







STRATEGIES

CHALLENGES

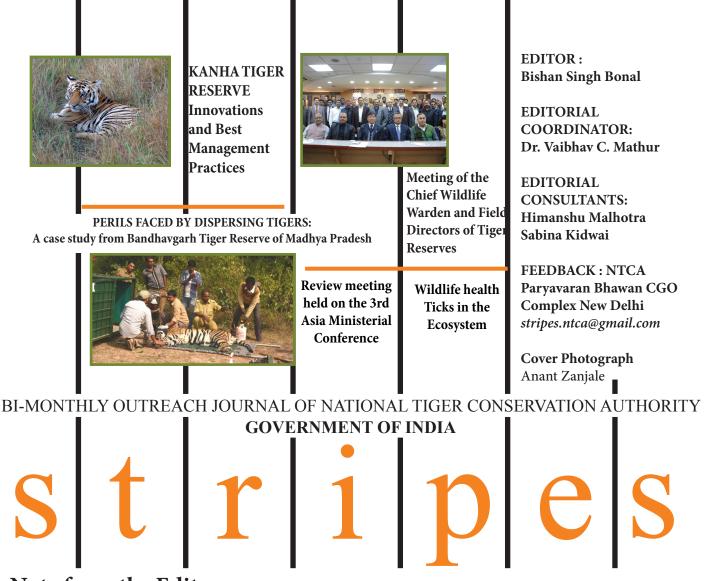


ACHIEVEMENTS

PERSPECTIVE



INITIATIVES



Note from the Editor



Kanha Tiger Reserve is one of the best managed tiger reserve in the country and important source area in Central Indian Region of Madhya Pradesh. The reserve has undertaken several innovative initiatives including flagship activities, i.e. village relocation from critical tiger habitat, and as a result, no village exists now in core area of Kanha Tiger Reserve. Improvement of reclaimed village sites by augmenting quality grasslands has restricted dispersal of endangered hard ground barasingha.

Corridor connectivity planning, skill development training, creation of Kanha Development Fund have been crucial for improvement of management skills. Reintroduction of black bucks, alongwith translocation of gaur, hard ground barasingha, rewilding of orphan cubs are some of the conspicuous innovative initiatives undertaken by Kanha Tiger Reserve and these are highlighted in present issue. The frequent perils faced by dispersing tigers of Bandhavgarh Tiger Reserve has been highlighted by Shri Narendra Kumar, ex-PCCF & CWLW, Madhya Pradesh in this issue, which will serve as reference for future. In the meeting of Chief Wildlife Wardens and Field Directors of Tiger Reserves various issues including status of Tiger Conservation Plan, notification of eco-sensitive zone, staff position in tiger reserves, expeditious finalization of tiger mortality, timely completion of Phase-IV monitoring etc. were discussed threadbare. The issue also highlights about the meeting convened for initiative for security audit of tiger reserves and preparation of manual for investigation, trade and traffic.





KANHA TIGER RESERVE Innovations and Best Management Practices

JS Chauhan & Rakesh Shukla

Kanha Tiger Reserve

Amongst the first nine tiger reserves notified during 1973-74 in India, the Kanha tiger reserve forms part of an eco-region once renowned internationally for its rich floral and faunal attributes. Nestled essentially on the northern slopes of the Maikal hills of the Satpuras in central Indian highlands, and falling administratively in the Mandla and Balaghat districts of Madhya Pradesh, the present tiger reserve and its surrounds were proud witnesses to an amazing era of conservation history. The Kanha landscape of sal (Shorea robusta) and mixed woodland interspersed with grassy expanses chronicles a glorious history of wildlife conservation, and is potentially

rich in natural heritage. Besides a viable population of tigers and the only world population of the hard ground barasingha, a wide spectrum of plant and animal species considerably add to the significance of this landscape.

The tiger reserve consists of a core (Critical Tiger Habitat) of 917.43 sq. km. and a buffer zone (Multiple Use Area) of 1134 sq. km., and is being managed under a corebuffer strategy. Presently, there is no village inside the core and 161 villages in the buffer.

Habitat Management

Regular improvement/ restoration of wildlife habitats in the Kanha National Park is a very important conservation practice. Different wildlife habitats in the protected

area sustain thousands of wild ungulates that in turn support species of carnivores, including several endangered species. Past history of forest management, anthropogenity of grasslands, total rainfall and its pattern, ecological succession and natural intricacies have a strong bearing on the vegetal status of these wildlife habitats. The stated objectives of conservation and management of the National Park include increasing population growth of the endangered hard ground barasingha that depends exclusively on grasslands and to manage the over-all diversity of wildlife habitats, including grasslands/meadows, and ensuring equitable distribution of water for supporting a good prey base for carnivores, specially tigers. In this way, managerial interventions become all the more important to



reverse or stabilize degradation/ regression of wildlife habitats. The management practices incorporate annual and perennial weed eradication, brushwood/ phoenix eradication, restocking of grassland and water development. The National Tiger Conservation Authority, New Delhi, Govt. of India has recognized this management practice and awarded the tiger reserve with the NTCA award for excellence (Habitat Management) for 2010-11.

