

India's first forest helpline, launched in July 2014 to help people report forest and wildlife offences in Kumaon, has received a heartening response. 'Van Mitra' was initiated by CCF (Kumaon) Paramjit Singh, who said that it was hoped that the helpline would help curb poaching, smuggling of timber and other forest produce, and also build support for wildlife.

The 'Van Mitra' initiative has succeeded in garnering

more than 250 complaints related to poaching, illegal felling of trees and encroachment that allowed prompt corrective action by the forest department on the ground. The toll free number for the helpline is 9208008000.

Motivated by the response, there are now plans to launch an interactive website—www.ukforest.in—to allow the public to upload and share photo and video evidence with the forest department.

Source: 'Website to follow India first forest helpline's success' Vineet Upadhyay, *TNN*, 2, November 2014

INTERNATIONAL NEWS

Massive oil spill in the Sundarbans

A vessel carrying 350,000 litres of furnace oil crashed into another vessel in the Sundarbans, a World Heritage Site, spilling almost the entirety of the toxic liquid over a 350 sq km area along the Shela River in Bangladesh, on 9, December 2014.

The spill will cause irreversible damage to the unique and fragile land-marine ecosystem of the Sundarbans, the only mangrove ecosystem in the world which harbours tigers.

The tanker, Southern Star VII, sank after colliding with another vessel while trying to steer through dense fog. The incident occurred in the Shela River, one of the three dolphin sanctuaries in the region, and a no-go zone for vessels. Activists and environmentalists said the shipping route through the Sundarbans violates ecological norms.

Local officials and residents said the spilled oil quickly spread into smaller channels, covering waterways and mudflats.

While officials declared the oil spill an ecological catastrophe, Bangladesh's shipping minister Shajahan Khan tried to majorly downplay the impact of the spill saying that it will cause little impact on the Sundarbans. "We've talked to foreign experts who said the oil spilled from the crashed tanker won't harm the world's largest mangrove forest that much," he said. The minister further added, "It won't affect dolphins and other animals as the oil has not spread that much. The oil couldn't enter the forest as fishing nets were used on the mouths of canals to prevent its spread..." He reassured that the locals were collecting the oil. Locals, meanwhile, have been reportedly collecting oil with spoons and sponges! While Bangladesh has admitted that they are woefully under-equipped to

carry out the required damage control, India has chosen to keep its hands off of cleaning the mess, even though Sundarbans is a contiguous eco-system that spans across India and Bangladesh.

A team of international experts from the UN visited the Sundarbans to assist in clean up strategies.

Fragile mangroves and wildlife threatened

Environmentalists say that the endangered Irrawaddy and Gangetic dolphins will be worst hit. Dolphins frequently need to come up for air, suffocating when unable to rise past the congealed layer of oil to breathe.

Tigers have vast territories and move through creeks and rivers. Such movement will be restricted by the oil and grime in the water.

Several carcasses of animals like dolphins monitor lizards, otters, and birds covered in oil have washed up ashore. The mangroves are also choking in the grime. The spill will also cause a huge problem on the shorelines of canals and rivers which are used by the animals of the mangrove forest to drink from. The mangrove ecosystem consists of salt-water trees like the *sundari*, *kewra*, *goran*, *poshur* and *gol*. Windfall seeds from these trees fall to the ground and germinate. But they will fail to germinate if they fall on oil-covered soil, disturbing the fragile ecosystem of the Sundarbans.

A Water Highway or a Tiger Reserve?

Plying of vessels through the sanctuary, a UNESCO natural heritage site is illegal under the environment protection law. Despite this, there have been two such accidents in the past three years, with the tankers dumping fly ash and fertilisers, contaminating the waters of the Sundarbans. Reportedly, with the regular route heavily silted, the Bangladesh Inland Water Transport Authority opened a "temporary" route through the Shela River.

According to some reports, more than 200 tankers ply through the Sundarbans *everyday*. Last year, UNESCO had requested the Bangladesh government to suspend the water route through the Sundarbans with immediate effect. Evidently, this went unheard. The UNESCO had threatened to withdraw its world heritage site tag and list the Sundarbans as an endangered world heritage site instead, said a source.

Damage control

Amir Hosain, chief forest official of the Sundarbans admitted to being unprepared to tackle this

unprecedented catastrophe. Authorities asked the locals to collect the furnace oil and sell it to Padma Oil Company, the company responsible for the oil spill. Locals were advised to use fishing nets, sponges or any other manual means (including spoons!) to collect and clean up 3,50,000 litres of oil.

An official from the Bangladesh Inland Water Transport Authority was quoted saying that Navy vessel Kandari-10 would spray a powder adhesive to increase the density of the oil. It will then be swept away through fishing nets from at least 20 points. However, forest officials advised against this, as it would further harm the biodiversity of the Sundarbans. A belated decision was taken by the authorities to ban plying of vessels through the Shela River until further notice, to ostensibly prevent further spread of the oil.

A disaster of such monumental implications, and of a kind for which manmade boundaries have no meaning, demands a quick response and collective action. Yet, India has made no effort to contribute to damage control.

History shows that impacts of such oil spills last beyond the immediate. The toxic effect reduces the reproductive health of both terrestrial and aquatic wildlife and causes mangrove die-offs. There are potential toxic impacts if fish exposed to oil is consumed. In major oil spills across the globe, the legacy continues even two decades later with oil residues and sediments in animal populations, fish, mud, ocean beds, and beaches—everywhere. Impacts of the Ixtoc I oil spill in the Gulf of Mexico are still prevalent, even after 30 years since the accident occurred

Sources: *TigerLink*; 'Huge oil spill threatens rare Irrawady dolphins in their Sundarbans home', Nayantara Narayanan, *Scroll*, 12, December 2014; 'Animals start to die', Pinaki Roy, *The Daily Star*, 12, December 2014; 'Sundarbans oil spill: Dolphins will be first to take a hit, say greens', *TNN*, 12, December 2014; 'Oil spill alarm in Sundarbans mangroves', Subhro Niyogi & Krishnendu Mukherjee, *TNN*, 12, December 2014; '350-tonne oil spill by Bangladeshi ship threatens Sundarbans', Krishnendu Mukherjee & Rakhi Chakrabarty, *TNN*, 12, December 2014; 'Bangladesh begins clean-up after spill', *AlJazeera*, 12, December 2014; 'Sundarbans oil spill: The toxic knows no borders', Prerna Bindra, *DailyO*, 15, December 2014; 'Shajahan Khan downplays threat to Sundarbans', *The Daily Star*, 13, December 2014; 'UN sends team to clean up Sunderbans oil spill in Bangladesh', *AFP*, December 18, 2014.

Attenborough backs £1million campaign for tiger conservation

David Attenborough is pledging £1million for protection of the Chilkiya-Kota corridor of Corbett National Park. An entire Indian village is also set to be

relocated as part of a new £1million project. As part of the campaign, conservationists will buy the land between the two places that host tigers, alongside other endangered creatures.

Once protected, the corridor will permanently connect Corbett Tiger Reserve and Ramnagar Forest Division along a traditional wildlife route. Its proximity to Corbett Tiger Reserve, home to the highest density of tigers in the world, harbouring around 8% of India's entire tiger population makes the Chilkiya-Kota corridor a priority for conservation.

