PROTOCOL FOR
SECURITY AUDIT OF TIGER RESERVES

ACKNOWLEDGEMENT

PREFACE

India is the largest tiger range country in the world. However the status of tiger is still critically endangered. The biggest threat to tiger conservation is poaching due to rising demand of tiger body parts and derivatives in consumer countries. Every tiger living in the wild is under risk, therefore development of protocol for security audit of our tiger reserves with international standards is an important step towards strengthening tiger protection.

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GLOSSARY

CDR	Call Detail Records
CI	Confidential Informants
COPS	Conservation Oriented Patrol Standards
CWLW	Chief Wildlife Warden
DFO	Divisional Forest Officer
FD	Field Director
GPS	Global Positioning System
GTF	Global Tiger Forum
HWC	Human-Wildlife Conflict
IUCN	International Union For Conservation of Nature
LEM	Law Enforcement Monitoring
LE	Law Enforcement
MEETR	Management Effectiveness Evaluation of Tiger Reserves
MoEF & CC	Ministry of Environment, Forest and Climate Change
MSTrIPES	Monitoring System for Tigers – Intensive. Protection & Ecological Status
NP	National Park
NTCA	National Tiger Conservation Authority
PS	Patrol Standards
PCCF	Principal Chief Conservator of Forest
PA	Protected Area
RFA	Ranger Federation of Asia
RO	Range Officer
SA	Security Audit
SAT	Security Audit Team
SP	Security Plan
TR	Tiger Reserve
TRC	Tiger Range Countries
WCC	Wildlife Crime Cell
WCCB	Wildlife Crime Control Bureau
WCI	Wildlife Crime Investigator
WII	Wildlife Institute of India
WPA	Wildlife (Protection) Act, 1972 (Amended 2006)
WLS	Wildlife Sanctuary
ZP	Zero Poaching

DEFINITIONS

Anti Poaching Camp:
Term used for beat station or Chowki.

Intelligence:
Actionable information

Patrol planning:
Plan prepared for individual patrol, beats or range on monthly basis

Check points:
A barrier or manned entrance, typically at a border, where security checks are carried out on intruders.

Personal First Aid Kit:
A small first aid kit that a patrolling staff can carry with them while on patrol.

Ranger:
Frontline staff i.e. Range Officers, Deputy Ranger, Forester, Forest Guard, Watchers etc.

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INTRODUCTION

BACKGROUND

Law Enforcement Monitoring (LEM) is a site-specific way of keeping track of our Law Enforcement (LE) efforts. 'Site specific' because every protected area (PA) is different and its LE needs vary. While results can be compared between different years in the same PA, they cannot be compared between sites.

Keeping in mind the above points, Security Audit (SA) protocols are developed to help Tiger Reserve (TR) managers in regularly tracking the progress of their enforcement efforts to tackle poaching in their sites, while the status assessment is conducted by independent team constituted by the National Tiger Conservation Authority (NTCA) at a regular interval.

SECURITY AUDIT;
GLOBAL IMPLEMENTATION

SA is currently being used widely across the globe by government and non-government organizations to assess and improve the site-specific protection efforts. In context of Tiger Range Countries (TRCs), it is currently being used in Bhutan, Cambodia, Indonesia, Malaysia, China, Thailand, Laos, Vietnam and Russia.

SECURITY AUDIT IN INDIA

The Tiger is a conservation and management dependent species which is facing major threats like poaching driven by an illegal international market for tiger parts and products; depleting prey base as a result of wild meat consumption and habitat loss. TRs are the cornerstone of tiger conservation in India. TRs act as key sites for "source population" of tigers. As per the Wildlife (protection) Act, 1972 (amended 2006), each TR in India is required to prepare a Tiger Conservation Plan of which "Protection" consists of a key component. The NTCA has also issued a generic guidelines for reserve specific Security Plans (SPs), which forms part of the TCP.

The level of security enjoyed by the tiger and all other species that inhabit the area, is key to conservation success even if every other factor remains very favorable, lack of security can lead to irrevocable and sudden losses of the biodiversity wealth of the area. There is a need to evaluate the security status of the TR from time to time to be able to assess current status, understand gaps in security and take necessary steps to fill those gaps in view of ever increasing poaching pressures also involving newer techniques and technologies.

The draft SP protocols of the NTCA are largely based on WWF's Wildlife Crime Initiative (WCI) and inputs from WCCB, FDs, WTI to suit Indian conditions. The current version is updated version of that based on the protocol validation process carried out by GTF team over two TR - Kanha in Madhya Pradesh (very good MEETR rating) and Satkosia Tiger Reserve in Odisha (fair MEETR rating) in January 2017.

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FREQUENTLY ASKED QUESTIONS (FAQ)

How long does it take to complete a Security Audit?

Who conducts the security audit and at what periodicity?
The exercise is done by independent teams constituted by the NTCA every year.

Can I do it myself or do I need external expertise?
SA is an independent assessment and should be conducted by the Security Audit Team (SAT).
However, based on the protocol, self-assessment may be done by the TR managers.

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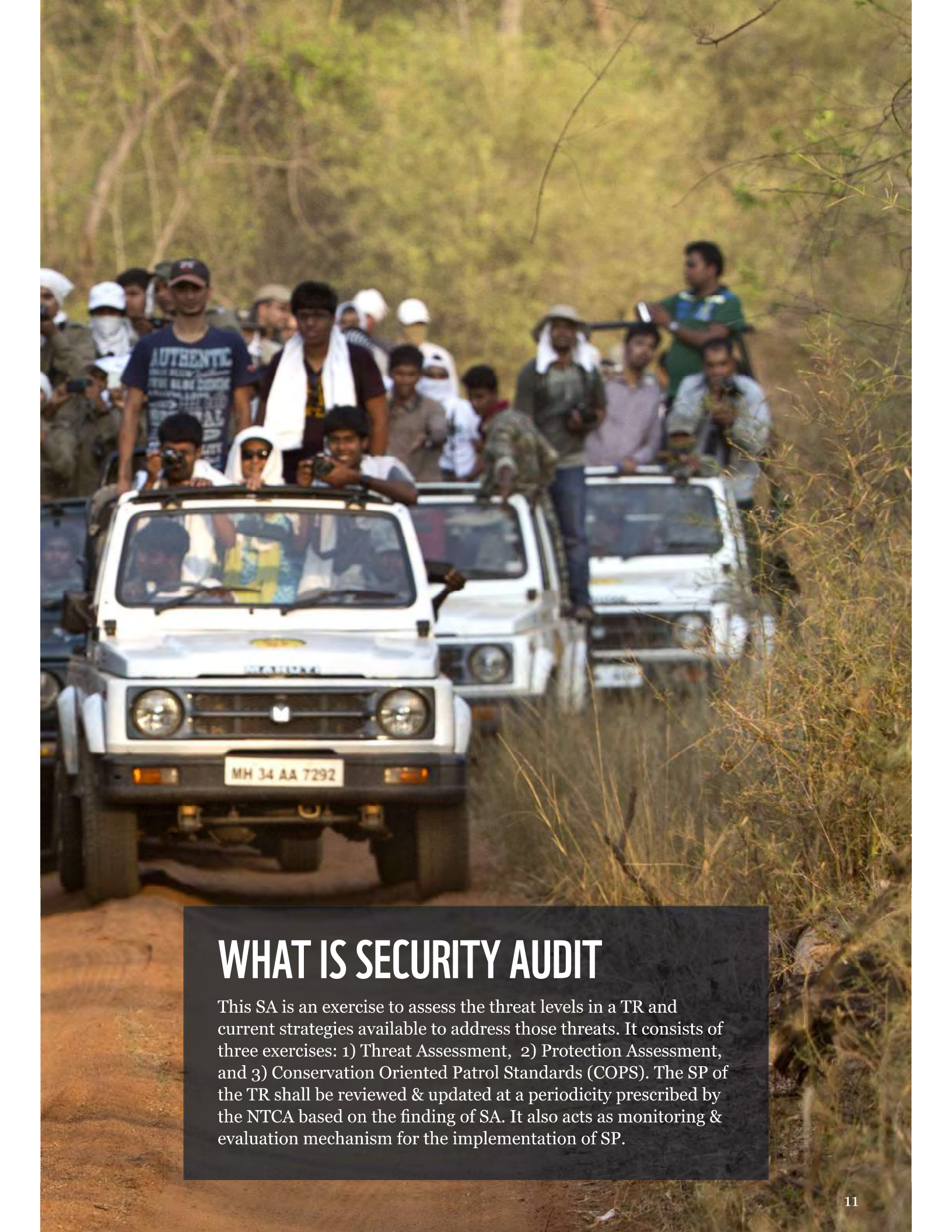
WHAT IS SECURITY AUDIT

This SA is an exercise to assess the threat levels in a TR and current strategies available to address those threats. It consists of three exercises: 1) Threat Assessment, 2) Protection Assessment, and 3) Conservation Oriented Patrol Standards (COPS). The SP of the TR shall be reviewed & updated at a periodicity prescribed by the NTCA based on the finding of SA. It also acts as monitoring & evaluation mechanism for the implementation of SP.