Special Conservation Inputs for Barasingha

The central Indian barasingha is a majestic endangered deer species whose population had been steadily declined since the 1930s. The population declined to an all time low of 66 animals in 1970. The resurrection of this cervid from 66 animals to now around 650 is regarded as an amazing conservation success. The conservation of this deer species requires a long-term strategy based on the past and present experiences and observations



Surveillance of epidemics

- Translocation of barasingha to its historical range
- Special enclosure for multiplication
- Translocation for reintroduction

Village Relocation from the Core

As many as 35 forest villages have been relocated from the core area as per the guidelines issued by the Govt. of Madhya Pradesh and the NTCA, New Delhi, with due compensation package. During the past four years seven forest villages have been relocated under option-1 of the National Tiger Conservation Authority. Presently the core is completely free from biotic pressure. Village relocation has helped in reclaiming a substantial chunk of plain land for improvement as grassland for ungulates.

Improvement of Reclaimed Village Sites

Special effort has been launched

recorded by the management. The following special initiatives are underway for the conservation of endangered deer:

- Habitat improvement:
- Weed eradication
- Eradication of woody species
- Maintenance of tall grasses
- Grass exclosures for relieving pressure
- Shallow water points
- Swamp/ marsh creation
- Wallows
- Daily monitoring
- Mortality survey



Habitat Management





population of the Indian gaur, and the management had modest exposure to such teamwork in the past, it was naturally the first choice for these operations. Eventually, in January, 2011 and March, 2012, field operations were carried out to capture, restrain, load and translocate a total of 51 gaur to the Bandhavgarh tiger reserve. This was remarkable reintroduction undertaking which received profuse accolades from all quarters. These animals are currently doing well.

Translocation of Hard Ground Barasingha

Amid national and international applause, the successful conservation of the hard ground barasingha had slowly but steadily increased its population in Kanha. It was, however, also keenly discussed that this small population was still faced with several threats. In the backdrop of these opinions and considerations, it was decided that a few barasingha should first be introduced into the Van Vihar national park by non-invasive capture, and after refining and improving upon the entire operation, some animals be reintroduced into the Satpuda tiger reserve. A comprehensive capture, transportation and release protocol was prepared to the minutest details and nothing was left to chance. Specially designed in-situ enclosures with improved barasingha specific habitat were erected at Van Vihar and Satpuda. Rigorous mock drills were conducted in the field and long sessions were held to discuss every

to convert these abandoned village sites into quality grasslands. The response of wild ungulates is on expected lines, and these areas are now being used. These additional grassland habitats are also very crucial for dispersal of the endangered hard ground barasingha whose survival solely depends on grasslands.

Corridor Connectivity Planning

Though the connectivity between Kanha tiger reserve and these protected areas may be weak, there is ample scope for ensuring gene flow from the Kanha core conservation unit by resorting to appropriate site-specific restorative management. Thus, Kanha tiger reserve has considerable significance as a conservation nucleus. Besides, it affords scope for fostering eco-regional development complement to the conservation initiatives. The Kanha management has prepared

these corridor conservation plans which are under submission to the National Tiger Conservation Authority, New Delhi.

Reintroduction of Blackbucks

Thelocal extinction of the black buck from Kanha was regarded as a blow to biodiversity, and the Kanha management decided to give it a try and reintroduce some animals into extensive areas of short grass with low density of shrub and woody species, which would serve as good rehabilitation sites for the black buck in the core. Some of these sites are: Matigahan, Yusufdadar, Silpura, Mundidadar, Deoridadar, Adwardadar and Dulhadadar.

Translocation of Gaur

It was decided that in future the gaur population in the protected area would be restocked. As the tiger reserve had a sizeable





eventuality and assign specific duties to the staff.

Inspired by the South African capture and translocation technique, already used successfully for the translocation of several Indian gaur, the boma method was employed to capture barasingha in the barasingha enclosure itself at Kanha. A large transportation truck was also customized to carry around 15-20 captured barasingha comfortably. The truck container was also fitted with CCTV cameras to monitor the animals in the driver cabin during transportation.

The transportation truck was closely fitted to a ramp camouflaged with plastered soil and grass to make it look natural to the animals. In this way, the transportation truck, the ramp and the chute of boma became one composite structure at the capture site. This structure had been installed several days before the actual capture operation in

Skill Development Training

the field so that the animals might get habituated to its presence and could freely enter and exit it. Four non-invasive capture operations were carried out in January, March, 2015 and January, 2016, and several animals were successfully transported to the Van Vihar national park and Satpura tiger reserve. No mortality took place in these operations.