The corridor encompasses one village divided into three segments, and the project has been designed in three phases. World Land Trust and Wildlife Trust of India are supporting phase 1, which concentrates on the voluntary relocation of around 50 families from the Panod section of the corridor; the area with the highest density of human-wildlife conflict.

Over the last three years, nine people are known to have been killed by tigers in and around the Chilkiya-Kota corridor and countless livestock have been lost to both tiger and leopard. Elephants also cause severe difficulties for local people settled within the corridor through trampling and raiding of croplands.

The Chilkiya-Kota corridor, as the strip of land is known, is an ancient route used by animals to pass between the forests. However, their passageway is being disrupted by the local people who now live there, according to the Guardian.

Over half of the people killed by tigers are women, who are often attacked when they are foraging in the forest for food and wood. Large numbers of livestock are also killed.

As a result, the project intends to move around 50 families from their village in Chilkiya-Kota to new, safer homes a few miles away in the first phase of the project, and an increasing number in the second and third phase. Around 200 people will be re-homed in total.

Each of the families will be provided with sanitised, properly built homes and access to schools for their children.

Source: 'David Attenborough backs £ 1 million campaign to save the Bengal tiger - and stop them from attacking people', Jenn Selby, *The Independent*, 1, October 2014; 'World Land Trust raising funds for the 'ambitious' Chilkiya-Kota elephant corridor', Kounteya Sinha, *TNN*, 29, September 2014

Frontline staff at great risk

With poachers responsible for more than half of ranger deaths over the past two years, the

International Union for Conservation of Nature (IUCN), and the International Ranger Federation (IRF) called for a toughened stance against wildlife crime globally.

Fifty-six rangers have lost their lives in the line of duty in the last 12 months, 29 of whom have been killed by poachers, according to the latest information released by the International Ranger Federation, which has been monitoring ranger deaths since 2000. Last year's death toll has reached 102, with poachers and militia responsible for 69 of them. More than 1,000 rangers have been killed worldwide and many more injured over the last 10 years. Thailand has seen one of highest casualties, with more than 40 park rangers murdered in the last five years, and many more injured or left in a critical condition.

These figures represent only the confirmed deaths from some 35 countries that voluntarily report to the IRF; the actual number of rangers killed in the line of duty worldwide could be two to three times higher.

“Rangers are the guardians of our planet's most precious natural assets and it's unnerving to think that every day they go to work, their lives are at risk as a result of human greed and cruelty,” says Julia Marton-Lefèvre, IUCN Director General. “Without solid protection, proper law enforcement and a strong support network for those unsung heroes of conservation, our efforts to protect wildlife are a lost cause. All conservation action should start with supporting those that put their lives on the line to protect nature every day.”

The term 'ranger' is broadly used to encompass frontline forest staff.

Source: 'Rising murder toll of park rangers calls for tougher laws', *IUCN*, 29 July, 2014.

Tigers, leopards seized in Interpol raids

Hundreds of animals have been seized and more than 160 arrests made in Interpol coordinated raids across Asia. Under the PAWS (Protection of Asian Wildlife species) programme, law enforcement officials from 13 Asian countries moved in on wildlife traffickers.

While the operation led to the seizures of mega fauna such as tigers, leopard, bears etc, the focus of the operation was on the lesser-known species such as pangolins. The operation did not just cover street traders and markets but also online traders with social media sites.

Live animals were also seized. Included in the haul were tigers, 3.5 tonnes of elephant ivory, 280 kg of

pangolin scales, four tonnes of red sandalwood, rhino horns, leopards, bears, lions, red pandas, crocodiles, turtles, tortoises and a large number of bird species.

Designed and developed by the involved member countries as a collaborative law enforcement response to wildlife crime, Operation PAWS was coordinated by INTERPOL's Environmental security unit as part of Project Predator, in addition to support from the International Consortium on Combating Wildlife Crime (ICWC).

Source: 'Tigers, leopards, bears and more seized in Interpol raids', Kevin Heath, *Wildlifeneeds.co.uk*, 21, December 2014.

ARMENIA

Tigers as pets get legal boost

Recent amendments to Armenia's wildlife law, passed on 12, April 2014 allows private citizens to own wild animals, including endangered species, if they have areas for the animals that ensure their “life, health and safety,” and prevent escape from captivity, the law reads. Although tigers, as an endangered species, cannot be exported from the wild, their import from zoos is allowed.

A search of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) database for 2008 to 2013 shows the import of six tigers to Armenia. The animals came from Belgium, Chile, Kazakhstan and Ukraine.

Armenia is increasingly gaining a reputation for unlawful trade of wild animals. Several wealthy and politically-connected residents of Armenia are known to have exotic and endangered animals as pets with private zoos having lions, tigers and bears emerging as a popular hobby. Powerful political players like Gagik Tsarukian, head of the opposition Prosperous Armenia Party owns about two dozen lions and tigers. Former Deputy Defense Minister Lieutenant General Manvel Grigorian, head of an influential organisation of Karabakh-war veterans, keeps tigers, lions, bears and various birds in a private zoo in the town of Etchmiadzin. A tiger cub was found wandering the streets in 2013.

An Armenian Border Guard official said that a tiger can be brought into the country if documents show its country of origin and demonstrate that it is the third generation of a zoo-based line of tigers. A CITES certificate that authorises the animal's shipment is also required, but implementation of regulations is poor.

Source: 'Armenia: Shady Import of Lions and Tigers Raises Fears', Marianna Grigoryan, *EurasiaNet*, October 24, 2014.

BANGLADESH

At global meet, PM vows to save tigers

Some 140 tiger experts and government officials from 20 countries met at Dhaka to review progress towards an ambitious goal of doubling their number in the wild by 2022, at the Global Tiger Recovery Programme (GTRP) in Dhaka, on 14, September 2014.

Bangladesh Prime Minister Sheikh Hasina opened the conference, saying efforts to conserve the wild cats have reached a “turning point” and that her “government will do everything for conservation of the tigers,” lamenting “indiscriminate industrialisation,” as a chief threat to habitats.

Bangladesh's government is, however, involved in several industrial projects controversially located very close to the country's sole remaining tiger habitat, the Sundarbans. Experts have also criticised the proposed 1,320-megawatt coal-fired power plant, coming up in the vicinity of Sundarbans. They argue that toxic pollution, water diversion to the plant, and heavy coal barge traffic could leave the Sundarbans an increasingly degraded ecosystem, threatening the livelihoods of half a million people who depend directly on the great mangrove forest. The project is a partnership between the Bangladesh Power Development Board and India's state-owned National Thermal Power Corporation.

Such projects pose serious questions about the commitment of governments. Bangladesh's response to the catastrophic oil spill that occurred in the Shela River of the Sundarbans has also been heavily criticised worldwide.

The 13 tiger range countries that participated were Bangladesh, Bhutan, China, Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Russia, Thailand and Vietnam.