WHY DO WE NEED SECURITY AUDIT OF TIGER RESERVES

TRs throughout the country are often different due to different terrain, different standards of training, different methods, and critically: different management styles. What remains the same throughout is that no TR can ever say "we are finished", "We know everything"... all TRs will always need funding support, recognition, improved methodologies, SOPs & protocols.
A SA provides an overview, from an outside perspective, of where the gaps in the provision of protection and enforcement services occurs, allowing the TR management to redress these shortfalls and thereby improve the protection it offers to the biodiversity it is mandated to preserve.

SECURITY AUDIT PROCEDURE OF TIGER RESERVES: PROCESS & PROTOCOLS

SECURITY AUDIT COMPONENT

The SA consist of three components

1) Threat Assessment,

2) Protection Assessment, and
3) COPS. Each exercise has been explained in detail below.

		Dates
Threat Assessment	Name, designation and affiliation	
Protection assessment	Name, designation and affiliation	
COPs	Name, designation and affiliation	
Name of TR		

State	District/s:		
Date of Establishment/Creation (initial and final notification)	As PA	As TR	

Size of TR (sq km):	Core	Buffer	Total	

Important corridors relevant to the TR	
Status of FRA implementation (if relevant)	

Annual budget (excluding staff salary costs):	Recurring:	Non-recurring:	Total

List of two primary TR management objectives
Management objective 1
Management objective 2

Total number of people involved in completing assessment	

Field Diretor & Deputy Director	TR office staff	Frontline staff	Staff from other TR	NGO	Others

EXERCISE 1: THREAT ASSESSMENT

This is a process of identification and analysis of those key factors that endanger the valuable assets within a TR. Threat Assessment aids TR managers in drawing up effective protection strategies for their parks.

STEP 1: IDENTIFICATION OF THREATS

1. Identification of key biological resources of the TR (e.g. key species like tiger, elephant, rhinos)

2. There can be three types of threats:-

   Current threat – immediate threat to the valuable asset of the TR (e.g. poaching, habitat destruction, grazing, illicit felling, mining, encroachment etc.)

   Near future threat – can be threat to the valuable asset of the TR in next 2-3 years (e.g. a road coming up in the park)

   Future threat – can be threat to the valuable asset of the TR in next 4-5 years (e.g. industrial growth, and human resource of the TR)

3. List different types of threats – this should be done in consultation with the stakeholders and from the existing threat data/crime data. It is advisable to use at-least 3-5 years of threat data.

STEP 2: ASSESSMENT OF THREATS

Each threat identified in the above step shall be critically analyzed in terms of extent, distribution and trend. This step will help TR managers in understanding the distribution of different threats and the damage they cause to the TR.

List of information TR managers would need for threat assessment (but not restricted only to these question)

• Data (both temporal and spatial) on all threats.

• A map on distribution of key species in the conservation site/TR.

• A map of important man made features (human habitations, roads, religious places, high tension overhead electric lines, villages etc.).

• The road infrastructure including all main and secondary roads in and around TR. An indication of which roads are fair-weather and which are usable year round.

• Rivers, canals, bridges, mountain passes (or other choke points) and established tracks with specific emphasis on which seasons they can be used for transportation.

• All known commonly used entry/exit points around the TR

• Points at which poaching incidents have happened (priority species and prey) in the last five years?

• The areas in & around the TR which have populations of known traditional hunting communities and also any points indicating temporary camps used for illegal activities

• Database of local communities known to support external poachers repeatedly

• Details of the hunting communities- name of communities, permanent settlement or nomadic

• Cultural & Religious places (temples/dargah/ashrams etc.) inside the TR and periodicity of visits by people-regularly or few times a year.

- Points where well-known poachers are known to reside in the area (in at least a 100 km radius). As much information about these individuals are possible e.g. where are they from, what is their present social status, who all are their key associates near the TR

- List of well known/already identified trade centers in the area (in at least a 500 km radius)

- Localities which have a higher concentration of licensed firearms. What is the trend of consumption of cartridges in such areas?

- Estimate of types and numbers of arms that are/maybe used for poaching in nearby areas to TRs

- Map sharing electricity transmission lines inside TR and in fringe areas.

- Map sharing Police Stations/Chowkis in the vicinity/inside TRs and their contact details.

- Schedule of weekly market in fringe area.

- Map showing location of iron smiths in the fringe areas.

- Map showing entry and exit points of the TR.

- Database of the iron smiths of the area

- The areas, which suffer from high human-wildlife conflict, especially with respect to species like the tiger, leopard, bear or elephant. Sensitive areas for crop depredation? Relative dependence of crop on local community's livelihood?

- The cropping pattern of adjoining areas and the different crop protection measures including illegally put up measures like live electric wire or snares.

- Measures being adopted for minimizing/control of Human wildlife Conflict.

- List of water bodies, close to the periphery of the TR that attract wild animals especially during summer

- Details of wildlife crime incidents (past 5 years) with international/Pan India/ interstate ramification and links

- Nature and status of coordination with line departments

- No. and location of encounters with poachers (past 5 years)

- Prosecution success in last 5 years (with own resources and outside support)

- Location of breeding tigresses.

- Details of dispersing (probable) tigers- Phase IV monitoring details.

- Availability/non availability of readily accessible and sufficient maintenance budget for equipment and infrastructure

- Extent and mechanism of tourism revenue sharing with local communities

- Staff welfare mechanism (leave, camp facilities, medical aid, school facilities, accident insurance/
ex gratia, security etc.) in place including casual staff

STEP 3: ANALYSIS (FORMAT)

This step includes the analysis of all the threat data TR managers have collected in step two and producing the threat report.

Some of the outputs TR managers will get after the threat analysis;

- Maps with distribution of threats

- Threat score cards

- Priorities on the basis of threat scores

- Recognition of the attackers/offenders/potential offenders

- Threat trends

STEP 4: SECURITY PLAN

A SP shall be developed through a work/meeting with the TR authorities and other stakeholders concerned. The SP shall also be supported by an operation plan/ implementation plan.

FORM B: THREAT ASSESSMENT

1. Background of the area and current threat prospective

2. Key Biological resources

TABLE 2.1. LIST OF KEY BIOLOGICAL RESOURCES

Scientific name	Common name	W.P.A. (1972) status	IUCN status	Estimated population in TR with reference
[Add rows as necessary]				

3. THREAT ANALYSIS

Possible threats to the above mentioned key Biological resources in & around the TR.

TABLE 3.1: THREAT IDENTIFICATION

Immediate threat	1. 2. 3. 4. 5.
Near future threat next 2-3 years	1. 2. 3. 4. 5.
Future threat next 4-5 years	1. 2. 3. 4. 5.

Threat	Attacker / offender responsible	Type of problem / attack /offences	Location of attack / offence/ problem	Reason / motivation
Ref: Table 3.1	*Who are the Individuals/ groups responsible for the threats*	*How attack s are carried out (E.g. Trapping, livestock, electrocution etc.)*	*Where attacks are carried out (E.g. Beat no., compartment no., village name etc.)*	*Why these attacks are carried out (E.g. Commercial, subsistence, retaliation etc.)*
[Add rows as necessary]				

TABLE 3.2: PRIORITIZATION   Scoring: 1 Low,   2 Medium,   3 High,   4 Very High

Key biological resources	Threats	Potential for sustainable revenue-generation (score)	Vulnerability to hunting / Unsustainable use (score)	Vulnerability to Habitat loss / fragmentation (score)	Replacement value (score)	Priority value (score)	Total score	Priority
Ref: table 2.1	List the actual threats	From tour-ism, pay-ment for ecosystem services etc.	Risk level to species from poaching &/ or retaliatory killings	Risk level to species from changes to habitat	How difficult would it be to bring the species back if it goes extinct at the site?	How important is the species to your TR as per the TCP		
[Add rows as necessary]								

EXERCISE 2: PROTECTION ASSESSMENT

This is a process of gathering information on current protection practices in place to effectively address threats to species and their habitat.