School for Rewilding Tiger Cubs

In the backdrop of discovery of orphaned tiger cubs due to infighting or death of mothertigresses in the tiger reserve, the idea of rearing, training and rewilding such cubs took shape several years back. Accordingly, a specially designed large in-situ enclosure was constructed in the Mukki range. The first batch of two such trained tigresses were reintroduced successfully into the Panna tiger reserve, and in the recent past, two animals (male and female) were rewilded into Kanha itself, and a tigress was released into the Satpuda tiger reserve.

Skill Development Training

Though these people are coming to terms with gradual departure from their hunter-and-gatherer lifestyle, a lack of higher education facilities and opportunities for vocational trainings have hindered their way to a better life. These disoriented and unemployed youths are vulnerable to insurgent ideologies or involving themselves illegal activities. Therefore, skill development programme will go a long way in channelizing their energy to earn their livelihood.

The Kanha management has tried to make a novel effort to help such youths from villages within the tiger reserve procure employment opportunities commensurate with their education/ skill. The management has entered into a tripartite agreement with the Hotel Company Indian Ltd. and the PRATHAM Education Foundation to select such vouths and train them all in a number of batches for the next three years for developing hospitality skills. So far, three batches of 90 youths (boys and girls) each have been trained in hospitality skills and all have been employed in star hotels at various locations in the country.

The management has also collaborated with a renowned private security agency of New Delhi to train young men of surrounding villages for employment. As soon as the





training is over, all these trainees will be employed as security guards at different places through this agency.

Considering the demand for employment of skilled personnel Masonry and Electrical in Maintenance the Kanha has also taken management initiative to have select youths trained as mason and electrician. The second batch of 14 youths is undergoing a training course in masonry at Kurud (district Dhamtari) in Chhatisgarh.

Considering the potential of tourism activity for the benefits of the local community in the buffer zone, the Kanha management has also helped locals to set up a homestay facility. The management has acquired financial support from the State Rural Livelihood Mission, Mandla and started a two-room home-stay facility at Sarhi village of the Sijhora forest range of the buffer zone division. This ecotourism activity is being conducted under the Damini Livelihood Women's Self-Help Group.

The Kanha Workers Sahkari Sakh evam Kamgar Samiti Maryadit, Kisli was formed under the Society Act, 1960 for the welfare of the Kanha staff. Every serving individual of the tiger reserve, including daily wagers, are the members of this Society. In this way, the Society provides the remotely placed wildlife personnel with the essentials of the household at concessional prices. The Society also gives almost interest free softloans to the frontline staff and daily wagers on easy installments. Besides this it provides for Health Insurance Scheme for the Staff and scholarships for children of the staff.

Creation of Kanha Development Fund (Kanha Vikas Nidhi)

The fund, known as the "Kanha Vikas Nidhi", is used for the development of tourism infrastructure in the tiger reserve.

Kanha Workers Society

Besides, every year a certain percentage of this fund is also used for the development of forest villages in the tiger reserve. The main beneficiaries, in order of preference, are those forest villages which have been relocated outside the tiger reserve. After these forest villages come other forest villages of the national park and buffer zone followed by select revenue villages. This fund is used for the development of these villages, which include a host of rural upliftment activities.



The authors are J.S.Chauhan (IFS) CCF & Field Director, Kanha Tiger Reserve Rakesh Sharma, Research officer Kanha Tiger Reserve



PERILS FACED BY DISPERSING TIGERS: A case study from Bandhavgarh Tiger Reserve of Madhya Pradesh

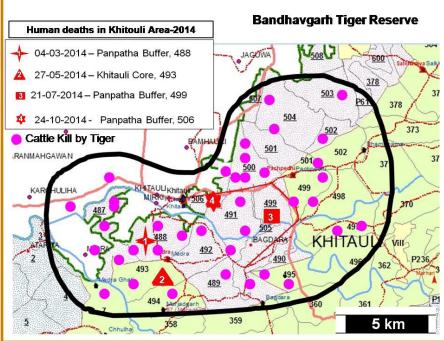
Narendra Kumar



Tigers dispersing from a source population face various problems. In Indian context the source population areas, generally tiger reserves are like islands in a sea of human habitations all around, with fragmented corridors or no corridor at all. The dispersal of tigers, specially the young tigers and ensuing man-animal conflicts initiated by cattle kills sometimes result in death of the tigers or human deaths. In later case the tigers involved are dubbed man-eaters and the local population demand their removal. Many a times the situation takes ugly turns.