Source: “Bangladesh Vows to Protect Wild Tigers in Spite of Industrialization”, By Joseph Allchin, *National Geographic*, Sep 17, 2014; 'Bangladesh meet begins to save endangered tigers', *AFP*, Sep 14, 2014; 'Report on tigers released', *Saswati Mukherjee, TNN*, Sep 17, 2014.

INDONESIA

Tiger-skin trader nabbed in Lampung

A tiger-skin trader, identified as Eka Widya Sari was arrested in Lampung, Indonesia. Eka, who told the police that she had obtained the skin via Facebook, was arrested while waiting for a buyer in a restaurant in Bandar Lampung. Police confiscated the piece of

tiger skin, which she had purchased for Rp 4 million and was attempting to resell it for Rp 4.5 million.

The head of Lampung's Natural Resources Conservation Agency (BKSDA), Subakir said that those implicated in trade of protected wildlife and its derivatives faced up to five years in prison and a Rp 100 million fine.

Source: 'Tiger-skin trader nabbed in Lampung', Oyos Saroso H.N., *The Jakarta Post*, October 23, 2014.

US, Indonesia swap debt for nature

The US will write-off more than \$12 million of Indonesian debt, under the Tropical Forest Conservation Act. Instead of repaying that money, Indonesia will spend it over the next seven years on conservation measures on the biodiversity-rich island of Sumatra. Although the details of where the funding will be spent are still being worked out, the primary focus will be on conserving the Sumatran rhino, the Sumatran tiger, and the Sumatran orangutan—all unique species or subspecies that only exist on the island.

Indonesia will spend the money to enhance the conservation of several existing protected areas, which were established to set aside key habitats for rare species. Another thrust area is building awareness of the value of Indonesia's national parks and protected areas.

The rainforests of Sumatra protect the island's water supplies for both human consumption and agriculture, while minimising floods and regulating climate on a global scale.

This “debt-for-nature” swap is the third such deal Indonesia has made with the US, overall amounting to about \$70 million. Similar deals have been made with Bangladesh, Brazil, the Philippines, and ten other countries.

Source: 'Trading Indonesia's Debt for Sumatran Tigers, Rhinos, and Orangutans', By John R. Platt, *Take Part*, October 9, 2014.

Moratorium on new logging permits

Indonesia's Minister of Environment and Forestry, Siti Nurbaya Bakar imposed a moratorium on the issuance of all new logging permits in November 2014. The moratorium is likely to last between four and six months, says the ministry. Though they welcomed the move, conservation groups say the time frame of four-to six months is simply too short to deliver any results or show impacts. Besides, much of Indonesia's habitat destruction is occurring on land parcels that have already been permitted, so the moratorium will have

no impact on addressing these issues.

Several conservation groups say that the impact of the moratorium will depend on how rigorously the moratorium is enforced.

Source: 'Indonesia imposes moratorium on new logging permits', Robert S. Eshelman, *Mongabay*, November 20, 2014.

MYANMAR

Traffic workshop for media

A three-day workshop organised by TRAFFIC and the British Embassy in Myanmar through the Bilateral Programme Fund (BPF) introduced 21 writers and editors from 18 media organisations to global wildlife trade and the issues arising from wildlife trafficking in the country.

Speakers from the Myanmar Press Council and the Forest Department's Nature and Wildlife Conservation Division addressed participants on wildlife legislation, scale of the illegal trade in wildlife and plants, reporting challenges, and enforcement efforts in the country. The Wildlife Conservation Society held a special session on Myanmar's endemic turtles in trade, while Vietnam's Thanh Nien News helmed sessions on how to develop wildlife story ideas and investigative reports. The workshop also included a panel discussion on the importance of reporting wildlife trade and crime.

Jeremy Eppel, Deputy Director for International Biodiversity, Ecosystems and Evidence of the UK's Department of Environment, Food and Rural Affairs, updated the participants on the UK's international efforts in the fight against wildlife crime. "Whilst the crisis affecting Myanmar's wildlife which includes highly threatened species such as tigers, Asiatic black bear and pangolins is well known amongst conservationists and specific agencies, it seems there is low awareness of the true scale of the problem or what efforts are being taken to tackle it in other sectors of society," said TRAFFIC's Training and Capacity Building Co-ordinator in Southeast Asia, Claire Beasall.

British Ambassador Andrew Patrick said: "For the UK, combating the illegal wildlife trade is not just an environmental issue. It is an issue that threatens national and international security – with links to organised crime and the drug trade. It is a health and social issue which can undermine sustainable development. And it is an economic issue – forming part of the unregulated, un-taxed black economy. Media reporting on this important issue will be key to

tackling it and I would like to thank TRAFFIC for having run the workshop."

Source: 'Wildlife trade awareness training for media and launch of writing contest in Myanmar', *traffic.org*, 10th December, 2014

Myanmar records increase in tiger trade

The trade in tigers and other wild cat parts from Myanmar into China has grown in recent years, a new study based on two decades of survey data suggests.

It reports a surge mainly in Mong La, a Burmese town bordering China, where shops selling such products have more than trebled in the past eight years. Tiger parts were found in 80 percent of the surveys, the study says, representing at least 200 tigers. The most common parts were from clouded leopards, numbering some 480 animals. The findings, published in the journal *Biological Conservation*, reinforce past claims that the town was emerging as a major wildlife market in the region for products from as far away as Africa.

At the same time, they suggest that in another Burmese town, Tachilek, on the border with Thailand, there has been a fall in trade. "It could be due to greater enforcement action in Thailand," says report author Chris Shepherd of TRAFFIC, an international wildlife trade monitoring network.

Dwindling numbers

Though such trade is illegal, wildlife conservation organisations say that on the ground, this has little meaning.

This study on wildlife products supply from Myanmar to China is based on information gathered from 19 separate surveys of the wild cat trade in Tachilek between 1991 and 2013 and seven surveys between 2001 and 2014 in Mong La. The surveys recorded a total of over 2,000 wild cat parts—mostly skins. Other products included tigers and leopards' claws, skulls, and canine teeth. This year there were 21 shops selling some of these parts in Mong La, compared with just six in 2006.

Source: 'Tiger and wild cat trade from Myanmar to China growing', Navin Singh Khadka, *BBC World Service*, December 22, 2014.

THAILAND

Tiger recorded in Salakpra WLS

Conservationists from the Zoological Society of London (ZSL) have for the first time captured images of a tiger in Salakpra Wildlife Sanctuary of Thailand. Salakpra is part of the Western Forest Conservation

Complex (WEFCOM), a priority tiger area located close to the Myanmar border. Although tigers have been known to live and breed in the Huai Kha Khaeng Wildlife Sanctuary in the northern part of WEFCOM, no tiger has been recorded as far south as Salakpra until now. The two sanctuaries are connected through the Srisawat Forest Corridor.

For years, foresters and local villagers have maintained that they have seen tigers and signs of tigers south of Huai Kha Khaeng. This prompted ZSL to undertake the first comprehensive survey here and camera traps were set up in 2013 along known wildlife pathways. Two images of the same tiger were obtained in different parts of the sanctuary at an interval of three years confirming the presence of the tiger here. The next stage of ZSL work will be continued camera trapping to build a picture of prey availability in Salakpra and determine whether other nearby areas are also being used by tigers.