An exercise is carried out in consultation with the TR authorities where sets of questions are asked to TR management and frontline staff to gather information on protection, backed by evidence and field verification.

STEP 1: CONSULTATION WORKSHOP

1. Conduct a consultation workshop with the TR manager, enforcement and patrol teams/staff/officers.

2. Communicate the workshop schedule well in advance and provide them the list of information you would need to complete the SA.

3. Make sure that all relevant people listed in point 1 attend and actively participate in the discussion.

4. It is evidence based assessment therefore all information provided by the TR authorities should have supporting documents (e.g. Latest list of staff to verify the actual number of staff on ground).

STEP 2: FIELD VERIFICATION

The assessment team to verify the information gathered during the workshop and do Field verification through field visits. For field verification, at least 50% each of range offices and camps/chowkis will be selected based on stratified random basis to represent the entire TR. The field verification formats (enclosed) will be used for the purpose using score cards. This will help in finding any disparity in the information provided at the TR HQ with the field realities.

STEP 3: VISUALIZATIONS OF RESULTS

Most TR managers may not be interested in detailed reports and therefore appropriate info graphics shall be used to represent threat assessment and protection assessment. They can however access detailed reports as well.

FORM C: PROTECTION ASSESSMENT

1. ASSESSMENT

Information	Result	Source of verification	Remarks
Year of last MEETR		MEETR report	
MEETR Category (Very good, good, fair, poor)		MEETR report	
Frequency of evaluation		MEETR report	

2. STAFFING

Information	Result	Source of verification	Remarks
Number of sanctioned staff		Government notification	
Number of sanctioned staff position filled		Payroll list	
% of staff from nearby areas			
Number of patrolling staff		Staff allocation list & field verification	
Number of female patrolling staff		Staff allocation list & field verification	
Average age of patrol staff		Staff details	
No. of casual staff engaged by TR for protection duties and their % of overall staff strength.			
Percentage of patrol staff undergone protection & enforcement training (refer table 8)		Training records maintained at the office	
Percentage of staff undergone refresher training within one year		Documents from Head Office (ex. Staff register, training plan/ reports)	

3. BASIC AMENITIES FOR PATROLLING

Information	Result	Source of verification	Remarks
Percentage of patrol staff with appropriate patrol boots		Resource allocation list from store room at TR HQ & Field verification	
Percentage of anti poaching camps with first aid kit		Same as above	
Percentage of patrol staff issued with appropriate personal first aid kits (refer table 3)		Same as above	
Percentage of patrol staff who receive at least two complete sets of uniform every year (refer table 1)		Same as above	
Percentage of staff who have bedding facilities at camps		Same as above	
Percentage of staff who have proper cooking facilities		Same as above	
Percentage of staff having easy access to potable water		Same as above	
Percentage of staff having easy access to functional toilets		Same as above	
Percentage of staff who have functioning radios (or equivalent) during patrols		Same as above	

Percentage of staff who have functioning torches/ searchlights for night patrols		Same as above	
Percentage of staff/camps who have functional digital cameras		Same as above	
Percentage of camp with electricity provided		Same as above	
Availability of deep search metal detectors to TR		Same as above	
Availability of sufficient maintenance (e.g. for repair of equipments, stitching/repair of uniforms, reimbursement of official phone call bills, POL for vehicles etc.) budget and ease of accessibility to it		Same as above	
Percentage of staff evaluated/ performance review every year		Same as above	

4. ASSESSMENT OF THE CURRENT PATROL REGIME

Information	Result	Source of verification	Remarks
Use of M-STrIPES		M-STrIPES reports	
Average number of personnel per patrol		M-STrIPES patrol reports & field verification	
Average number of staff per 100 sq km		Calculated from the data & field verification	
Number of camps/ Patrolling Chowkis		TR HQ documents, field verification and M-STRIPES reports to see if any station is inactive	
Number of vehicles (bicycle, motorbikes, jeeps, boats, elephants)		TR resource allocation list & field verification	

Numbers of functional vehicles actually available for patrol		Record field verification	
Presence of sniffer dogs for detecting wildlife crime		Records and field verification	
Existence of full maintenance protocol and SOP for sniffer dogs			
Presence of a SP		Check the SP	
How often is the SP updated		Check the SP	
Tactical map in place (1:25000; 1:50000)		Consultation workshop and field verification	
Have the local hunting tribe settlements been delineated & mapped?		Map & reports.	
Are potential wildlife trade markets being checked on regular basis?		M-STRIPES reports & patrol records	
What is the smallest patrol unit (eg. Section/ block, beat etc.)?		TR HQ documents	
Average size of the smallest patrol unit		TR HQ documents	
Permanent presence in all patrol sectors (Y/N)		Consultation workshop, field verification and M-STRIPES reports	
Permanent functional presence in all gate/ access/check points with records maintained (Y/N)		Field verification & gate/access/ check points registers	
All patrol beats assigned a team leader (Y/N)		Same as above	

Frequency of patrol planning		M-STRIPES / patrol planning reports and field verification by interacting with frontline staff	
List the factors considered in patrol planning?		Consultation workshop and field verification by interacting with frontline staff	
Who leads the patrol planning?		M-STRIPES patrol planning reports and field verification by interacting with frontline staff & instruction register	
Percentage of patrol staff authorized and trained to use and maintain a firearm		Valid arm license, M-STRIPES/ patrol reports and firearm training report, field verification	
Percentage of patrol staff issued with an appropriate firearm		TR resource, firearm allocation list & field verification	
Written rules of engagement (ROE) and use of firearms		Rule book, firearm user guideline	
Percentage of patrols with GPS tracking		M-STRIPES/ patrol reports	
Average daily patrol length (hrs)		Same as above	
Percentage of patrol hours by patrol type (night patrol, foot patrol, vehicle patrol, elephant patrol, bicycle patrol, boat patrol, ambush etc.)		Same as above	
Percentage of park covered by patrols in last year		Same as above	
Wildlife Crime Cell under the CWLW established and active		Number of cases actively investigated with WCC	
Access to CDR: Authorized & being used:		Proof of CDR analysis	

Intelligence network established and active		M-STRIPES intelligence reports, financial report showing payments made to informants, confidential informant register	
Do you have specific budget for building and maintaining an informant network?		TR budget allocation document	
Are the funds for confidential informants readily available		Field verification from frontline staff	
Percentage of intelligence led patrols		M-STRIPES/ patrol reports	
Are meetings held with local police, adjoining states' forest departments, local prosecutors (also with military & para military units if applicable)?		Reports, Minutes of meetings, visits to local authorities	
If trans-boundary TR, do you have mechanism for regular collaboration with border security forces/ SSB?		M-STRIPES/ patrol reports & field verification	
If yes, How often do you do joint patrols?		M-STRIPES/ patrol reports, meeting minutes	
How often do the Senior staff (above Range Officer) do field patrolling		Patrol registers	
Do you have a program to engage local communities in conservation		Field verification by interacting with staff and local communities, minutes of community meeting, EDC reports,	
What is the extent of sharing revenue , generated through tourism (if relevant), with local communities		Forest deptt. records, EDC records	
How many frontline staff are trained for community engagement?		Training records,	
How many staff are designated in community engagement?		Records of staff posting	
In general, how is the relation between the FD and the communities		Records of community interactions and outcomes, anecdotal incidences of community support for conservation	

5. POST CRIME

Information	Result	Source of verification	Remarks
Percentage of range offices with access to handcuffs		Stock list &field verification	
Percentage of range offices with adequate gender sensitive detention facility		Field verification	
Percentage of cases with access to trained wildlife crime investigator/I.O.		Consultation workshop & field verification	
Percentage of cases with access to specialist wildlife lawyer		Court case records, offence register & field verification	
Percentage of arrests in last five years that lead to prosecution		TR court case database	
Percentage of cases where SOP complied w.r.t. tiger mortality		Record /field verification	
Percentage of cases where CDR, Forensics & modern tools / technologies used		Record/field verification	
Percentage of cases uploaded on WCCB Wildlife Crime Tracking Tool		Online records/Office Records	

EXERCISE C: CONSERVATION ORIENTED PATROL STANDARDS

COPS is a set of indicators TR managers to assess the patrol regime. It is an evidence based assessment tool that helps TR managers to monitor and evaluate their patrol strategies.