Bandhavgarh Tiger Reserve(BTR) in Umaria district of Madhya Pradesh is such a typical source population in the Central Indian landscape. It is a small tiger reserve with 448.84 sq km of core and 820.035 sq km of buffer. The buffer is heavily populated with very sparse cover. One female tiger of Khitouli range of the BTR (hereinafter called BKT-1) had established her home range in the Khitouli buffer about 2 years back and the 2 male cubs from the litter have been raised by her in that area for the last 2 years. The prey base density in the home range of BKT-1 is rather poor and the cattle had been mainstay of this family for subsistence. Early this year the BKT-1 started weaning of her young male cubs. The young sub adult tigers started making their kills, sometimes with mother but mostly on their own. They had strong bonding and were seen together almost always. Their food was mostly cattle. These young tigers have been accused by the villagers to be involved in 4 cases of human deaths in 2014 which occurred in Khitouli buffer area. A map of the area showing locations of the 4 incidents is enclosed as figure-1.





Location map of the BTR-

The facts of these incidents are as follows:

1. Incident-1, dated 04.03.2014

One lady Guddo Bai of Khitouli village, aged about 45 years went into comptt 488 of buffer on 04.03.2014 morning for collecting firewood. Her dead body was discovered around noon. Death was due to injury in neck by some animal as per the post mortem report. Body was not eaten. There were pug marks of a male tiger on ground near the body. The body had been dragged for about 20 metres into lantana bushes. Nobody had actually seen the tiger killing the lady. Obviously this seems a case of accidental death, caused by a surprised tiger.

2. Incident-2, dated 27.05.2014

One Ramesh Bhumia of Medra village, aged about 22 years took

his bullocks for bath in Umrar river in comptt 493 of the core area on 27.05.2014 morning. Around noon some villagers found one of the young tigers (cub of BKT-1) sitting on the dead body on the bank of river. The tiger could not be driven away by noise made by the villagers. Forest staff of the area tried to scare off the tiger by firing a shot in air but were not successful. Vehicles were brought in and the dead body could be recovered late in the afternoon. Death was found to be caused by injury in the neck region. No part of the body was eaten. Only the face was slashed by the claws of the tiger while sitting on the body, as reported by the onlookers. Here it would not be out of place to mention that presence of the young tigers was known in the area and villagers have been reportedly warned not to go into the core zone to avoid interaction with the tigers.

3. Incident-3, dated 21.07.2014

One Sukhdeo Singh Gond of Khitouli village, aged about 40 years went into buffer forest on 20.07.2014 evening to search for his missing buffalo and did not return in the night. He had been warned by the local forest watchers not to venture into the forest in evening because of the known movements of tigers in the area. Sukhdeo Singh had a hunched back. His remains were found in a nala near Siddh Baba(a place of worship) on 21.07.2014 morning in comptt 499 of the buffer range when villagers and forest staff searched for him. Only his skull and bones of the limbs were found, with his clothes, umbrella and stick lying nearby. There were pug marks of a male and a female tiger at the site. There were marks of dragging the body for about 25 metres. In this case the death appears to be caused by a tiger due to mistaken identity of the hunched back person in fading light of evening. Dead body was most likely eaten by hyenas or jackals which are present in the area.

4. Incident-4, dated 24.10.2014

One Amosh Kumar Lakra of Khitouli village, working as a teacher at Karchuliha, aged about 52 years went into the buffer forest area near the village on 24.10.2014 early morning on his bicycle to collect firewood. His dead body was discovered around noon. In post mortem his death was found to be due to hoemorrhage. There were canine marks in the neck region. The body was intact except



for part of one foot which had been eaten upto ankle. There were signs of dragging of the dead body on the ground into bushes. His bicycle and a bundle of firewood was lying in the vicinity. The death can be ascribed to the young tigers because of their presence in the area. Near the site of the death the young tigers had killed a cattle the previous day and eaten it partly only.



The villagers became agitated after finding the dead body. There was sloganeering against forest dept and the body was not allowed to be removed for post mortem by the people. By evening some 300-400 villagers from Khitouli and nearby villages gathered in Khitouli. The mob attacked the forest campus of Khitouli and set on fire all offices and residential buildings located in these premises using diesel and petrol. All official equipments, furniture, 2 vehicles and 3 motor cycles as well as all personal belongings of the staff were torched totally. There was looting and attempts to burn the staff alive by dousing them in petrol. When the police staff of Khitouli police post tried to intervene they were stoned. 4 police personnel were injured including the in-charge lady sub inspector. Additional

police force reached the site in the night and rounded up 28 rioters. The total loss in the fire is to the tune of about Rs 1.5 crore of government property and Rs 38 lakhs of personal property of the staff. The whole incident appears to be instigated for political reasons and that angle is being investigated.