Source: 'Tigers recorded in Thailand's Salakpra Wildlife Sanctuary for the first time', *www.wildlifeextra.com*, September 26, 2014.

WILDLIFE CRIME

Wildlife trader's bail rejected

In an important order with nationwide, Justice SB Shukre of the Nagpur Bench of Bombay High Court on 12th December cancelled the bail granted by a sessions court to Suraj Pal alias Chacha, involved in the illegal trade of tigers skin and other derivatives.

Chacha was granted bail by district and sessions judge SD Jagmalani on 30th July 2014. His bail application has been rejected twice earlier in the year. The High Court judges, while rejecting Chacha's bail applications, had recorded that he was in a dominant position to influence witnesses and trial. He had even threatened another skin trader and transporter Sarju Bagdi, who is lodged in Nagpur Central Jail, and had procured five tiger skins for Chacha in May-June 2013. The bail granted by sessions court was challenged by the state forest department in the High Court. In subsequent hearings on the issue, the High Court seemed to be very serious about poaching of tigers, and noted that this should not be treated as an ordinary offence. "The order by additional sessions judge granting bail to Chacha in July is not in consonance with guiding principles laid down by the apex court," ruled the High Court.

Special counsel for the forest department had argued that Chacha was involved in the illegal trade since 1972. A dossier by CBI, called him one of the biggest

supplier of tiger skins and body parts.

Source: 'Bombay high court cancels tiger skin trader Chacha's bail', Vijay Pinjarkar, *TNN*, 13, December 2014; 'Tiger poaching impacts society at large: HC', Vijay Pinjarkar, *TNN*, 17, December 2014.

Metros the new urban hubs of tiger crime

A report titled 'Tiger poaching and trafficking in India: estimating rates of occurrence and detection over four decades', with Koustubh Sharma as the lead author has highlighted that metros and large cities in India are turning into hubs of wildlife crime. Although far from tiger habitats, transport connectivity is making them ideal illegal trade hubs.

At least 17 districts, have a "high probability of occurrence of tiger crime" despite not being surrounded by tiger habitats. "These districts are also likely to be tiger trade hubs," Sharma said. Apart from metros and upcoming cities, Balrampur, Darjeeling, Gurgaon, Ghaziabad, Indore, Hyderabad, Indore, Kolkata, Dehradun, Udham Singh Nagar, Kolhapur, Haridwar, Pilibhit, Kheri, Bahraich are active tiger-crime centres.

The report, published in the scientific journal *Biological Conservation* in September 2014 focused on the cumulative effect of tiger habitats, proximity to road and rail, and presence of tiger trade hubs on wildlife crime. Using statistical models, the authors estimate the probability of crime and its detection across the country. They identified factors that increase the risk of poaching in each district by analysing data collected since 1972. Some districts near tiger habitats suffer a particularly high risk of poaching, while in others the risks have declined.

The report has analysed tiger-crime data between 1972 and 2012. Tiger deaths due to road accidents, natural disasters and conflict were excluded. Between 1997 and 1999, there were 86 tiger-crime prone districts in the country. Between 2009 and 2012, the number came down to 73 but, at the same time, metros became the centres of illegal tiger trade despite being far from tiger habitat.

The report says that tiger poaching in India has always been a specialised job led mostly by family groups and individuals with traditional expertise. Poachers prefer to operate in specific tiger habitats, mainly because of their familiarity with these areas and trusted network individual poaching gangs have set up over several years.

The authors of the paper also note that non-detection of tiger crime does not necessarily mean that no such crime is taking place, it could also mean poor policing.

OFFICIALLY RECORDED TIGER MORTALITIES, SEPTEMBER 2014-JANUARY 2015

S. NO.	DATE	LOCATION	STATE
1	4 Sep 2014	Nainital, Corbett Landscape	Uttarakhand
2	19 Sep 2014	Panna Tiger Reserve	Madhya Pradesh
3	24 Sep 2014	Mudumalai Tiger Reserve	Tamil Nadu
4	28 Sep 2014	Biligiri Ranganatha Temple	Karnataka
5	5 Oct 2014	Masinagudi, Mudumalai	Tamil Nadu
6	16 Oct 2014	Mahof, Pilibhit Tiger Reserve	Uttar Pradesh
7	26 Oct 2014	Umred WLS	Maharashtra
8	10 Nov 2014	Mudumalai	Tamil Nadu
9	12 Nov 2014	Chamorishi Range, Alapalli Division, Tadoba Andhari	Maharashtra
10	28 Nov 2014	Terai West Division, Corbett	Uttarakhand
11	30 Nov 2014	Mundiareeth, Khawasa Buffer, Pench, 326	Madhya Pradesh
12	4 Dec 2014	Talamalai Range, Sathyamangalam	Tamil Nadu
13	7 Dec 2014	Orang National Park, Mangaldoi Wildlife Division	Assam
14	8 Dec 2014	Bandipur	Karnataka
15	9 Dec 2014	Lakhimpur, Dudhwa	Uttar Pradesh
16	16 Dec 2014	Shivni, Tadoba Andhari	Maharashtra
17	17 Dec 2014	Dodakulassi, Kurichiat Range, Waynad, Wayanad Wildlife Sanctuary, Nagarahole/Bandipur, Karnataka	Kerala
18	19 Dec 2014	Segur RF, Nilgiris North Division, Mudumalai	Tamil Nadu
19	28 Dec 2014	Dechauri range, Ramnagar forest division, Corbett	Uttarakhand
20	29 Dec 2014	Bhimgad WLS	Karnataka
21	31 Dec 2014	Kundukere, Bandipur	Karnataka
22	31 Dec 2014	Tadoba Andhari	Maharashtra
23	6 Jan 2015	Biligiri Ranganathaswamy Temple	Karnataka
24	8 Jan 2015	Bagur, Gundre, Bandipur	Karnataka
25	10 Jan 2015	Talamalai Range, Sathyamangalam	Tamil Nadu

Source: National Tiger Conservation Authority/TRAFFIC-India(www.tigernet.nic.in)

OFFICIAL STATISTICS OF SEIZURE OF TIGER PARTS, SEPTEMBER 2014-JANUARY 2015

S. NO.	DATE	LOCATION	STATE	SEIZURE INFO
1	19 Oct 2014	Balaghat, Kanha/Navegaon Nagzira	Madhya Pradesh	Tiger Skins
2	1 Dec 2014	Kanker Forest Division	Chhattisgarh	Tiger Skins
3	1 Dec 2014	Kanker Forest Division	Chhattisgarh	Tiger Skins
4	20 Dec 2014	Mancherial Forest Division	Andhra Pradesh	Tiger Skins

Source: National Tiger Conservation Authority/TRAFFIC-India(www.tigernet.nic.in)

TIGER MORTALITY STATISTICS, SEPTEMBER 2014- JANUARY 2015

STATE	SKIN & BONE	POACHED	FOUND DEAD	SHOT BY FD/ POLICE OR KILLED BY VILLAGERS	KILLED IN ROAD/ TRAIN ACCIDENTS	INFIGHTING	DIED DURING RESCUE/ TREATMENT	FIGHT WITH OTHER ANIMALS	TOTAL
ANDHRA PRADESH		1							1
CHHATTISGARH	2 skins								2
KARNATAKA	tiger bones		4	1		1			7
KERALA						1			1
MADHYA PRADESH	1 skin, 8 claws		2						3
MAHARASHTRA		1	3						4
TAMIL NADU		1	2			2		1	6
TELANGANA	1 skin								1
UTTAR PRADESH		1				1			2
UTTARAKHAND					1	1	1		3
Total Tiger Deaths	5	4	11	1	1	6	1	1	30

Poaching & Seizure	9
Found Dead	11
Shot by FD/police or killed by villagers	1
Killed in Road & Train Accidents	1
Died during rescue/treatment	1
Infighting	6
Fight with other animals	1
TOTAL	30

Source: Wildlife Protection Society of India (WPSI)

Conversely, an increase in the number of reports of tiger crime cannot be necessarily interpreted as an increase in crime rate, as it could instead be a reflection of better enforcement."The authors point out that the "biggest stumbling block to curbing tiger crime is the lack of intelligence led enforcement."