1. AN ENFORCEMENT PLAN MUST BE IN PLACE FOR THE TR

- The enforcement plan will be based on the enforcement strategy as per the SP and will provide the guidelines for patrol activities and planning. It should contain:

- Situation: Containing a list of threats to TR, maps, aerial photos etc.

- Mission (Objectives): Maintain an effective compliance and enforcement capacity to mitigate the impacts of users, visitors and illegal activities.

- Execution (Methodology):
  i) Maintaining regular reserve patrols particularly along the boundaries.
  ii) Ensuring the effective deployment of the enforcement and compliance members towards controlling illegal activities, enforcing legislation and regulations.
  iii) Mapping areas where illegal activities occur and maintaining an inventory/record of incidents.

- Administrative and logistics:
  i) Essential provisions for transportation, clothing, and equipment
  ii) A safety and risk assessment
  iii) Training requirements

2. MINIMUM OF FIFTEEN DAYS/NIGHTS OF ENFORCEMENT PATROLS PER MONTH

The patrol schedule and adequate staff numbers may allow for 100% coverage over the month, but at the minimum, a random 50% coverage using available staff is required. This is to include night patrols. Day/nights are for 24 hours periods of actual coverage. i.e. 15 x 24 hrs

3. COVERAGE OF ACCESSIBLE AREAS OF THE TR

Patrols have to cover at least 75% of all readily accessible areas of the TR per month. If the area is accessible to the public, it must be patrolled. At least 75% of all accessible areas covered per month.

4. MINIMUM OF FOUR TEAM MEMBERS

If patrolling by vehicle or boat, this may be reduced to three members. In addition to normal enforcement patrol requirements and efficiency (contact & cover officers) this is also an officer safety issue. If a patrol staff/ officer are injured then two of the staff can carry him out, while one is available for point, or one person can stay with the injured staff while the other two go for assistance. If the patrolling party is travelling by vehicle or boat, then the difficulty with the transport of apprehended persons or injured individual changes, therefore three persons may be adequate.

5. INCLUDE AN OFFICER TRAINED TO COLLECT EVIDENCE

At least one of the enforcement patrol team must be trained in wildlife crime scene investigations (WCSI) and informant handling and interrogation techniques.

6. POWERS OF ARREST & DETENTION PROCEDURES

Enforcement patrols within the Forest Department must have powers of arrest. This includes

the powers of detention a necessity until the suspect has been charged and arraigned in court. Protocols and procedures must exist to cover officer safety, prisoner rights, safety, & well-being, as well as specifications for the holding facilities prior to processing for court.

7. ENFORCEMENT PATROLS MUST BE SUPPORTED BY AN INFORMATION NETWORK

There has to be an intelligence-based enforcement. As in many areas of LE, confidential informers (CIs) are a crucial part of the system. Most TRs are too large to be adequately patrolled. Therefore, using informants and targeting known hotspots or suspected individuals, will make the patrols more effective. (UNODC claim that 86% of border seizures result from informers).

8. MOBILE/RAPID RESPONSE TEAMS (RRT)

RRTs consisting of TR staff effectively deployed to respond to "hot spots" and other illegal activities not covered by regular patrols. This mobile team is internally staffed, allowing for standardized training, operating procedures, protocols, equipment, control and immediate response if needed.

9. SOME PROTECTION STAFF SHOULD BE PERMANENTLY BASED ON SITE

These staff may either be in a camp, check post or a guard house/Chowki at the TR's entrance or other available site. The public must:

- In an emergency or circumstances requiring assistance, be able to contact staff at a known location.

- Be aware that there exists a staff presence in the area to show "ownership" of the TR – that Government is paying attention to its TRs.

10. A COMMUNICATION SYSTEM MUST BE IN PLACE BETWEEN PATROL TEAMS AND HEADQUARTERS

The type of communication system will only be as sophisticated as budgets and terrain allow, however staff must be able to get emergency assistance by some method.

11. A LE-MONITORING TOOL SHOULD BE IN PLACE

Some LEM tool is being used such as M-STrIPES (We must be able to keep track of results, plan for future activities, analyze results and show improvements).

12. TACTICAL MAPS ARE AVAILABLE OF THE TR AND SURROUNDING AREAS

Actual maps (not something contained electronically) these should be of the Topographic type Scale 1:50,000 and 1:25,000, "GIS" produced maps often do not include areas outside the TR. The TR is not an "island". It is essential that the maps include all the surrounding areas, and are suitable for posting on a wall, so that coloured pins designating various crimes can be affixed.

13. ALL MAJOR ACCESS POINTS/ROUTES SHOULD BE CONTROLLED

There should be "Gate house/ Barrier/Check post"s at the entrance/s to the TR, or on all roads traversing the TR, to welcome visitors, monitor traffic access and egress, and search suspicious vehicles if necessary. This forms part of the visible deterrent approach.

14. INCLUDE MULTIPLE AGENCIES

Different Government legislation and regulations apply. The enforcement staff must consist of personnel trained, authorized and capable of properly carrying out all their duties.

15. TRAINING STANDARDS

Training standards vary at local, regional, or country level. Training should conform to the ASEAN Competence Standards for Protected Area Staff (Appleton 2003), IUCN Global Register of Competences for PA Staff (Appleton 2016) and the Anti-Poaching Ranger (frontline staff) Training Guidelines (Lotter et al 2016) or any other standard set by the NTCA. Please refer to Table 8 for details of training modules.

Form C: Conservation Oriented Patrol Standards

Objective 1 - Protection : Maintain an effective protection and enforcement capacity to mitigate the impacts of users, visitors and illegal activities

	Item	Criteria	Score	Remarks
1	**Ensure the filling of vacant staff posts in the approved organogram for the PA**			
	1. All vacancies are filled with suitably trained and qualified personnel Are staff being recruited to fill the approved organogram for the PA?	Vacancies remain unfilled for long periods of time	0	
		Vacancies are filled with unsuitable, or untrained, personnel	1	
		Vacancies are eventually filled with trained staff or, filled with suitable staff who are trained later	2	
		Vacancies are filled timeously with suitable, qualified and motivated staff.	3	

2	Provide adequate equipment for protection and enforcement activities.		
Item	**Criteria**	**Score**	**Remarks**
2. Are the rangers issued the basic uniform listed in Table 1	Not equipped	0	
	0-74%	1	
	75-100%	2	
	Equipment exceeds listed items	3	
3. Do the rangers carry the items listed in Table 2 while on patrol?	Not equipped	0	
	0-74%	1	
	75-100%	2	
	Equipment exceeds listed items	3	
4. Do the patrols carry a patrol First Aid kit (FAK) equipped as listed in Table 3? - This FAK contains items needed for trauma incidents in the field & is not intended for station use.	Not equipped	0	
	0-75%	1	
	75-100%	2	
	Equipment exceeds listed items	3	
5. Range offices, camps, beats, watch towers, & check points' appearance The premises need to maintained in an orderly clean manner which reflects the pride of the Forest Department. This includes areas publicly accessible as well as private areas eg: garbage management, ablutions, toilets, living quarters.	Nil attention to proper maintenance or hygiene	0	
	Superficial cleaning up, or periodic cleaning activities	1	
	Regular cleaning but not all areas	2	
	All areas of public & private areas of the ranger station are maintained to a high degree of cleanliness workability a& hygiene	3	

3 | Maintain regular enforcement patrols, particularly along the boundaries3

Item	Criteria	Score	Remarks
6. Enforcement Strategy - An enforcement strategy and implementation plan must be in place for TR, (Note 1)	Nil enforcement strategy	0	
	There is a strategy but it is not often referred to	1	
	There is a strategy which is used occasionally when drawing up action plans for the TR	2	
	The strategy is the basis of regular monthly patrol planning activities	3	
7. Fifteen days of patrols per month – regular enforcement patrols that provide a minimum coverage of fifteen days & nights of patrols, per month. (Note 2)	Nil coverage	0	
	0 – 4 days patrol coverage	1	
	5 – 14 days patrol coverage	2	
	More than 15 days patrol coverage	3	
8. Coverage of accessible areas of the TR – patrols that cover at least 75% of all readily accessible areas of the TR per month. (Note 3)	Nil	0	
	Patrol trails only	1	
	Patrol coverage of 25-75% of accessible areas per month	2	
	Patrol Coverage exceeding 75% of accessible areas per month	3	
9. Minimum of 4 enforcement staff -	Nil patrols	0	
A minimum of four rangers on an enforcement patrol (Foot patrol)	60% of patrols go out with less than four rangers	1	
Minimum of 3 rangers (Mobile patrol) (Note 4)	30% of patrols go out with less than four rangers	2	
	100% of patrols go out with four or more rangers	3	
10. Trained Investigator/evidence officer/Wildlife Crime Scene Investigator (WCSI) –	Nil trained investigator/evidence officer/WCSI	0	
	There is a designated evidence collection officer who has not received any formal training	1	
An enforcement patrol team must include a trained investigator in WCSI, informant handling and interrogation techniques. (Note 5)	There is a designated WCSI who has received some training	2	