It was decided to capture the "accused" young tigers and remove them from their present area to prevent possibility of further conflicts and pacify the agitated villagers. The capture operation was carried out on 27.10.2014 morning. Both the young tigers were tranquilized and shifted to an enclosure in the core zone of the BTR where they are being kept in near-wild conditions. The captured tigers are perfectly healthy, weighing about 164 and 159 kgs. They shall be released in suitable areas in the tiger reserves at suitable time. The capture operation of these young tigers was tricky and difficult one. Both the tigers were always moving together, having strong bonding being siblings. It was imperative to capture them together to avoid the risk to rescue parties/ villagers which was very likely in case of capture of only one tiger at a time. Accordingly two separate rescue teams were



arranged, one from Bandhavgarh and another from Panna tiger reserve. Using 7 elephants the tigers were localized in a suitable area near Khitouli village and were darted simultaneously. The further operations went on smoothly and by noon they were released into two separate but adjoining enclosures at Behraha.



Analysis of the incidents shows that human deaths in all the 4 cases were accidental deaths. All the incidents have occurred in forest and not in habitation area. Man was the intruder in the tiger area and not vice versa in all the 4 cases. As there are no other big carnivores in the area, all the deaths can be said to be caused by the tigers. Only one death of 27.05.2014 can be said to be definitely caused by the accused young tigers. The incident of 21.07.2014 was a typical case of mistaken identity. Last incident of





24.10.2014 can be ascribed to the young tigers on circumstantial evidence of their presence in the area on the kill. The other 2 incidents are perhaps by some other adult tiger and certainly not by the young tigers. Tigers had not eaten any of the bodies in any of the incidents and as such there is no reason to regard them man-eaters. There is no history of man- eating in or around BTR. The young tigers had been largely dependant on village cattle as is reflected by 38 cattle kills in the area during this year.

The study highlights the need to investigate thoroughly all the incidents of tiger-man conflicts and analyze systematically before declaring any tiger a man-eater. The retroactive measure of removing the problematic animal was taken in this case but it is more important to take proactive measures to avoid occurrence of such incidents. These measures

could be:

- 1. Having prior knowledge of resident tigers (especially encumbered tigresses and weaned male young adults looking for a foothold)
- 2. Institutionalising a day to day monitoring of such animals with due alerts
- 3. Putting temporary camps near such settlements, closing water points close to villages to avoid need driven forays of tigers into human habitations.
- 4. Earmarking comptts for grazing, with day to day surveillance on livestock kills
- 5. Creating village level wildlife monitoring register involving eco-development committees (EDCs) and rewarding villagers for reporting carnivore presence to enable

staff for containing the habitual wanderers (carnivores)

- 6. Creating live hedges in patches around villages which make a direct interface
- 7. Radio-collaring sub adults to monitor their movement with mobile phone interface
- 8. Putting camera traps to fix ID of recurrent wanderers
- 9. Clearing dense lantana and other bushes in wastelands around village habitations and along footpaths to avoid "surprise" accidents/ attacks by carnivores



The author is Narendra Kumar (IFS), Ex PCCF & CWLW, Madhya Pradesh



Review meeting held on the 3rd Asia Ministerial Conference

The Review meeting on the 3rd Asia Ministerial Conference held on 7th Oct, 2015, reviewed the work done in the earlier 1st AMC and the 2nd AMC and set the agenda for the 3rd AMC to be held in April in 2016. The main theme of the 3rd Asia Ministerial Conference was finalised as "Securing tiger habitats / landscape and controlling poaching and trade".

Aim inter alia includes :

- Showcase India's remarkable achievements, success stories and leadership in tiger conservation, India being country with largest number of tigers in the wild
- Several milestone initiatives taken by the Government of India for conservation and protection of tigers including other wild animals
- The third round of country level status assessment completed in 2014\Increase in tiger number (in 2014): 2226 (lower limit: 1945, upper limit: 2491)
- A report on MEE was released in January, 2015, containing the third round of independent assessment based on refined criteria done for 43 tiger reserves. Out of 43 tiger reserves, 17 were rated as 'very good', 16 as 'good' and 10 as 'fair'.

Participation :

- 13 TRCs including India (Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Thailand, Russia & Vietnam).
- TRC Minister + 2 senior TRC Officials
- International / National NGOs / Experts / Institutions / Funding Agencies
- To be co-organised by GoI / NTCA, WII, GTF, GTI Council, WWF, IUCN & WTI

Advisory Body :

Hon'ble MEF & CC / Chairman NTCA Secretary (EF&CC) DGF&SS, MoEF&CC Secretary General, GTF ADG(PT) & MS (NTCA)

Organising Body :

- Organising Body constituted under the Chairmanship of Shri B.s.Bonal ADG (PT) & MS (NTCA)
- Dr. Rajesh Gopal, Secretary General (GTF)
- Shri Keshav Verma, Executive Director & CEO, GTI Council
- Dr. V. B. Mathur, Director, WII, Dehradun
- Member Secretary, DIG (NTCA)
- Shri P. R. Sinha, Country Head (IUCN)
- Shri S. P. Vashistha, DIGF (WL), MoEF&CC
- Shri Ravi Singh, CEO & Secretary General (WWF-India
- Shri Vivek Menon, Executive Director & CEO (WTI)
- Dr. H. S. Negi, IGF, NTCA Member Convener.