It is imperative that wildlife law enforcement agencies upgrade their tools to confront the threat posed by illegal hunters.

Maharashtra has the country's first cyber crime cell devoted to tracking wildlife crime. Its monitoring efforts—along with solid field intelligence and coordinated efforts of NGOs, park management, forest as well as police authorities, led to the arrest of 34 people complicit in killing a tiger in Melghat Tiger Reserve. The reserve is in Amaravati, one of the 73 districts identified by the paper's authors as tiger crime hotspots for the period 2009-2012. Investigators tracked the main culprit across three northern states and finally arrested the main accused in the southern state of Andhra Pradesh.

Source: 'Metros the new urban hubs of tiger crime', Neha Shukla, *TNN*, 12, October 2014; 'Tiger survival: mapping poaching and trafficking hotspots', Janaki Lenin, *The Guardian*, 14 October, 2014

Two arrested with tiger skin

Two people were arrested in Bhandara and Gondia districts of Maharashtra with a tiger skin on 17th October by the Balaghat police. It is suspected that the skin is from a tiger poached in the Navegaon-Nagzira Tiger Reserve.

Source: 'Is the seized skin of a tiger from Nagzira reserve?', Vijay Pinjarkar, *TNN*, 19, October 2014.

Poachers arrested in Kerala

Forest officials in Thalavadi, Kerala, arrested two people for killing a tiger and other wild animals by poisoning a waterhole in a forest area in the region. Following frequent reports of poaching, officials on an anti-poaching drive arrested two people. The duo admitted to having dumped poison mixed urea in the forest pond at Ettegoundarthotti in Mukkampalayam. Both confessed that they also killed a tiger in a similar manner in February and smuggled its skin and claws into Karnataka.

Source: 'Tiger Poachers Arrested in Thalavadi', *The New Indian Express*, 6, November 2014

Tigress electrocuted

A tigress was found dead under mysterious circumstances in a farm along the bank of river

Wainganga under Chamorshi forest range in Gadchiroli on 12th November. Even as forest authorities denied the possibility of poaching, reliable sources who were present at the spot claimed that the tigress was electrocuted.

"The body of the sub-adult tigress, about two-years-old, was discovered near the river bank by the local van majdoor who then informed higher officers. All the body parts of the tigress were intact, which overrules chances of poaching. Still, we are going to investigate the case from the angle of accidental or unintentional killing," said DCF Allapalli, Hemanth Kumar Meena.

Black stains spotted inside the mouth of the tigress substantiate suspicion about the tigress getting electrocuted.

Notably, a tigress was found dead under similar circumstances on the other side of Wainganga River in Saoli range in March 2012. Investigations had revealed that its forelimb had gotten stuck in the electricity cable laid to pump water from the river to the farm. The tigress was electrocuted after it chewed the wire in a—vain—attempt to release herself.

Farmers are known to use electrified snares to kill wild pig and ungulates, for meat, and also to curb crop depredation by wild animals. However, tigers, leopards and other animals often become the unintentional victim.

Source: 'Tigress electrocuted in a farm in Gadchiroli', Mazhar Ali, *TNN*, 13, November

Wildlife smugglers caught

Forest officials of Sathyamangalam Tiger Reserve arrested 11 persons at Kalmundipuram, a village near Sathyamangalam, on 14th November for trading in wildlife products. Following a tip-off, the officials simultaneously raided the premises of suspected persons and seized pangolin scales, elephant tusks, and the teeth and claws, possibly of tigers.

A senior officer said a local politician intervened and tried to hinder the operation. It is learnt that the Range Officer of Talavadi, who acted boldly against the offenders, was transferred to appease the local politician.

Source: 'Gang with links to international wildlife trade busted in STR', P Oppili, *The Hindu*, 15, November 2014

Tiger skin seized in Thane

The Thane police arrested two persons and seized a tiger skin in the city's Teen Hath Naka area on 15th November. Police Inspector Shahaji Jadhav said they

had kept a vigil in the area after receiving a tip-off, and arrested the duo after they arrived in a car. Additional Commissioner of Police Shivaji Bodke said that the accused had brought the skin from Nashik.

Source: 'Two arrested, tiger skin seized in Thane', Press Trust of India, *Business Standard*, 15, November 2014

Two arrested with tiger bones

Two people were arrested at Chamarajanagar, near the BRT (Biligiri Ranga Hills) Tiger Reserve in October, by Karnataka Police for possessing tiger bones. Following a tip-off, the police nabbed Balu Naik and Muniswamy, residents of Kolipalya in Chamarajanagar and recovered more than 100 small and large tiger bones. They were trying to sell the bones to a dealer from Tamil Nadu, and confessed to poaching tigers in the state using poisoned baits.

Source: 'After pelts, poachers now aim for tiger bones', Niranjan Kaggere & Nischiith N, Bangalore Mirror Bureau, 24, October 2014

Poacher arrested from Valmiki

A poacher has been arrested from Valmiki Tiger Reserve in Bihar. "Acting on a tip-off about the presence of some poachers in Madanpur forest range on the night of 20th November, forest guards carried out search and nabbed a poacher, identified as Chhote Lal Mushar," Madanpur Forest Ranger Sadan Kumar said.

A net used for catching wild animals, and other such tools of the trade were seized from the accused. The poacher has been booked under relevant provisions of the Wildlife Protection Act. Mushar's other associates managed to flee from the spot.

Source: "Poacher held from Valmiki Tiger Reserve", *Press Trust of India*, 21, November 2014

Five arrested with tiger, leopard skins

Five persons were arrested with two tiger skins and two leopard skins in Chhattisgarh's Kanker district, police said on 30th December.

The alleged wildlife traders were apprehended late at night at Gyani Chowk under Kanker police station limits when they were heading towards Raipur to reportedly sell the smuggled big cat skins, superintendent of police RN Dash said.

They were carrying wildlife body parts in an SUV which has been seized. Those nabbed have been identified as Ros Immanuel, Domar Singh Sethiya, Budhram Poya, Sukhram Poyam, natives of Bastar district. The driver, Manishankar Rai is from Umarnote, Orissa.

Source: '5 arrested with tiger, leopard skin', *PTI*, 1, December 2014.