Criteria	Score
There is a designated WCSI who has been trained & meets or exceeds the Standards for crime scene investigations (or country/regional equivalent)	3
11. Arrest & Detention - An enforcement patrol team must follow correct procedures when arresting or detaining individuals for enquiries. (Note 6)	
Nil protocols of arrest or detention exist	0
Protocols exist but staff are unaware or do not follow them	1
Protocols exist, staff are aware but irregularly follow them	2
Protocols exist, staff are trained & follow all, every time.	3
12. Correct patrol procedures – while on patrol do the rangers follow all the guidelines listed in Table 4?	
Never comply	0
Comply with Items 1 or 2	1
Comply with 1 & 2	2
Comply with 1, 2 & any of the others listed	3
13. General patrol tactics - Do the rangers correctly follow all the basic patrol tactics listed in Table 5?	
Never comply	0
0-74%	1
75-100%	2
Exceed 100%	3

4	Collate and maintain and information (from patrol reports, M-STRIPES, informer networks) on all incidents to enable planning for effective deployment of protection and enforcement resources and capacity and to provide feedback for future management activities.		
Item	**Criteria**	**Score**	**Remarks**
14. Monthly patrol plans - drawn up by the TR manager & the head of the LE patrol teams, taking into account previous illegal activities and reports from informants & prior patrols.	No monthly plans are made	0	
	Monthly patrol plans are made but not implemented	1	
	Monthly plans are implemented but results are not used towards future plans	2	
	Monthly plans are made, implemented, and results are fed into the next planning session	3	
15. Informer Network - Enforcement patrols must be supported by an information network (Note 7)	Nil information network	0	
	Occasional tips	1	
Information to be used to plan patrols and "hotspot" raids	Regular information received from registered CIs & prior patrols	2	
	Regular information plus a Wildlife crime hotline (toll free etc.) in place and manned 24/7	3	

5	Ensure the effective deployment of the protection and enforcement rangers towards controlling illegal activities, enforcing legislation and regulations			
	Item	**Criteria**	**Score**	**Remarks**
	16. Mobile team/Rapid Response Team – consisting of TR staff effectively deployed to respond to "hot spots" and other illegal activities not covered by regular patrols (Note 8)	No Mobile team/RRT	0	
		Mobile team/RRT designed on paper but not actually operational	1	
		Mobile team/RRT responds sporadically	2	
		Mobile team/RRT is on 24/7 standby and respond efficiently whenever required	3	
	17. Permanent presence - Some rangers should be permanently based in the TR at check points, stations, camps or access points (Note 9)	Nil permanent presence	0	
		0 – 9 random days	1	
		10 – 22 days office hours or weekend duty	2	
		23-31 days of presence 24/7	3	
	18. Communications with Headquarters; A communication system must be in place between patrol teams and HQ. (Note 10)	No official communications network	0	
		Exists but comms are sporadic and unreliable. Or; a good system is in place, but not being used	1	
		Enforcement staff rely on personal mobile phones	2	
		Good reliable communication system exists and is in use	3	

6	Maintain an incident's register and collate information on all illegal incidents in order to monitor effectiveness of enforcement activities			
	Item	**Criteria**	**Score**	**Remarks**
	19. Monitoring tool - A LE monitoring tool must be in place. This will depend on the TR, but it is encouraged that a standard system such as M-STRIPES be used. (Note 11)	Nil monitoring tool	0	
		In place – but untrained operators or meaningless reports	1	
		In place – reports are produced irregularly or are regular but need clarification	2	
		In place – regular and meaningful reports	3	
	20. Records of patrol results – are results being recorded as listed in Table 6?	Not recorded	0	
		Recorded irregularly/partially	1	
		Recorded regularly/fully	2	
		Recorded regularly and results are monitored	3	
7	Map areas where illegal activities occur and maintain an inventory of incidents			
	Item	**Criteria**	**Score**	**Remarks**
	21. Tactical Maps are available of the TR and surrounding areas. Topographic Ordinance Survey maps (Scale 1:50,000, 1:25,000, 1:10,000) not something contained electronically. (Note 12)	No maps	0	
		Maps exist but of the TR area only (GIS type)	1	
		Topographic maps are used but the scale is greater than 1:100,000	2	
		Topographic maps exist with scale of 1:50,000 or less and are used in planning sessions	3	

8	Direct field staff's protection, enforcement, and compliance activities towards the mitigation of visitor impacts, and ensuring security of visitors			
	Item	**Criteria**	**Score**	**Remarks**
	22. Assign staff to monitor and control visitor activities	No staff assigned to visitors	0	
		Staff assigned but TORs are vague	1	
		Staff assigned and monitor visitor activity but take little action	2	
		Staff assigned and visitor activity is monitored and controlled to the benefit of the TR	3	
9	**Erect signage indicating risk of prosecution for illegal activities within the TR, in particular on road access, public roads traversing the reserves including signage to warn drivers of need for reduced speeds and/or consequences of breaking the speed limit.**			
	Item	**Criteria**	**Score**	**Remarks**
	23. Signage - indicating , but not limited to: the boundaries of the TR, entrance gates, speed limits, various penalties	No signage	0	
		Signage erected but not adequate or appropriate	1	
		Signage erected appropriately	2	
		Signage clearly indicates the TR, the boundaries, basic rules & penalties, speed limits, visitor facilities	3	
	24. Access Control - All major access points/routes must be controlled. (Note 13)	No Access control	0	
		TR boundaries are lengthy & access control is difficult	1	
		Exists, but is not regular enough to be depended upon to control illegal vehicles, pedestrians	2	
		Regular and dependable access control is in place during opening hours of the TR.	3	
	25. Gate Control – Staff on duty at entrance gates and other roadblock duties need to collect user information. (See Table 7)	Do not stop vehicles	0	
		0-74%	1	
		75-100%	2	
		Exceed 100%	3	
		Sub Total		

Objective 2 – Training: The development of the staff's skill base

	Item	Criteria	Score	Remarks
1	**Ensure the provision of adequate protection and enforcement training for staff.**			
	26. Patrol Staff trained (Note 15)	Not trained	0	
		Rangers have received minimum of training	1	
		Majority of staff fully trained & meet or exceed the standards	2	
		All patrol team staff trained & meet or exceed the standards	3	
	27. Training Courses – Staff regularly attend continuation training courses designed to provide adequate protection and enforcement training. (See Table 8)	No courses arranged	0	
		Courses are arranged but staff irregularly attend	1	
		Staff attend regular relevant training courses but fail or are prevented from applying the training	2	
		Staff regularly attend relevant training courses and apply lessons learnt.	3	
2	**Ensure that managers & all enforcement staff attend and apply training**			
	28. Maintain a training record – Include records of any training courses attended in the staff member's personal file and update annually. Issue each staff member a training log book to record courses they have attended.	No records	0	
		Training records kept but no record of improvement	1	
		Training records kept and some improved staff performance	2	
		Training records kept and obvious signs of staff improvement and application of training materials	3	
		Sub Total		

Objective 3 – Cooperation: The integration of the Patrols into local and regional compliance and enforcement initiatives

1 Maintain good relations with local police offices, military & para-military units, prosecutors, local govt. agencies (Panchayati Raj Institutions), local people &adjacent landowners.