Review meeting held on the 3rd Asia Ministerial Conference

• TOR: An oversight on the activities which are to be undertaken vis-à-vis successful organisation of the 3rd AMC

A Core Group : To deal with routine activities constituted

- Shri Sanjay Kumar, DIGF (NTCA)
- Shri S. P. Yadav, Assistant Secretary General, GTF
- Shri Dipankar Ghose, WWF-India
- Dr. Ishwar, IUCN
- TOR: Will be meeting frequently, as and when required for dealing with all routine matter relating to organization of the 3rd AMC

Media Cell :

- To deal with media briefing on the event, issue daily bulletins during the conference, besides preparing a communication strategy with prior approval of ADG (PT) & MS (NTCA)
- Constitution of the cell: One representative each from NTCA, WWF and GTF.

Logistics :

• Venue: Vigyan Bhawan, New Delhi

Budget Partners : NTCA, GTF, WWF and World Bank

Decisions :

- Conference to be followed by Field visit (Ranthambhore, Sariska, Corbett, Agra)
- Website: A fresh website to be developed for the event besides having a fresh E-mail ID for communication
- Logo: To be designed
- Online registration
- Political and other clearances sought
- Formal invitation to be issued after necessary clearances
- Ministerial recommendation to be finalised after discussion with TRCs and partners







Meeting of the Chief Wildlife Wardens and Field Directors of Tiger Reserve

A meeting of Chief Wildlife Wardens of Tiger Range States and Field Directors of Tiger Reserves was held on 29th -30th December, 2015 at Scope Complex, New Delhi under the chairmanship of Mr B.S.Bonal, ADG (PT) and Member Secretary, National Tiger Conservation Authority.

Day 1 : (29th December, 2015)

While welcoming the participants, ADG (PT) & MS (NTCA) initiated the deliberations related to status of Tiger Conservation Plan, other statutory requirements, status of notification / submission of proposal for notification of ecosensitive zone of tiger reserves, staff position in tiger reserves, pending cases of tiger mortality in tiger reserves and receipt of reports pertaining to phaseIV. Besides, issues related to budgetary allocation, pending VIP references, ecotourism and submission of nominations for different categories of awards were also discussed.

Following the discussion, Field Directors from different tiger reserve made presentation vis-àvis phase-IV result in the respective tiger reserves.

After deliberations, following decisions were taken:

1. Those Tiger Reserves which are yet to submit their Tiger Conservation Plan (TCP) would submit it at the earliest, and not beyond 31st January, 2016 for old tiger reserves and 31st March, 2016 for new tiger reserves, keeping in mind that

there is an ongoing case on this matter in Hon'ble Apex Court, where the National Tiger Conservation Authority may have to file the status of TCPs on affidavit, any time. CWLWs-(Action Assam. Maharashtra, Rajasthan, Madhya Pradesh, Tamil Nadu, Uttarakhand; Field Directors - Kaziranga, Panna, Tadoba-Andhari, Sathyamangalam, Ranthambhore, Navegaon-Nagzira, Bor and Rajaji Tiger Reserves).

2. Tiger Conservation Foundation has not been notified so far in Dudhwa & Pilibhit, (Uttar Pradesh), Rajaji (Uttarakhand) and Mukundara Hills (Rajasthan). An expedite action is required by the concerned



Chief Wildlife Wardens / Field Directors. (Action by: CWLWs- Uttar Pradesh, Uttarakhand, Rajasthan, Field Directors: Dudhwa, Pilibhit, Rajaji and Mukundra Hills Tiger Reserves).