Pench firing accused caught

On 19th October, Pench Tiger Reserve officials arrested main accused Anantrao Kumre, who had shot a Special Tiger Protection Force guard Satish Shendre on 13th October while he was a patrolling duty. The incident occurred in Koltimara range of West Pench, when forest guard Satish Shendre was on patrolling round along with two van majdoors or contractual forest workers. On spotting two trespassers in Amti forest area in Ghatpendhri, Shendre asked the suspects to stop but instead one of them carrying a rifle shot at Shendre. The bullet pierced Shendre's left shoulder.

The officials had arrested Anantrao's son Rajkumar from his house at Amda in adjoining West Pench on MP border. The officials have seized monitor lizard skin from the main accused. They have also seized eight trophies, pangolin scales, and an old skin of chinkara.

Source: 'After Jamni tigress, male Gabbar radio-collared in Tadoba', Vijay Pinjarkar, *TNN*, 20, October 2014

Katni gangs in Karnataka?

After a leopard was caught in a jaw trap set near Nagarhole Tiger Reserve, forest officials of Karnataka are suspecting that professional poachers from Katni, Madhya Pradesh might be targeting the state. Poachers of Katni are proficient in using jaw traps to trap big cats.

The leopard, stuck in a jaw-trap near Hagarahalli village, was rescued by forest officials. The incident occurred in late November.

The Karnataka Wildlife Division has alerted all tiger bearing regions of the state to step up vigil.

Source: 'Jaw-trap raises fears of Katni gang', By MB Maramkal, *TNN*, 4, December 2014

SCIENCE & RESEARCH

Scats help identify species, sex & individuals

Scientists from the Centre for Cellular and Molecular Platforms, National Centre for Biological Sciences, Centre for Wildlife Studies and Wildlife Conservation Society have developed a range of novel genetic approaches to identify species, sex and individuals from carnivore scats. This will greatly enhance the utility of basic field data to effectively conserve large felids in India.

The findings were published in the latest article - 'Identifying species, sex and individual tigers and leopards in the Malenad - Mysore Tiger Landscape

(MRTL), Western Ghats, India'.

The authors – Samrat Mondol, N Samba Kumar, Arjun Gopalaswamy, Kartik Sunagar, K Ullas Karanth and Uma Ramakrishnan collected over 300 carnivore scat samples across 20,000 sq km landscape in Karnataka, and used molecular tools to identify the species (tiger or leopard), assign individual identities and also reliably determine the gender of the animal.

“Accurate scientific baseline data is the foundation of a good conservation initiative,” said Dr. K Ullas Karanth, Wildlife Conservation Society – India.

The methods deployed included a novel multiplex PCR-electrophoresis based approach for species identification, a new multiplex-molecular sexing system combining two previously described gender determination approaches (based on Amelogenin and ZFX-DBY markers), and use of micro-satellite loci for individual identification.

The species identification was done for 312 faecal samples, 229 were of leopards, 39 of tigers and 44 of canids. Of the cats' faecal samples, sex identification process revealed 134 belonged to leopards (including 78 females and 56 males) and 18 to tigers (including 13 females and 5 males). The individual identification indicated 18 tigers and 39 leopards as unique individuals.

“This pilot study for tigers and leopards is a step ahead in conservation genetics. It can be successfully applied to any other endangered wildlife – and will be particularly useful for large mammals like bears or dholes for example, that cannot be identified through physical features,” Dr Karanth added.

The article was published in the international journal *Conservation Genetics Resources* in the October 2014 issue.

Publication citation: Mondol, S., Kumar, N. S., Gopalaswamy, A. Sunagar, K., Karanth, K. U., Ramakrishnan, U. (2014). Identifying species, sex and individual tigers and leopards in the Malenad-Mysore Tiger Landscape, Western Ghats, India. *Conservation Genetics Resources*, 1-9. DOI: 10.1007/s12686-014-0371-9.

Camera traps help ID 'conflict' tigers

Researchers of WCS in India have successfully demonstrated a technique to accurately zero in on individual 'conflict' tigers, to remove them out of harm's way and benefit both people and tigers. “Accurate animal identification is absolutely crucial in addressing human-carnivore conflicts, if evidence indicates more than one individual in the area,” says Ullas Karanth, Director for Science – Asia, WCS. “Interventions based on incorrect animal identification can have a host of negative repercussions, including aggravation of conflict itself,”

he added.

In two tiger-conflict cases in south India – one involving a human fatality and the other, predation of livestock, scientists helped Karnataka Forest Department authorities to identify problem tigers using stripe pattern-matching software and additional information to make the connections. Both tigers were subsequently captured.

The cases are presented in a new paper titled “Photographic Database Informs Management of Conflict Tigers” published in *Oryx*. Authored by Dr. Ullas Karanth, N Samba Kumar and Divya Vasudev of WCS-India, the paper showcases use of data gathered through long-term research in Bandipur and Nagarhole National Parks to accurately identify the 'conflict' individuals.

In the Bandipur tiger case that involved loss of a human life in late December 2013, camera traps at the conflict site gave multiple tiger pictures. Comparing it with the WCS tiger database, the scientists discovered a match with an animal that had been photographed over a five year period between 2008 and 2012. “This animal was past its prime by 2013. Old tigers unable to catch natural prey sometimes resort to hunting livestock, bringing them in conflict with people,” added Karanth.

The second tiger from Nagarhole NP had only been recorded in the database in the previous year, about 35 km from the site of conflict. This was concluded as a young tiger looking to establish its territory.

The tiger database was generated through long-term research focused on identification and tracking of individual tigers. Since the initiation of the research protocol in the 1980s, more than 750 tigers have been identified from six protected areas in the Malenad Tiger Landscape in the Western Ghats in Karnataka. The system also enables researchers to keep track of other data such as home range locations, age and sex of individual animals, activity patterns. Over the longer term it even enables estimation of survival and recruitment rates and changes in numbers, all of which can be used to inform management decisions on wild tigers.

Publication citation: Karanth, K. U., Kumar, N. S., Vasudev, D. (2014). Photographic database informs management of conflict tigers. *Oryx*, 48(04): 484-484.

AWARDS

Sanctuary Wildlife Awards, 2014

The 15th Sanctuary Asia Wildlife Awards, supported by DSP Blackrock and Deutsche Bank, were held on 5th

December, 2014, at the National Centre for the Performing Arts in Mumbai.

The Chief Minister of Maharashtra, Devendra Fadnavis indicated his support to the cause by his presence. The CM said Maharashtra was taking many measures to conserve tigers. While talking to media after the event, he said that securing tiger populations was an important responsibility of the state. He assured that Maharashtra would continue in its task of conserving tigers, and promised strict action against those involved in poaching activities.

He also presented the Special Sanctuary Tiger Award to the Women of Maharashtra's Special Tiger Protection Force.

The Lifetime Service Award was awarded to MK Ranjitsinh. He is the main architect of the Wildlife (Protection) Act, 1972 and facilitated the first ever relocation of a village from inside a Protected Area. He was the Member Secretary of the task force that formulated Project Tiger and has overseen the notification of over eight National Parks and 11 Wildlife Sanctuaries.