Item	Criteria	Score	Remarks
29. Relationships - developed through meetings and assistance.	No meetings are conducted	0	
	Meetings are conducted with some relevant parties	1	
	Meetings are conducted with all relevant parties but little follow-up	2	
	Meetings are conducted with all relevant parties and useful and constructive relationships are developed	3	
30. Multi-agency patrols - An enforcement patrol team may include multiple agencies, including community members. Some TRs require multi-agency patrols to cover jurisdictional issues. (Note 14)	Required by legislation but teams don't exist.	0	
	Required by legislation/regulations and the teams are in existence but not operating	1	
	Required by legislation/regulations and the teams are in existence but not up to full complement	2	
	Required by legislation/regulations and the teams are fully operational.	3	

2 Confirming the activities in TRss that specifically require compliance with legal requirements, and advising staff members accordingly to ensure compliance and adherence

Item	Criteria	Score	Remarks
31. Identify legal requirements – all legislation and regulations that have a bearing on any activities occurring in the TR. i.e.; infrastructure development, pollution/noise related laws, forest laws, labour law, road traffic law, etc., are identified and registered.	No relevant legislation identified	0	
	Partial register of all relevant legislation identified	1	
	Register of all relevant legislation identified	2	
	Register of all relevant legislation identified and updated as required	3	

3 | **Collate and maintain a legal register on pertinent legislation for the TR and advising patrol members on particulars**

Item	Criteria	Score	Remarks
32. Maintained and updated - copies of all legislation and regulations pertinent to the operation of the TR	No copies of pertinent legislation.	0	
	Full copies of pertinent legislation, but staff are unaware of the resource.	1	
	Full copies of pertinent legislation. Some staff refer to them	2	
	Full copies of pertinent legislation and staff are aware and refer to them	3	
	Sub Total		

Total Score

Out of possible **96** **(-3 for each item that is "Not Applicable")** | **Score =** | |

Total Percentage Score (score/96 = %) | |

TABLE 1: Personal Issued Kit

SN°	Uniforms	Yes	No	NA	Score
1	2 Uniform shirts				Nil = 0
2	2 Uniform trousers				1-74% = 1
3	1 Uniform cap				75-100% = 2
4	1 Uniform belt				
5	1 Winter jacket (if relevant)				> 100% = 3
6	1 Jersey				
7	1 Rain suit/poncho				
8	3 T-shirts (subdued)				
9	2 Combat boots or Shoes				
10	1 Rain boots (gum boots) – pair (if relevant)				
11	4 Socks – pair				

TABLE 2: Patrol Equipment

SNo.	Do the field rangers carry the following items while on patrol?	Yes	No	NA	Score
1	A method of communication eg cell phone/radio/handset				Nil = 0
2	Back pack				1-74% = 1
3	Tent or Shelter-half or Hammock with fly sheet and mosqui-to netting				75-100% = 2
4	Water-bottles (canteen) and metal cup				> 100% = 3
5	Knife (machete / personal multi-purpose knife)				
6	Matches / lighter / flint				
7	Water purifying tablets (if relevant)				
8	Handcuffs (metal or plastic restraints)				
9	Small torch				
10	Binoculars & night vision equipment				
11	Camera				
12	Personal First Aid Kit				
13	GPS or compass & map				
14	Data Collection Forms, notebook & pen				

TABLE 3: First Aid Kits

SN°	Does the Patrol First Aid kit contain at least?	Yes	No	Score
1	1 Hemostat (artery forceps)			Nil = 0
2	5 pr Surgical gloves			1-74% = 1
3	1 tweezers			75-100% = 2
4	1 pair of small surgical scissors			
5	2 triangular bandages			> 100% = 3
6	1 Elastic 4" bandage			
7	1 packet assorted "Band-Aid" plasters			
8	20 Gauze swabs			
9	1 roll of 25mm wide adhesive plaster			
10	2 C.A.T. Tourniquet			
11	1 Large wound dressing			
12	2 Medium wound dressings			
13	1 CPR mouthpieces			
14	1 tube Anti-septic ointment (eg. Neosporin)			
15	1 Anti-septic solution (eg. Betadyn)			
16	10 Anti-histamine pills (eg. Benadryl)			
17	1 tube Anti-histamine ointment			
18	10 Anti-inflamitories (eg. Ibuprofen)			
19	10 Aspirin			
20	5 Anti-diarrhea tablets (eg. Immodium)			
21	5 packets Rehydration fluid powder			
22	1 Waterproof bag for above contents			

TABLE 4: Patrol Duties

SN°	While on Patrol do the Team:	Yes	No	Score
1	Carry out LE?			1
2	Remove traps which can cause death or injury to wildlife?			1
	Properly dispose of snares as per approved protocol			
3	Collect information with regards to animals – numbers, distribution, breeding records, sex ratios, diseases, abnormal behaviour?			**Any of these = 1**
4	Report mortalities?			
5	Report on the species and location of alien plants?			
6	Report problem animals?			
7	Check vegetation condition?			
8	Report on location of soil erosion?			
9	Report activities outside the reserve?			

TAB

LE 5: General Patrol Tactics

SN°	Do the Patrol Staff correctly follow the following basic patrol tactics?	Yes	No	NA	Remarks
1	Travel light?				Nil = 0
2	Reflect no sunlight during daytime?				1-74% = 1
3	Silence equipment at night?				75-100% = 2
4	Communicate using hand signals?				>100% = 3
5	Ensure all-round observation at all times while walking?				
6	Move separately whenever the terrain allows?				
7	Rest separate during daytime?				
8	Circle all water-points and collect information on whom and what are utilizing them?				
9	Avoid walking on game or footpaths?				
10	Plan patrol routes so as to cross (cut) possible poacher infiltration routes?				
11	Always maintain vigilance and all round defence during stops for meals, rest or to attend to ablutions?				
12	Before leaving the area, make sure nothing is left behind such as litter, equipment, etc.?				
13	Do not make unnecessary noise such as talking, kicking stones or breaking branches underfoot				
14	Do not walk and smoke				
15	Do not patrol the same routes every day or fall into the habit of using established pattern				
16	Always record everything they see that may be important				
17	Always obey the patrol commander's instructions immediately.				

TABLE 6: Enforcement Activities

SNº	Are the following occurring	Yes	No	UNK.
1	Number of verbal warnings being recorded?			
2	Number of written warnings being recorded?			
3	Details of recipients of warnings, being recorded?			
4	Arrests being made for repeat or serious offenders?			
5	Cases in courts being followed up regularly and results of court cases being recorded?			

TABLE 7: Gate control requirements

SNº	While on Gate duty/ Check posts do the Staff?	Yes	No	NA	Score
1	Stop every vehicle				Nil = 0
2	Record Time Date				1-74% = 1
3	Record Vehicle Registration number				75-100% = 2
4	Record drivers particulars				>100% = 3
5	Record passengers particulars				
6	Search the vehicle				

TABLE 8: List of modules for Anti-Poaching Staff Training Guidelines

Have you had training at following subjects?	Yes	No	NA	Score
Values and ethics to be kept in mind and followed while performing duties				Nil = 0
Concepts and principles of conservation and ecology				1-74% = 1
Criminal threats to natural resources in and around PAs				75-100% = 2
Roles and responsibilities				>100% = 3
Teamwork				
Operational security				
Human rights				
Use of force				
Community collaboration				
Drill & discipline				
Physical training				
Weapon handling (elective)				
First Aid				
Survival skills				
Equipment use and maintenance				
Camouflage & concealment				
Radio communication				
Hand signals				
Orienteering & navigation				
Tracking				
Wildlife protection legislation & court procedure				
Evidences types and collection methods				

Witness (confidence building, maintenance, protection)				
Arresting procedure				
Mission planning & orders				
Marksmanship (elective)				
Immediate action drill (elective)				
Patrol				
Surveillance training				
Rapid response to emergency situation (elective)				
Search & raids				
Vehicle check points				
Temporary basis				
Ambush				
Night operations				
Snaring & de-snaring				
Unexploded ordnance, land mines and booby traps (elective)				
Combative				
Standard operating procedures				
Wildlife crime information gathering				
Basic crime scene response and photography				
Basic identification of wildlife products & derivatives				
Interview & interrogations				
Joint operations & Cooperating with other enforcement agencies				
Waterborne operations (elective)				
Pesticide crime/wildlife poisoning investigation				
Data collection				
Debriefing & reporting				

SECURITY AUDIT PROCESS

STEP 1

CONSTITUTION AND TRAINING OF TEAMS FOR SECURITY AUDIT OF TIGER RESERVES FIXING TIME LINES.

STEP 2

NOMINATION OF THE SECURITY AUDIT NODAL POINT FOR TIGER RESERVE BY FIELD DIRECTORS
SECURITY AUDIT TEAM WORKS WITH NODAL POINT ON SECURITY AUDIT PLAN

STEP 3

CONSULTATION WORKSHOP IN THE TIGER RESERVE INVOLVING MAXIMUM POSSIBLE NUMBER OF FIELD STAFF· PROPOSED LIST OF PARTICIPANTS- FIELD DIRECTOR, DIVISIONAL FOREST OFFICER/ DEPUTY DIRECTOR AND ASSISTANT CONSERVATOR OF FOREST/ RANGE OFFICERS, DEPUTY RANGE OFFICERS AND 20% FRONTLINE STAFF

STEP 4

AT LEAST 50% EACH OF ANTI POACHING CAMPS, RANGE OFFICES AND CHECK POSTS SHOULD BE FIELD VERIFIED.