- 3. The newly created State of Telangana is yet to constitute Steering Committee as envisaged under section 38 U of the Wildlife (Protection) Act, 1972. The State is required to do needful at the earliest. (Action by Chief Wildlife Warden, Telangana).
- 4. Owing to the dismal position of submission of proposals vis-à-vis notification of Eco-Sensitive Zone around Tiger Reserves, the officers concerned were requested to submit the same at the earliest. Since, the deadline for notification of ESZ as decided by Ministry is 31st March,

2016, it would be appropriate to submit the proposal in this regard not beyond 31st January, 2016. (Action for proposal not received: Chief Wildlife Uttarakhand, Wardens, Odisha, Bihar, Chhattisgarh, Uttar Pradesh, Telangana, Maharashtra, Field Directors: Corbett. Rajaji, Satkosia. Valmiki, Udanti-Sitanadi, Indravati, Achanakmar, Pilibhit, Amrabad, Bor:

- 5. For proposals where rectification required: Action Chief Wildlife Wardens and Field Directors of concerned all Tiger tiger reserves-Reserves of Rajasthan (3) Sahyadri, Bhadra, Nagarahole, Dandeli-Anshi, all TRs of Tamil Nadu (4),NSTR. Dudhwa, Namdapha, Pakke, Simlipal, Kanha, Pench, Panna and Sundarban).
- 6. Looking into the severe crunch

in front line staff position in tiger reserves, Hon'ble MEF&CC was kind enough to address the issue to Chief Ministers of respective Tiger States. Concerned officers were handed over a copy of the said letter and were requested to pursue matter with the State Government for needful in this regard. (Action All Chief Wildlife Wardens & Field Directors).

7. Taking into account that all tiger deaths are considered to be poaching unless and until otherwise proved; finalization of reports of tiger mortality requires utmost urgency. Since a large number of cases are shown to be under scrutiny on the tigernet.nic.in site, it gives a very dismal picture of tiger mortality in the country in public domain. This needs expeditious action on the







part of concerned officers and pursuance, wherever necessary, is required in this regard. (Action by: All Chief Wildlife Wardens & Field Directors except Jharkhand, Mizoram and Telangana where there is no pendency).

- 8. Though, presentation regarding findings / results of phase-IV exercise was made by Field Directors of 40 tiger reserves, except for Satkosia Kanha (Madhya (Odisha), Pradesh), Sariska (Rajasthan), NSTR (Andhra Pradesh), Nagarhole & BRT (Karnataka) and Tiger Reserves of State of Maharashtra report was submitted by none of the tiger reserves. All other tiger reserve were expected to submit to report by 15th January, 2016 (Action by: Chief Wildlife Wardens & Field Directors of all tiger reserves except for aforementioned tiger reserves)
- 9. Besides, concerned officers were requested to respond to VIP references on an urgent are certain basis. There categories of awards for which entries were sought from tiger reserves. Owing to receipt of very less number of entries from States, the last date for receiving the entries has been extended to 28th February, 2016. Concerned officers were requested to do the needful in this regard, so that sufficient numbers of entries for each category are available for consideration. (Action by: Chief Wildlife Wardens & Field Directors of all tiger reserves

Day 2 : (30th December, 2015)

1. A presentation was made by the officials of National Informatics Centre on online submission module prepared for Annual Plan of Operations of Tiger Reserves. All the

templates were explained to the officers and their suggestions were solicited. Based on deliberations, the module was finalized and concerned officers were requested to do the needful for online submission of APOs from next financial year onwards. It was also conveyed that IFD has fixed deadline of 15th May, 2016 for final submission of any proposal for consideration. Hence, all tiger reserves are expected to submit their Annual Plan of Operation, online in the said module, latest by 20th April, 2016. In case of any inconvenience, officers in National Tiger Conservation Authority may be contacted

2. Owing to extremely slow pace of filing of cases pertaining to tiger reserve in the online criminal database system developed by WCCB, a brief presentation was made by the



Deputy Director of WCCB where response of Field Directors was sought in order to sort out any difficulty in the said matter. Only Dudhwa, Sariska and Ranthambhore Tiger Reserves have made significant entries.

- 3. A presentation was made by Dr. Y. V. Jhala, Scientist, Wildlife Institute of India on tiger reserve wise estimation of tigers, co-predators and prey. All Field Directors were requested to go through the report, soft copy of which was handed over to each one of them, and report within two days, if some correction is required or any anomaly is noticed.
- 4. The issue of need for formulation of checklist for utilization of funds, accounting and modus operandi of Tiger Conservation Fund (TCF) was raised by some officers. In this regard, it was conveyed to refer to the detailed guidelines for TCF.



5. The issue of service tax and income tax being raised by the concerned departments was discussed at length with the participating officers. It was decided to take up the matter at higher level.

After deliberations, following decisions were taken:

All Tiger Reserves / Tiger Sates would submit their Annual Plan of Operation for the year 2016-17 in the stipulated online module latest by 20th April, 2016.

All Tiger Reserves were directed

to do the needful vis-à-vis filing of cases pertaining to concerned tiger reserve in the online criminal database system of WCCB, at the earliest and as and when any case gets registered.

The meeting ended with thanks to all the participants



MANUAL FOR INVESTIGATION, TRADE AND TRAFFIC

A meeting was held at 11.00 AM on 8th January, 2016 at the NTCA (HQ), New Delhi to discuss a framework for Security Audit of Tiger Reserves including Manual for investigation, trade and traffic.