The Wildlife Service Award winners include the Hornbill's Nest Protector's Team who locate, monitor and protect nests of the four hornbill species found in Pakke Tiger Reserve; Binod 'Dulu' Bora of Assam, who works in mitigating Human-wildlife conflict in the Karbi-Anglong hills abutting Kaziranga, Pramod Patil, who is an Advocacy Officer of the Bombay Natural History Society, and involved in conserving grasslands, with a special interest in the Great Indian Bustard; Rajesh Sanap and Zeeshan Mirza, research associates at the NCBS, responsible for discovery of 23 species of lizards, scorpions and spiders, and Chewang Motup Goba, founder of Rimo Expeditions, Ladakh.

The Green Teacher Award was given to Isaac Kehimkar while Nirmal Kulkarni and Wildernest Nature Resort were awarded the Wind Under The Wings Award.

Awardees of the Special Sanctuary Tiger Awards are:

The Women of Maharashtra's Special Tiger Protection Force (STPF): The STPF comprises of 20 selected members from both Pench (Maharashtra) and Tadoba tiger reserves. They have shown tremendous courage to help stem poaching and other illegal activities in the reserves.

S. D. Shendre, Forest guard, Pench Tiger Reserve, Maharashtra displayed exemplary courage and

dedication when, confronted by five gun-toting poachers, unarmed, he survived a bullet through his collarbone and still ensured their arrest.

Gajendra Narawane, Deputy Conservator of Forest (Buffer), Tadoba-Andhari Tiger Reserve. Over the past years, he has not just hammered out a truce between people and parks, but has managed to turn enhanced biodiversity restoration into better living standards for villagers. There has also been a dramatic reduction in human-wildlife conflict, another factor that has helped to bridge the gap between people and protected forests.

MEDIA & BOOKS

ON THE SHELF

Wildfire, showcasing India's wildlife splendor

Edited by Valmik Thapar, the book is divided into three sections. The first section, 'Thoughts from Elsewhere', written by Thapar, takes the reader on a quick tour of India's natural heritage in the 21st century. It provides an overview of mammalian distribution, the characteristics of individual species, the evolution of the country's wildlife habitats, threats to the environment, and much else besides. The second section, 'The Wildlife Chronicles' collects the finest accounts of India's animals from the first century onwards. It has stories about the great predators—tigers, leopards, snow leopards, lions, golden cats and others; magnificent herbivores like the elephant, rhino, wild ox and the various species of deer and antelope; as well as evocative accounts of some of the most striking animals in the country as well as lesser-known members of the animal kingdom. *Wildfire* also contains a superb selection of some of the finest photographs ever taken of India's mammals.

BOOK REVIEWS

FOREST CONSERVATION CONCERNS IN INDIA

Authors: S. Shyam Sunder, S. Parameswarappa.

Publisher: Bishen Singh Mahendra Pal Singh Publishers & Distributors of Scientific Books.

Price: Rs. 475

Given that it is largely rooted in the past, the title of this book might be a bit misleading to those expecting a review of current forest conservation concerns in

India and how to tackle them. Nevertheless, it is an important addition to the existing literature on forests and forestry practices.

At the outset, the authors, S. Shyam Sunder and S. Parameswarappa, retired senior forest officials from Karnataka, are at pains to set the record straight on the popular notion that Indian forests were reverentially nurtured by local people until the British came along and laid waste to them. Delving into old records, they instead depict an India in which, despite a much lower population density in times past, slash and burn cultivation by local people was so rampant that it led to widespread forest destruction, especially in the hill regions of the country. It was also a time when potentates, from kings to local satraps, did their utmost to push back forests by any and all means, for reasons including expansion of settled agriculture, eliminating refuges of robbers and tax evaders, and protecting the path of their armies from ambushes.

The book documents how the destruction of forests worsened with the arrival of the British East India Company. The clearing of more forest for growing cash crops like sugarcane, cotton, indigo, tea and coffee took a vast toll, as did the insatiable demand for timber for public works like bridges, offices, schools, hospitals, military barracks and the laying of a vast railway network. This was apart from the public requirements for firewood, and wood to fuel railway engines and steamers. Thankfully, a handful of ecological visionaries of the Raj, such as Cleghorn, Griffith, Wallich, Royle, Roxburgh, and Beddomi, among others, brought enough pressure to bear on the authorities of the times to ensure the preservation of at least some of the best forests.

In chapter 3 the authors explain how the foundations of organised forestry were laid in 1856 when Lord Dalhousie appointed a German forester, Dr. Dietrich Brandis, as Superintendent of Forests, Burma. Brandis went on to become the Inspector General of Forests of India in 1864, bringing with him a rigorous knowledge of tried and tested forestry practices perfected in Germany. The German methods were adapted to suit Indian conditions, paving the way for systematically managed tree plantations for timber and other uses, in place of arbitrary and indiscriminate felling. The authors argue that instead of vilifying these pioneering foresters as the destroyers of India's natural forests, we must commend their vision, foresight and hard work.

In fact, they aver, it is thanks to the collective efforts of these concerned and hardworking men that the Indian Forest Act, which was to become the basis of all forest acts of the different states of India, was enacted in 1868.

Chapter 5 describes in detail the 'free for all' that ensued after India's independence, and the widespread encroachment of public lands, especially forests. This prompted the government to come out with a new National Forest Policy in 1952, which called for restraint in the release of reserve forests, and recommended that the country should aspire for a forest cover of 33% of its land area. The plight of the forest commons is also dealt with in this chapter. Today, when many human demands are being made on the last remaining forests, the authors remind us that twice the amount of land as was declared reserve forests was set aside for grazing and meeting the biomass needs of the populace. Sadly, this vast area of 'commons' has completely disappeared, leaving the reserve forests to bear the brunt of human need and greed.

Chapter 6 chronicles the reconstitution of the Indian Forest Service, the enactment of conservation legislation and the setting up of various institutions such as national forestry institutes, the Forest Survey of India, the Indian Institute of Forest Management and the Wildlife Institute of India.

In chapter 7, the authors rebut prominent academics including Madhav Gadgil, Ramachandra Guha and Vandana Shiva, whose various writings on forests and forestry, they feel, have portrayed a distorted picture that has come to be accepted as the truth. Using case studies, and citing specific examples and passages from their writings, they attempt to 'set the record straight' on a host of issues such as the true intent behind reserving forests, the factoring in of the needs of local people, and the plantation efforts of British foresters.

Forest Conservation Concerns in India is no easy read, given the esoteric nature of the subject, and could have benefitted from some incisive editing. However, its value lies in the fact that it presents a perspective that has been missing up to now. Undoubtedly, it will prove to be an important source of reference for all those who wish to acquire a more balanced view of the history of Indian forestry.

-Shekhar Dattari, *The Hindu*, 28 Oct, 2014.

THE SONG OF THE MAGPIE ROBIN

Author: Zafar Futehally

Publisher: Rupa

Price: Rs 500

"All around our property were lush rice fields dotted with toddy palm and palmyra. To the north was the Gilbert Hill, an abode of jackals and hyenas that announced their presence at sundown...."

There are many pleasures—and some pain—in reading *The Song of the Magpie Robin*, a memoir of one of India's pioneer conservationists Zafar Futehally. The line above is stolen from the book and is one of many bittersweet moments experienced as I read the book through the night; curious to get acquainted with this largely unknown, and unsung, doyen of the wildlife conservation fraternity; and fascinated with the content which unravels the evolution of our contemporary conservation movement through the eyes of a man who played a starring role. The prose above describes the verdant environs of the author's childhood home, which unbelievably is Andheri in Bombay—as it was known then. I lived there for two years in the past decade. All I recall is the fervent wish to escape the concrete maze and traffic snarls that defined Andheri, and my heart ached with a tremendous sense of loss, for a Bombay I did not know...and long gone.

Except for a few, tiny pockets which remain, like the Borivli National Park, which we owe to men like Zafar Futehally.

The memoir is full of such triumphs and tragedies as it carried me along on a journey through the country's conservation history, of which Futehally was so much a part of; indeed he has shaped and influenced many a milestone—such as helping establish sanctuaries within and around Bombay; and playing a pivotal role in getting the citizens of the financial and glamour capital—and beyond—interested in nature, and out into the field brandishing binoculars. I soared high in the glorious moments, as Project Tiger, the world's biggest initiative to save a species, took shape. I read, almost in awe—and a considerable amount of envy—as Futehally articulated the strong political will at the time to conserve, which has plummeted, sharply, over the years.

But I move ahead of myself. For the uninitiated, Futehally held key posts in all the important conservation organizations viz Bombay Natural

History Society (BNHS), World Conservation Union (IUCN), played a major role in establishing WWF-India, and was on various government committees including the Steering Committee of Project Tiger.

Futehally fought with as much zeal to save a small lake from encroachment as he did to lobby in international forums for the global community to give due importance to India's wildlife, of which he was a passionate advocate. He is a well-known, respected name in the ornithological world, and it was India's most famous ornithologist Salim Ali—and his wife, Laeeq's uncle—to whom the author largely owed his calling. The chapter on the legendary birdman in itself makes the book worthwhile giving unexpected insights not just into the man, Salim Ali—but also the unfortunate politics and petty jealousies that meddled and hindered in the workings not just of the Society (BNHS) they both served, but also the conservation world in general. Futehally's characteristic candour runs through the book: he minces no words, spares no feelings as he lays open the politics and egos that interfered with the conservation cause. Equally, he is generous with his praise for those who have worked toward the cause.

The Song of the Magpie Robin, so named after a bird whose song resonated in the author's garden, and heart, is a lucidly written memoir, sparkling with wit and is rich with insights. For those not associated with wildlife, it is an easy read and has the power to inspire; for those of us smitten by the wilds, I can only thank the author (and his co-authors Shanthi & Ashish Chandola) for giving such eloquent expression to a life well-lived; and feel deep gratitude for his enormous contribution to the cause. We lost Zafar last year. I, and the wilds, miss him.

-Prerna Singh Bindra, *Business Standard*, 8 Jan, 2015

Code of conduct for wildlife shutterbugs

Wildlife photography was once a hobby, ardently pursued with great endurance and patience to capture elusive wild animals. Photography is also a powerful tool, whether it is for highlighting the scenic beauty of our natural habitats, or bringing forward the ugly impacts of human interference in natural habitats, like poaching, habitat encroachment etc.

In recent times, however, it is increasingly turning into an ugly, competitive sport, often pursued with the

singular obsession of capturing the best shot of the animal, often the tiger, with scant regard for the subject's well being. In the last decade with the explosion of digital technology and with more and more people travelling to forest areas, the obsession to capture that one great image has reached the proportions of an epidemic.

What used to be a passion or a hobby is now an aggressive competitive sport, and there's enough evidence that our obsession to capture images of the natural world is having a negative impact on it. Unrestrained and irresponsible behaviour by nature photographers has affected many species, including the critically endangered Great Indian Bustard. Often, photographers aggressively pursuing nesting birds in order to get 'flight shots' has resulted in birds often abandoning their nests. It has also affected ecosystems like the Hesaraghatta grasslands in Karnataka or the Kaas plateau in Maharashtra during its annual flowering—with the habitats overrun and trampled by scores of tourists, photographers—very often in cars.

As acclaimed photographer, Aditya Dicky Singh, who has won many awards for his iconic pictures of the tigers in Ranthambore says, "Driving off-road when no one is around, clapping or throwing stones in nearby bushes to wake up sleeping tigers, getting off the vehicle and lying down on the ground to get low-angle shots, etc. is all too common. I know very few serious photographers who have visited Ranthambore and not done any of the above."

Kalyan Varma, wildlife photographer from Bengaluru who has worked on films for the BBC, refers to this new breed of photographers as the digital trophy hunters who will indulge in nest photography, call-backs, roasting amphibians with flash, etc. that are known to greatly disturb wildlife.

Sandesh Kadur, another award-winning wildlife film maker and photographer, says "Regulations are the need of the hour, but most importantly we need photographers to inherently feel the need to be ethical in their everyday practice."

As the debate rages on, perhaps there is one simple rule to follow. A fly-on-the-wall technique could be the place to start from as we all go about our work of documenting the natural world, the good old-fashioned way.

Source: 'Code of conduct for wildlife shutterbugs', Bahar Dutt, *Live Mint*, January 1, 2015; [TigerLink](#)

Tiger roar gets louder

The much-awaited 2014-15 tiger estimation report released on 20th January 2015, indicated a significant increase in India's tiger population. The last decade has seen a clear escalation in numbers—from 1,411 in 2006, to 1,706 in 2010 and 2,226 in 2014.

This rise of the tiger population can be largely attributed to better management and improved protection within the Tiger Reserves and other tiger bearing Protected Areas. This time, the estimation methodology was also more rigorous and was further expanded to areas outside the Tiger Reserves. The estimation exercise saw an unprecedented effort from the National Tiger Conservation Authority, state Forest Departments, the Wildlife Institute of India, and conservation organisations including WWF-India, CWS, ATREE, Aaranyak, WRCS and WCT.

The 2014 tiger estimation covered 18 states and more than 300,000 sq km was surveyed. A total of 1,540 individual tigers have been identified so far, through images collected from 9,735 camera trap locations across India's tiger landscapes. Because of the extensive survey effort and camera trap results, which identified nearly 70% of the estimated tiger number; these figures are most accurate ever.

The report, *Status of Tigers in India, 2014*, published by the National Tiger Conservation Authority of the Government of India and released by Prakash Javadekar, Hon'ble Minister of Environment, Forests and Climate Change, throws light on this increase in tiger numbers and highlights that the future of tigers in India depends on maintaining inviolate core habitats for breeding tiger populations, habitat connectivity and protection from poaching of tigers and their prey.

Source: WWF India



Pencil art by Aanchal Sharma. This artwork has been inspired by a sketch that Aanchal, a class 'X' student of Vasant Valley School, New Delhi, saw on a website



RANTHAMBHORE FOUNDATION

B-2/2324, 4th Floor, Vasant Kunj, New Delhi 110070
Telefax: +91-11-26893085 Email: ranthambhorefoundation@gmail.com
Website: www.ranthambhorefoundation.org