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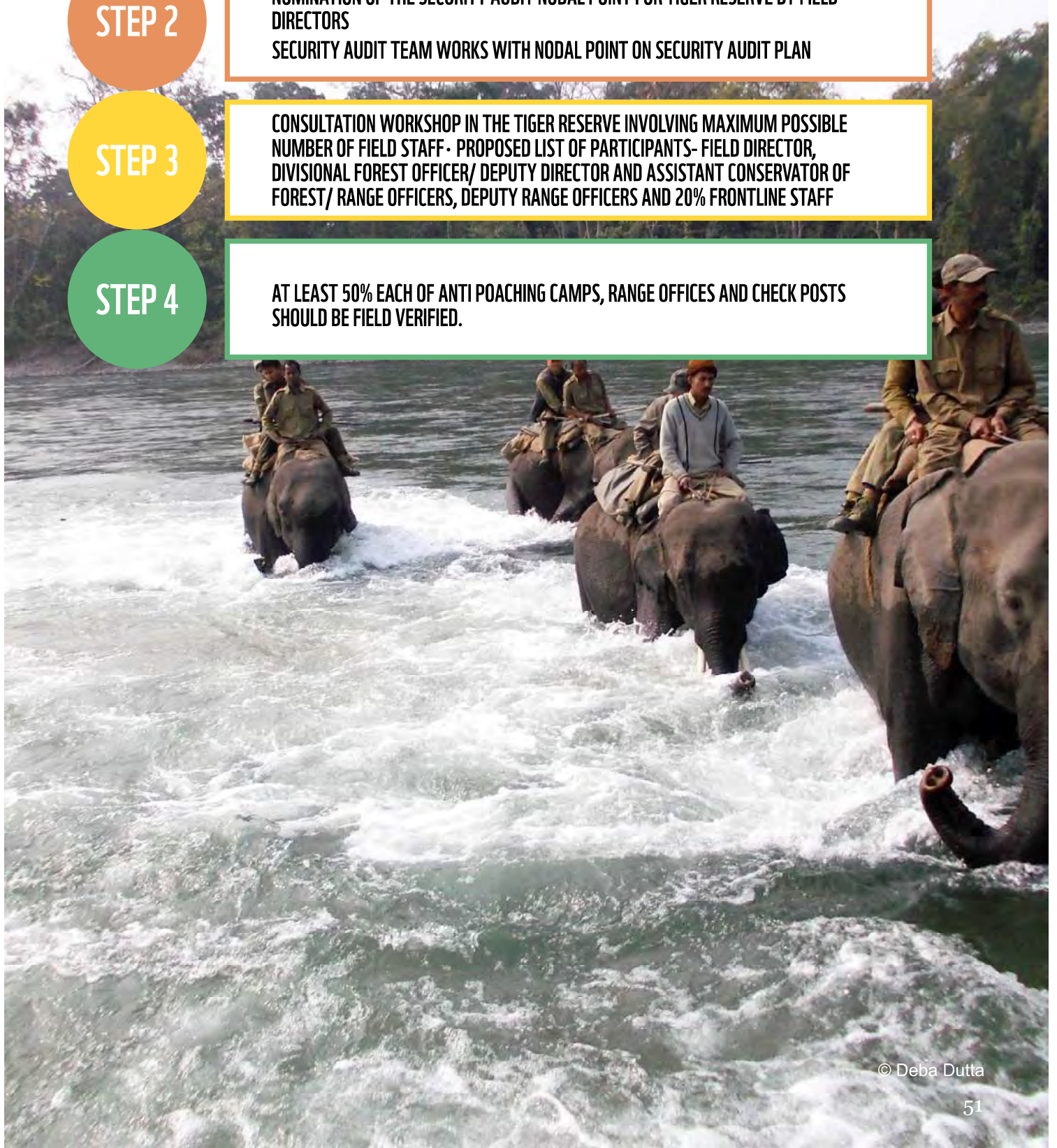
PROPOSED STRUCTURE OF SECURITY AUDIT TEAM

NTCA NOMINATED
SENIOR EXPERT AS CHAIR

WCCB
REPRESENTATIVE

NGO REPRESENTATIVE
WITH ENFORCEMENT
EXPERIENCE

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Field verification form for Camps/beats

TABLE 1: Personal Issued Kit

Scoring: -

0= No staff have the prescribed items

1= some staff (at least 50%) have the complete prescribed items

2= All staff have at least part of the prescribed items

3= All staff have the prescribed items

SN°	Uniforms	Camp-1	Camp-2	Camp-3	Camp-4	Camp-5	Camp-6	Camp-7	Camp-8	Overall score
1	2 Uniform shirts									
2	2 Uniform trousers									
3	1 Uniform cap									
4	1 Uniform belt									
5	1 Winter jacket (if relevant)									
6	1 Jersey									
7	1 Rain suit/poncho									
8	3 T-shirts (subdued)									
9	2 Combat boots or Shoes									
10	1 Rain boots (gum boots) – pair (if relevant)									
11	4 Socks – pair									

TABLE 2: Patrol Equipment

Scoring:

0= Not available at all

1= Available with staff but not functional for quite some time

2= Available with some of staff (as per relevance-some items can be in group) and functional

3= All staff have the items and in proper functional condition

SN°	Do the field Staff carry the following items while on patrol?	Camp-1	Camp-2	Camp-3	Camp-4	Camp-5	Camp-6	Camp-7	Camp-8	Total score
1	A method of communication eg cell phone*/radio (with LEM software)									
2	Back pack									
3	Tent or Shelter-half or Hammock with fly sheet and mosquito netting									
4	Water-bottles (canteen) and metal cup									
5	Knife (machete / personal multi-purpose knife)									
6	Matches / lighter / flint									
7	Water purifying tablets (if relevant)									
8	Handcuffs (metal or plastic restraints)/ ropes									
9	Small torch									
10	Binoculars & Night vision devices (in groups)									
11	Camera									
12	Personal First Aid Kit									
13	GPS or compass & map									
14	Data Collection (RBDC) Forms, note-book & pen, map									
15	Measuring tape									
16	Arms (Firearm/stick/kukri/big knife as distinct from point no.5									
17	Personal protective gear-for sensitive areas, e,g, bullet proof jackets/riot helmets									

TABLE 3: First Aid Kits

Scoring:-

0= Not available

1= Partially available (in terms of numbers)

2= Available as prescribed

3= Additional site specific items included

SN°	Does the Patrol First Aid kit contain at least?	Camp-1	Camp-2	Camp-3	Camp-4	Camp-5	Camp-6	Camp-7	Camp-8	T o t a l score
1	1 Hemostat (artery forceps)									
2	5 pr Surgical gloves									
3	1 tweezers									
4	1 pair of small surgical scissors									
5	2 triangular bandages									
6	1 Elastic 4" bandage									
7	1 packet assorted "Band-Aid" plasters									
8	20 Gauze swabs									
9	1 roll of 25mm wide adhesive plaster									
10	2 C.A.T. Tourniquet									
11	1 Large wound dressing									
12	2 Medium wound dressings									
13	1 CPR mouthpieces									
14	1 tube Anti-septic ointment (eg. Neosporin)									
15	1 Anti-septic solution (eg. Betadyn)									
16	10 Anti-histamine pills (eg. Benadryl)									
17	1 tube Anti-histamine ointment									
18	10 Anti-inflamitories (eg. Ibuprofen)									
19	10 Aspirin									
20	5 Anti-diarrhea tablets (eg. Immodium)									
21	5 packets Rehydration fluid powder									
22	1 Waterproof bag for above contents									

TABLE 4: Patrol Duties (Data from registers/LEM software like M-STripes)

Scoring:-

0= No staff carry out LEM (unlikely....)

1= Part of staff perform duties as prescribed

2= All staff perform duties partially as prescribed

3= All staff perform duties fully as prescribed

	Camp-1	Camp-2	Camp-3	Camp-4	Camp-5	Camp-6	Camp-7	Camp-8	Total score
1	Carry out LE?								
2	Remove traps which can cause death or injury to wildlife? * Follow up: What do they do with the traps-document, deposit and destroy?								
3	Collect information with regards to animals – numbers, distribution, breeding records, sex ratios, diseases, abnormal behaviour, if any?								
4	Report mortalities?								
5	Report on the species and location of alien plants?								
6	Report problem animals?								
7	Check vegetation condition?								
8	Report on location of soil erosion?								
9	Report activities outside the reserve?								

TABLE 5: General Patrol Tactics

Scoring (through counting of raised hands):-

0= No staff does as prescribed

1= Less than 50% staff does as prescribed

2= More than 50% staff does as prescribed

3= All staff does as prescribed

SN°	Do the field Staff correctly follow the following basic patrol tactics?	Camp-1	Camp-2	Camp-3	Camp-4	Camp-5	Camp-6	Camp-7	Camp-8	Total score
1	Travel light?									
2	Reflect no sunlight during daytime?									
3	Silence equipment at night?									
4	Communicate using hand signals?									
5	Ensure all-round observation at all times while walking?									
6	Move separately whenever the terrain allows?									
7	Rest separate during daytime?									
8	Circle all water-points and collect information on whom and what are utilizing them?									
9	Avoid walking on game or footpaths?									
10	Plan patrol routes so as to cross (cut) possible poacher infiltration routes?									
11	Always maintain vigilance and all round defence during stops for meals, rest or to attend to ablutions?									
12	Before leaving the area, make sure nothing is left behind such as litter, equipment, etc.?									

13	Do not make unnecessary noise such as talking, kicking stones or breaking branches underfoot								
14	Do not walk and smoke								
15	Do not patrol the same routes every day or fall into the habit of using established pattern								
16	Always record everything they see that may be important								
17	Always obey the patrol commander's instructions immediately.								

TABLE 6: Enforcement Activities

Scoring:-

0= Not being done at all as prescribed

1= Being done sporadically

2= Being done as prescribed, but not in a very systematic and organized/easy to retrieve manner

3- Being regularly done and in a very systematic and organized/easy to retrieve manner

SN°	Are the following occurring	Camp-1	Camp-2	Camp-3	Camp-4	Camp-5	Camp-6	Camp-7	Camp-8	Total score
1	Number of verbal warnings being recorded?									
2	Number of written warnings being recorded?									
3	Details of recipients of warnings, being recorded?									
4	Arrests being made for repeat or serious offenders?									
5	Results of court cases being recorded?									

TABLE 7: Gate/Check Post control requirements

Scoring:-

0= Not being done at all as prescribed

1= Being done but not regularly

2= Being done regularly

SN°	While on Gate duty/ Check points do rangers?	Gate-1	Gate-2	Gate-3	Gate-4	Gate-5	Gate-6	Gate-7	Gate-8	Total score
1	Stop every vehicle (Note: Maybe difficult in certain areas other than within TRs)									
2	Record Time Date									
3	Record Vehicle Registration number									
4	Record drivers particulars									
5	Record passengers particulars									
6	Search the vehicle									

OVERALL AMBIENCE/CLEANLINESS OF CAMPS/RANGE OFFICES

Scoring: On a scale of 1-10 (Very poor to Excellent)

| Camp-1	Camp-2	Camp-3	Camp-4	Camp-5	Camp-6	Camp-7	Overall score

CAMP AMENITIES

Scoring

0= Not available

1= Available but not in a functional state/condition for long period of time

2= Available but not in a functional state/condition for short period of time

3=Available and in a proper functional/clean/well maintained state

		Camp-1	Camp-2	Camp-3	Camp-4	Camp-5	Camp-6	Camp-7	Camp-8	Total score
1	Solar electricity connection									
2	Wireless communication									
3	Cooking facilities (e.g. fuel efficient stoves, LPG) including utensils									
4	Easy access to clean water for cleaning/washing									
5	Availability of functional toilet									
6	Access to potable water									
7	Water filter									
8	Cot									
9	Mattresses									
10	Blankets and linen									
11	Mosquito net									
12	Security measures for protecting camps from wildlife criminals, wild animals, mobs etc. (elephant proof trenches, camps on elevated pillars etc.)									
13	Books, guidebooks, manuals etc. necessary for appropriate enforcement									
14	Entertainment facilities (TV/Radio/ badminton set/volley ball etc.)									
15	Camp details-name, location, area covered, staff strength etc. prominently displayed outside the camp									
16	Status of completeness of appropriate Reports, records, maps, computer facilities etc. (in case of Range Offices)									
17	Gender sensitive detention facility (in case of range offices)									

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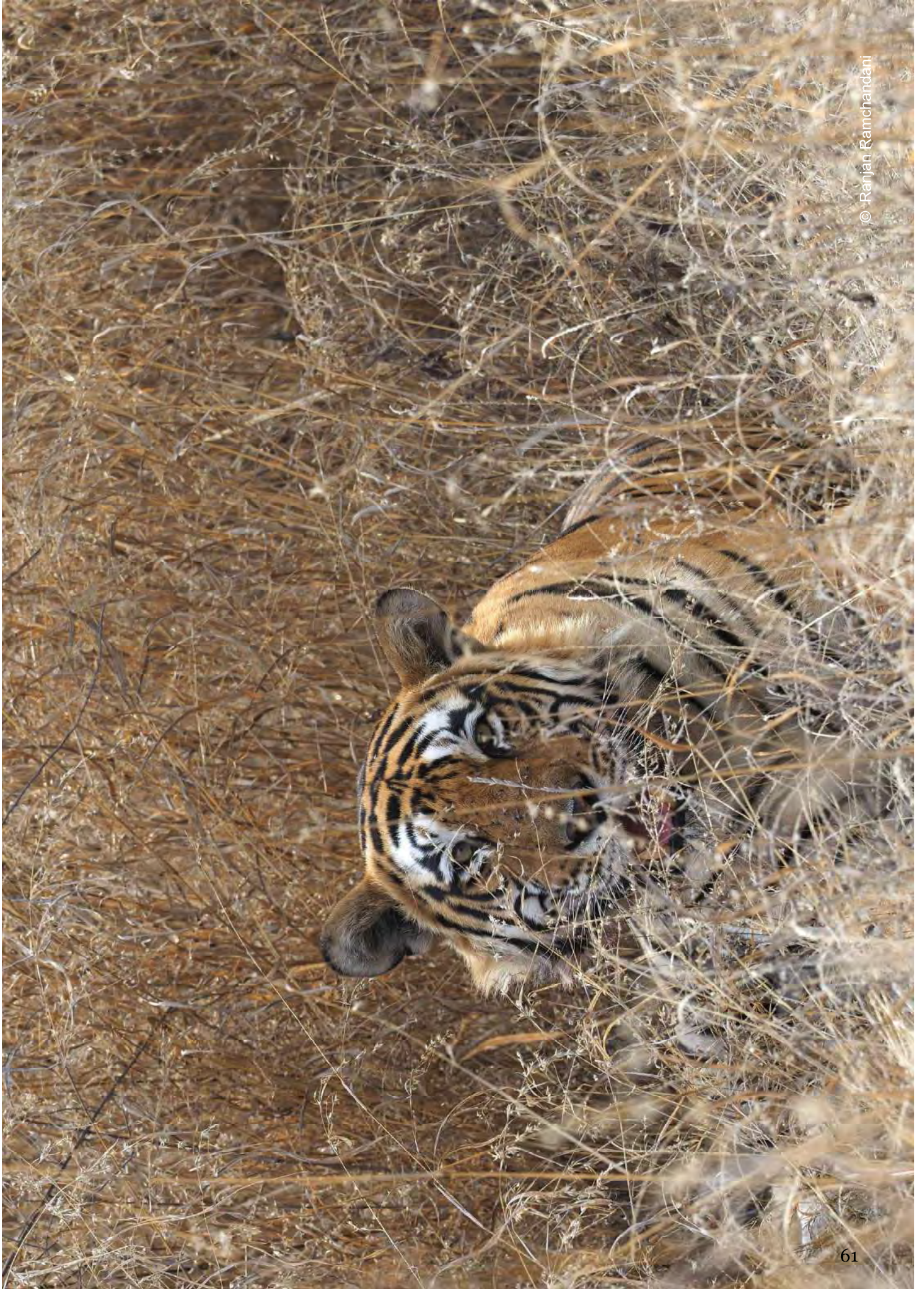
GENERAL NOTES

(If any) to be included for future security audits

Some photos from the field validation of Security Audit Protocol at Kanha and Satkosia Tiger Reserves

Photo credit Joydeep Bose & Rohit Singh (WWF)

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