WILDLIFE HEALTH TICKS IN THE ECOSYSTEM

Tick as indicators of an Ecosystem's Health

Ecologists often use ticks and other parasites as an indicator of an ecosystem's health. Because ticks depend on a variety of animals to prosper and reproduce, biologists study tick population, distribution health to understand and ecological trends better. For example, if an ecologist finds that tick populations have dropped considerably in a specific area for more than the past 10 years, the ecologist would also expect to find a drop in the population or health of available host species, indicating a deteriorating ecosystem. In contrast, when an ecologist finds tick populations on the rise, it would suggest that healthier host species are available, indicating a healthy ecosystem.

However, being vectors of diseases caused by blood protozoans, ticks also result in mortality of animals. Along with this, neurotoxins released by the ticks' salivary glands also cause tick toxicosis and paralysis, both of which have been incriminated in tiger mortality events in Panna Tiger Reserve, Madhya Pradesh. However, when viewed ecologically, this too could be a natural factor in keeping wild animal populations in check.

Tick Control in forests

A tick drag can reduce tick populations in an area. The idea is to drag a piece of light-colored flannel cloth across vegetation where ticks may be waiting for a host. Ticks will attach themselves to the cloth and then can be killed by placing the cloth in soapy water. It is best to drag any area where tigers are distributed and tick infestation is heavy.

To construct a tick drag, attach one edge of a square yard piece of white, heavy flannel or corduroy material to a 3 foot long wooden dowel and tie a rope to each end of the wooden dowel. Weights can be attached to the opposite end to help hold the cloth to the ground. Drag the cloth over the forest floor and leaves and check for ticks





Photo Credit : Anant Zanjale



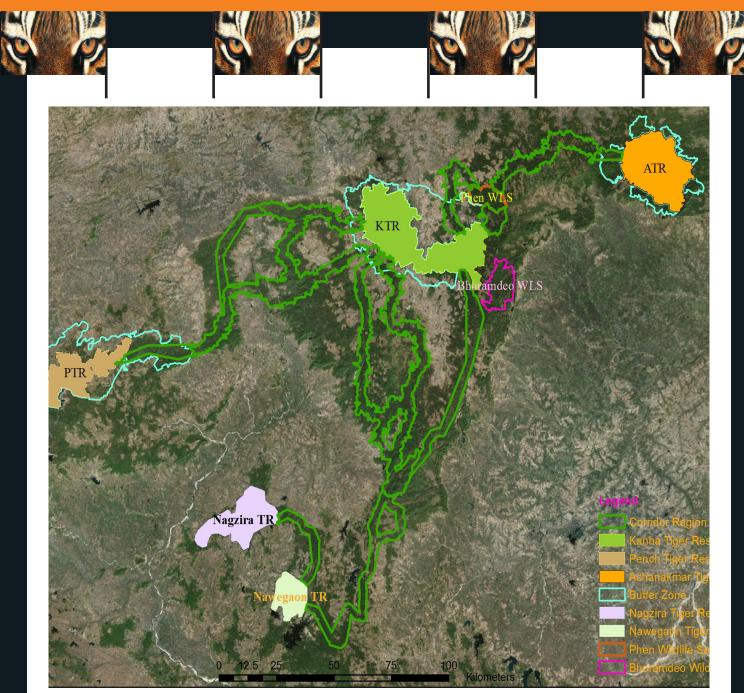
INDO BANGLADESH CONSULTATION MEETING ON TIGER CONSERVATION at Sundarban Tiger Reserve on January 28-29 2016



The bilateral meeting between India and Bangladesh was held under the Chairmanship of ADG (PT) & MS (NTCA) on 28-29 January, 2016 in the Sundarbans Tiger Reserve, West Bengal with counterpart from Bangladesh to discuss on progress on points outlined in MoU. Following issues were discussed:-

- 1. Corridor identification and delineation in GIS domain
- 2. Regulation of traffic in corridors
- 3. Publication on a joint report on assessment of tigers by 2016
- 4. India to provide technical assistance to Bangladesh on radio telemetry study / research on tigers
- 5. Periodic bilateral meetings on regular basis (once in three months) to be organized at the frontline level
- 6. Wildlife Crime

STRIPES BI-MONTHLY OUTREACH JOURNAL OF NATIONAL TIGER CONSERVATION AUTHORITY A STATUTORY BODY UNDER MINISTRY ENVIRONMENT FORESTS AND CLIMATE CHANGE, GOVERNMENT OF INDIA



Tiger Conservation Plan for Corridor : Wildlife Protected Areas

Published and Printed by SKM Wildlife Conservation Foundation on behalf of National Tiger Conservation Authority, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi