



**GENERIC GUIDELINES FOR PREPARATION OF
SECURITY PLAN
FOR TIGER RESERVES**

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(STATUTORY BODY UNDER THE MINISTRY OF ENVIRONMENT & FORESTS, GOVT. OF INDIA)

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NATIONAL TIGER CONSERVATION AUTHORITY

(STATUTORY BODY UNDER THE MINISTRY OF ENVIRONMENT & FORESTS, GOVT. OF INDIA)

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PREFACE

The wild tiger continues to remain endangered in the tiger range countries, and India is no exception. The growing demand for the body parts and derivatives of tiger in some countries continue to foster trafficking across the borders of our country. This illegal demand is a threat to the endangered source population of tigers, necessitating enhanced intelligence based enforcement. The States have been advised to prepare reserve specific Tiger Conservation Plan with a primary focus on field protection, vis-à-vis the enabling provisions in the Wildlife (Protection) Act, 1972. These generic guidelines are being issued to strengthen field protection in a more professional manner.

Several individuals and professionals have contributed in the development of this document. Shri S.P. Yadav, DIG (NTCA) and Shri Samir Sinha, Head TRAFFIC-India in particular deserve all praise for their untiring efforts in giving shape to these guidelines. I wish to thank Shri P.K. Sen, Ms. Belinda Wright, Brig. (Retd.) Ranjit Talwar, Shri Ramesh Pandey, Deputy Director, Northern Region, Wildlife Crime Control Bureau, Shri Mukesh Jain, DIG (SSB) and Shri Dipesh Juneja, DIG, Saharanpur for their valuable inputs. Comments and suggestions are invited from field officers and experts for refining these guidelines.

(Dr. Rajesh Gopal)

APCCF & Member Secretary
National Tiger Conservation Authority

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A Security Plan for Tiger Reserves



Background:

The key to conservation success in a Tiger Reserve is the level of security enjoyed by the tiger and all other species that inhabit the area. Even if every other factor remains very favourable, lack of security can lead to irrevocable and sudden losses of the biodiversity wealth of the area. The case of Sariska Tiger Reserve losing all its tigers in a short span of time due to poaching is a grim case in point.

Given that a forest area has its own unique characteristics, it is important that any plan to address its security must comprehensively address these unique challenges presented by the terrain and other related factors.

Today, every living wild tiger is under threat, irrespective of where it is found. While the degrees of such threat may vary, the fact is any tiger bearing area must be considered as vulnerable to external threats. Species such as the leopard, elephant or rhino which are prized in the illegal wildlife trade or other prey such as spotted deer, Sambar and wild boar usually associated with tiger landscapes also add to the threat of poaching.

This document attempts to provide a roadmap at recognising and evaluating threats to any Tiger Reserve and formulating an appropriate response to such threats.



The Nature of threats:

The threats to a Tiger Reserve could be one or several of the following:

- Poaching
- Encroachments, including mining
- Fires
- Floods
- Electrocution, accidents and also as a poaching technique.
- Epidemics
- Insurgency
- Human-wildlife conflict
- Illicit timber/fuel wood/minor forest produce collection and grazing

In addition, many such areas attract large number of visitors who camp inside the forest or in its vicinity. Safety of such visitors, which may include many high profile VVIPs is an added responsibility of the PA Manager.

The basic strategy to ensure security will depend on appropriate answers to the following questions:

- Who can do what?
- When?
- Where?
- Why?
- How?

Based on the above, the cornerstone of effective security is five fold:

- i Evaluation
- ii Preparation
- iii Prevention
- iv Detection, and
- v Response



This document will attempt to present a road map to an organised and strategic response to threats arising due to poaching. Many of the issues highlighted here can be used to respond to most other crisis and emergency situations also.

Evaluation of an Area:

The PA manager must be in complete knowledge of the terrain under his/her charge and its key features. This would need answers to the following key questions:

- What are the areas with higher spatial occupancy of tigers, co-predators, and prey in the area?
- What are the important human made features (Villages, tanks, roads, 11KV overhead electric lines, etc.) around such areas of high tiger, co predator and prey density?
- What are the main and secondary roads in an around the TR? Which roads are fair-weather and which are usable round the year? What are the alternate routes connecting key locations and the distances between them, important bridges etc. on the way etc. (important for emergency evacuations, sending in Strike Forces etc.)
- What other alternate routes of conveyance such as rivers, canals etc. are available in the area? Which areas do they connect? Are they seasonal or perennial?
- Which parts/routes on the TR boundary offer relatively easier chances of entry/ exit to or from the TR particularly if an inter- state boundary passes through a TR or close to it.
- Which areas have suffered poaching of important species of wildlife in the last five years? This should be done for ten years. Predators and prey spp cases must be segregated and plotted on a map with different color codes. Tiger poaching spots in the past, both within and in close vicinity of the TR, should be watched depending on the crime history of the area.
- Which areas inside the TR or in its vicinity have populations of traditional hunting communities or their temporary camps? OR past history of traditional poachers visiting such areas. Most traditional poachers love travelling by train, including narrow gauge, even if the journey takes longer. The nearest railway station from their camp could be as far as 50 + km. This vital information needs to be documented under this plan.
- Who are the well known poachers of the area and where do they live? Who are their key associates and where do they live in the vicinity of the TR? The best way to keep track of such poachers or potential poachers is to make a range-wise list of the accused and co-accused in poaching cases for the past ten years, and to keep a close watch on them.
- Which localities have a higher concentration of licensed firearms? What is the trend of consumption of cartridges in such areas? This data is available with

the DM /Collector and the Superintendent of Police. Form 3 of the Arms Act mentions all license holders for 12 bore guns and rifles, Form 5 lists all license holders for muzzle loading guns. Ammunition consumption data can be obtained from returns filed by dealers to the police dept.

- Which are the areas which suffer from high human-wildlife conflict, especially with respect to species like the tiger, leopard or the elephant? The cropping pattern of adjoining areas plays a major role in seasonal migration of prey spp followed by predators, who often walk into snares or live electric wires set as a crop protection measure and also for poaching.
- Which are the water bodies, close to the periphery of the TR that attract wild animals especially during summer?
- Most tiger reserves have a daily monitoring system to follow the movement of tigers. Tigers often have a composite territory, which covers part of a TR and part of a territorial forest. They are most vulnerable when they are out of the TR. Such areas and all paths/waterholes therein should be patrolled with joint patrolling staff.
- Each of the above need to be plotted on a Map of the TR, preferably on a scale of 1: 50,000.



Security Map:

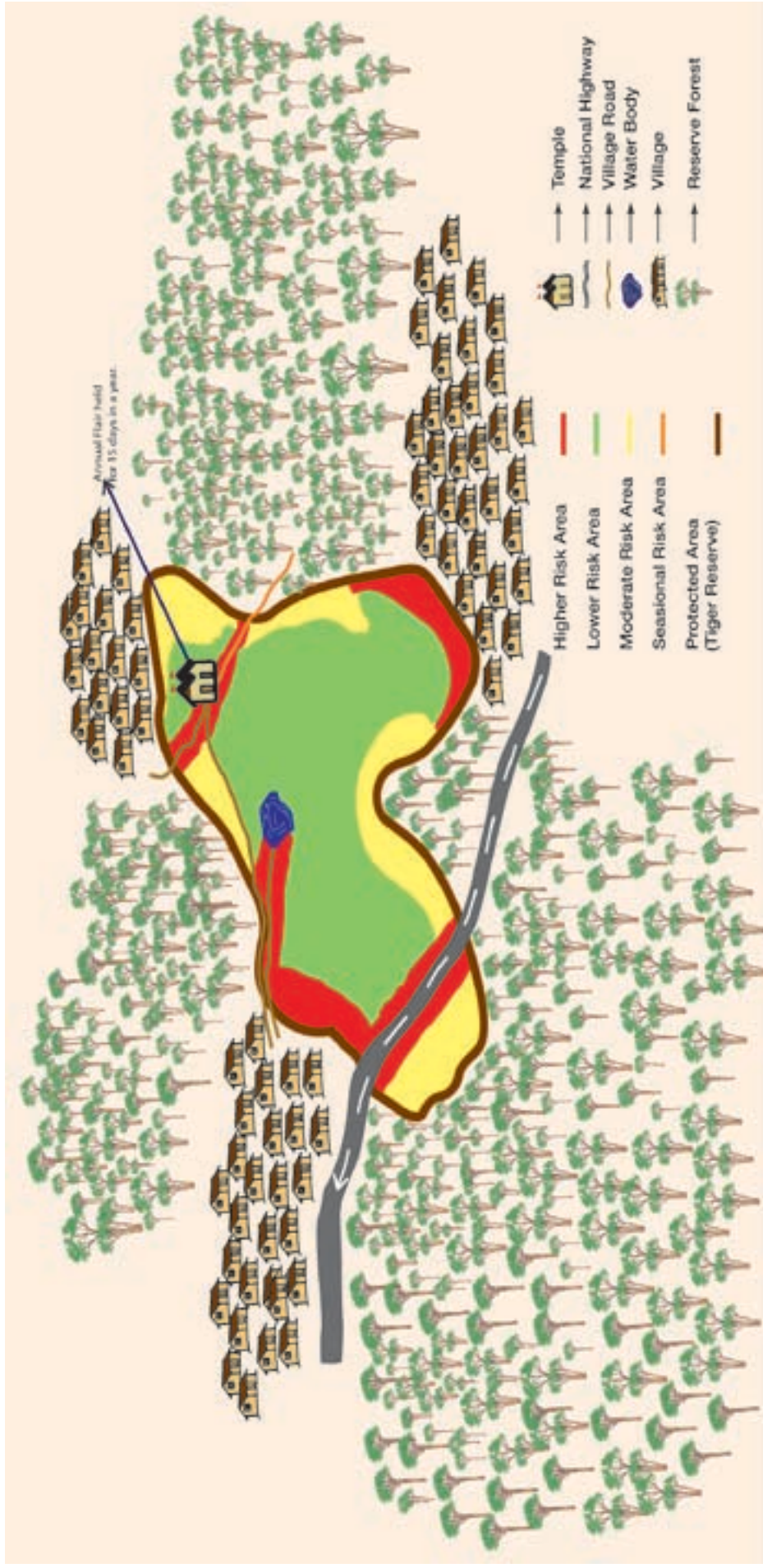
Based on the above, a clear picture of the threat perception and vulnerability of various regions in and around the TR is likely to emerge. Based on the evaluation of such threats, the TR may be divided into several regions, each of which would be depicted on the Map with a distinct colour:

- High Risk Areas: These are areas perceived to be under severe threat round the year- These should be coded in Red colour and called the Code Red Zone
- Seasonally High Risk Areas: These are areas perceived to be under high threat during specific times of the year, eg. areas where animals take shelter during a flood or which have a local tradition of organised hunts during a particular season- These should be coloured in Orange and called the Code Orange Zone
- Moderate Risk Areas: These are areas perceived to be under moderate threat round the year- These should be coloured in Light Brown and called the Code Brown Zone
- Low Risk Areas: These are areas perceived to be under low threat - These should be coloured in Light Blue and called the Code Blue Zone

Please note that the threat perception is variable and will keep changing, depending on the situation on the ground. This should necessarily be revisited and revised atleast once every calendar year.



Sample Map No-1



Preparation

Resource Mapping:

This will involve mapping Human and Physical Resources available with the TR Manager and other supporting agencies and will include:

- List, location and contact details of vital installations such as Police Station/ Customs Post/ Fire Stations etc. Also, an evaluation of human resources normally available there which could be requested for support in a crisis (eg: a section of Armed Constabulary in addition to 4 Constables at a local Police Chowki at location Bannerpet)
- List, location and contact details of hospitals/doctors and key life saving equipment, ambulance and drugs commonly available with them (eg. knowing which nearby hospital maintains a stock of anti venom could mean the difference between life and death for a field staff bitten by a poisonous snake)
- List, location and contact details of other important officials of the district including those of the District Magistrate / Deputy Commissioner, Superintendent of Police to the Sub Divisional Magistrate, Tehsildar/Talukdar, Thana Incharge etc.
- List, location and contact details of senior forest officials of the region including Range Officers, SDOs & DFOs of neighbouring Forest Divisions who can be directly approached for support in a crisis.
- List and location of electrical substations & transmission lines (along with their operating voltage) and contact details of officials in charge of their operation and maintenance: (Important in cases involving accidental or premeditated deaths or injuries to wild animals or human beings due to electrocution.)
- List, location and contact details of key officials of the Irrigation Dept. especially for areas which have reservoir or canal running through them. They may be needed to be contacted in an emergency involving regulating the flow of water to or from a water body.
- List, location and contact details of nearby important public transport installations such as Bus and Railway stations, Taxi stands etc. This information may be very handy when trying to follow up on escaped or fleeing suspects.
- Location and contact details of where heavy duty cranes and earth moving equipment can be available, for use in rescue of vehicles or for urgent repairs of washed away roads etc.
- List, location and existing resource details of Patrolling Camps and other Safety Installations such as barriers & watch towers, wireless and repeater stations etc. Wireless frequencies, both Rx and Tx for Duplex communication over different channels must also be recorded.

- List and location of key transport equipment such as 4 wheel vehicles, motor cycles, trucks, boats, elephants etc. available with the TR.

Prevention & Detection

Deployment of Resources: Based on an evaluation of the threat Perception of various parts of the TR and the resource available therein, a fresh look has to be taken at the deployment of resources at the disposal of the TR Manager.

The first charge of such resources must invariably be for the Code Red Areas. For Code Orange areas, the seasonal deployment of additional support staff must be planned and implemented well in time in a proactive manner rather than wait for accidents to happen.

Deployment of Strike Teams:

Each Tiger Reserve must have one or more Special Strike Forces deployed in the field. The deployment should be at locations where the strike force should be able to reach a given area within a reasonable amount of time to take charge of any crisis. In most situations, a Strike Force is best deployed along the periphery in the Code Red Zone. This will be in response to a threat perception.

The Special Tiger Protection Force should be preferably used as a Strike Force and deployed as such. Detailed guidelines on the establishment and use of the Tiger Protection Force are being issued separately by the NTCA.

Strike Teams should carry out regular mock drills to test their level of preparedness and their response time. Their visibility will also send out a strong psychological message to any intended poachers etc.





Planning a Patrol:

Based on the availability of field staff and the Special Tiger Protection Force (STPF), planning for foot as well as vehicular/elephant or boat patrolling can be carried out. The element of surprise is always very important in the patrol plans.

Foot Patrols are the best and most effective way of establishing command over an area. Foot Patrols must be regularly deployed. Each patrol must have a clear objective, which should be made clear to all staff by the designated Patrol Leader before the beginning of the patrol. Each patrol should be debriefed at the end of the patrol so as to record what was observed during the patrol. Each Range must have Patrolling Plan which should aim to cover the entire area of the Range at least once every fortnight. Care should be taken to ensure that patrols should not fall into the routine of covering only the most convenient routes and that they should not follow a predetermined pattern or route (eg., if it is Friday then the Patrol will cover the Forest Road from Nasirpet to Rani Bennur).

A Patrol Party should ideally be at least 4 persons with a minimum of two firearms and wireless sets. Patrols in an area should generally be a mix of short (1-2 days) and long term patrols (upto 6-7 days). Such patrols comprised of groups of staff drawn from different areas of the TR also bring about bonding and integration amongst the large number of staff in the TR.

Wherever possible, use of GPS by patrol parties should be encouraged. If plotted on a GIS domain, this can throw up interesting information on gaps in areas covered by patrols.

The use of **Deep Search Metal Detectors** (DSMDs) should be encouraged in areas where metal leg traps and snares are known to be used for poaching.

In areas which have a large water body, patrolling by motor boats or rubber dinghies should also be part of the patrolling plan.

Elephants in PAs are mostly used for tourism duties. However, occasionally, and especially during monsoons, elephants must be pressed into patrol duties as these can be the best All Terrain Vehicles in a forest.

Senior officials should also join foot patrols and other patrols periodically. This will give them a first hand experience of the area under their charge, as also to give a high degree of motivation to their first line of defence.

What to look for:

Patrols must actively look for signs of human presence which should ideally not be there. They must learn the art of moving slowly and silently in the forest, without advertising signs of their presence by smoking cigarettes or biris or walking on a hill crest with their silhouettes against the sky. They must check for human signs around waterholes or other water bodies, slat licks, forest trails, deserted camp sites etc. The party should be equipped with pH or Litmus paper to check for poisoning of waterbodies by urea. They should also look for machans on trees and ground hides near waterholes. If found the area near machans/hides should be searched for empty cartridges/ percussion aps or If any such trail or sign is seen, they must carefully trace and follow the same and try to surprise the infiltrators at their camp. Scan the hill sides and tall trees for any look outs/scouts who may be placed there to keep an eye on any approaching patrol. Surprise and swift action is the key in dealing with such situations. If it is assessed that the number of persons and their firepower is of an order that cannot be handled independently by the patrolling party, additional help should be summoned using the wireless, all the time keeping an eye of the offenders.

Full moon nights are generally known to be favoured by poachers. On and around such dates, special vigil must be mounted, especially around water holes and other water bodies. The units manning protection huts on elevated places must immediately report even the slightest flicker of light or any unusual tiger call at night.

Patrolling should be intensive during full moon bracket (5 days before and after full moon). During this time the patrolling party should look for these particular signs-

The units manning protection huts on elevated places must immediately report even the slightest flicker of light or any unusual tiger call at night.

If there are signs of the animal track being closed or narrowed down using twigs and branches or distractions in the form of cloth/flags being hung on branches.

If there are series of twin pits (one of 20+ cm diameter and another less than 10 cm diameter but 2-3 feet deep) on bridle paths indicating spring traps being set up and removed. Patrolling party should also keep a close watch on kills made by tigers.

Field staff regularly patrolling the forest areas should be aware of the presence and movement patterns of major species such as Tigers, Leopards and Elephants in such areas. They should actively look for direct and indirect evidences of such species' presence on a regular basis. Any inconsistencies should be immediately investigated.

Water bodies should be examined for signs of poisoning or of attempts of snaring or trapping around it. Sometimes, fishes are killed using chemical additives. This can be detected by telltale signs of small fish floating dead on the surface. Signs of poison such as sulphur and other chemicals ground on rocks near the water are also a pointer to such criminal activity.

The flight distance of animals and birds and their general demeanour in human presence is also an indicator of disturbance. In areas where hunting is common, animals are generally wary and keep a larger distance between them and humans. This is also true for areas which have a more frequent human visitation and such these need to be factored in also. Thus, animals in the relatively undisturbed "Core Zone" of a Protected Area generally have a larger flight distance than those in the "Tourism Zone". An entire Forest Range must be comprehensively covered once a month by such patrols.

A comprehensive Patrolling Plan will lay out the key areas to be patrolled, routes to be followed, persons responsible for leading the patrols and those for debriefing them, frequency of such patrols and any other significant facts related to the patrol. A copy will be available at each Range HQ and the Range Officer will be responsible for random deployment of Patrols within his/her Range so that the area is effectively covered. Trans Range Patrols should be organised periodically.

Cattle kill evidences are important signs to be observed. Sometimes, the aggrieved villagers retaliate by poisoning the kill, hence resulting in the poaching of wild animals. Professional poachers also keep an eye on cattle kills for ascertaining presence of carnivores. Where ex-gratia schemes are in place, speedy disbursement of such money is the first step towards preventing retaliatory killings. When a tiger or leopard is located at such a kill, it should not be disturbed but allowed to feed on it as otherwise it will only go away to make another kill. Driving away the animal from such a kill only leads to another conflict situation at some other point in time and space.

Certain areas are prone to a particular modus operandi for poaching like snares, traps, use of hunting dogs, poisoning of kills and water holes, electrocution, shooting etc. Based on the crime/ poaching history. Patrolling parties should be aware of such local variations in poaching techniques and especially look out for these during patrols.



Intelligence Gathering:

Intelligence networking is a very important pre-requisite for prevention of crime as well as for follow up after the crime has taken place. Intelligence deals with all things, which should be known in advance for taking actions in the direction of crime prevention. In this process after gathering the information, it is evaluated, analysed and used in the decision making. Advance information is key to success for prevention of crime and this emanates from intelligence.

The key to successful intelligence gathering is by trying to understand what needs to be known and who can provide such information.

- Intelligence / information is gathered from CONTACTS and SOURCES.
- Contacts are those persons who pass on superficial information. This information comes casually if one is careful enough to extrapolate and interpolate. The contacts could be press/ media persons, ironsmiths, junk dealers, lawyers, doctors, waiters, tea stall owners, village grocers, taxi / auto rickshaw drivers, bus conductors, street vendors etc. Making contacts is easier than making sources. Contacts are usually paid on the basis of the information supplied.
- Source is a special kind of contact who possess the inside information on what is going on. Sources can be permanent, temporary or casual.
- The best source is the one who is either insider or about to be engaged in the unlawful activities. Though difficult to cultivate, such sources give accurate information about the crime.
- The source could be a member of the gang itself or could belong to the criminal classes or the underworld. These sources could be members who live or operate in the fringe of the underworld.
- Permanent long standing informers/ sources are paid regularly usually given a permanent code / number for identification. Apart from general information he should provide specific information, about a crime, on demand. He should be helped during period of his illness/ hardship as long as he is faithful. There should be periodic review of the utility of such permanent sources / informers.
- Temporary sources are those who have proved their worth as casual source and are willing to cooperate in the future. They should also be paid on regular basis. After few years of testing they could be converted in to permanent source.
- Casual sources are most prolific and serve as the recruiting ground for the permanent and temporary sources.
- Secrecy on the identity of the sources should be maintained and his physical safety should be ensured. He should also be warned of the dangerous consequences for betrayal.

Heart of Corbett, poachers kill ranger

Cops stumble upon tanning factory



Skin trade 1 roots in De

1,200 rare birds seized

The world has recently the animal skin trade in India. In the Central and southern states the trade is rampant. A tiger skin is worth Rs 2 crore and a leopard skin is worth Rs 1 crore. The trade is illegal but the poachers are not deterred. They are using the internet to sell their skins. The government is trying to stop the trade but it is difficult. The poachers are using the internet to sell their skins. The government is trying to stop the trade but it is difficult. The poachers are using the internet to sell their skins. The government is trying to stop the trade but it is difficult.



Animal skins worth Rs 2 crore seized

18,000 leopard claws stare in Govt face

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The trade that hurts wildlife



The bare bones of an illegal trade



Poachers cross state borders to satisfy Sambhar meat lust

Skin traders using women as conduits: Official



neglect pushing medicinal herbs to brink of extinction



COMMUNICATION WITH SOURCES

- Establishment of an appropriate communication system with informers is extremely important. Direct contact with sources is the thumb rule. When a direct contact is not possible, telephonic or communication through letters may be resorted. In case of the telephone the source should always talk to the officer directly.
- On direct contact emphasis should be on secrecy and anonymity. The source could meet the officer at his residence under cover of darkness or at a lonely place. Payment to a source should be done directly.
- A system of should be also evolved to meet the source in emergency situations.
- A source should be briefed and debriefed suitably. It would be appropriate if a questionnaire is prepared before each briefing and debriefing.
- A separate file for each source should be maintained for the periodic review.
- Handing over and taking over of sources should be systematised, otherwise they will dry up. Proper introduction of the source to the new officer should take place.

Flow chart for intelligence gathering:

Collection--- Evaluation---Classification & Collation---Analysis----Reporting---
Dissemination & use---- Re-evaluation.





Running an Informer Network:

Careful selection should be done for posting of personnel in the sensitive areas of the PA as these are the persons on whom the mantle of security of the Tiger Reserve vests. They will also inspire confidence in people who want to provide information.

The motivation of persons providing intelligence information could be varied and needs to be treated accordingly. Usually, such persons respond best to contact with one person. This sometimes becomes a challenge in Govt. systems where length of an individual's tenure at a station may be limited. Sometimes the person providing the information chooses to remain anonymous and establishes contact on his own choice randomly. On several occasions such anonymous tip offs can be extremely valuable. Also, persons with a past history of indulging in poaching can also be motivated to turn informers.

In order to receive good information, the following must be ensured:

- The address/ Telephone contact numbers on which such information can be provided must be widely publicised and monitored regularly. This should be regularly verified by random checks by senior officers.

- All information received must be screened and acted upon without delay
- Identity of the informer must be concealed if so desired by him
- Resources MUST be available readily to buy the information/ provide reward whenever required
- A covert watch should be kept on the activities of known poachers and their key accomplices. If found missing from their normal place of residence, an alarm should be raised.
- Liquor vendors in the vicinity should be monitored regularly.
- Outlets for pesticide sales need to be monitored periodically.
- Please note that for undercover operations, disbursement of advances must be generally discouraged as it has the potential to actually encourage poaching in certain situations.
- Individuals and NGOs running undercover operations in and around a TR should be encouraged to keep atleast one link in the official enforcement hierarchy broadly informed of their role.

And finally, even the best of Intelligence, will be useful only if it brings about appropriate decisions. Thus, information from intelligence sources must be regularly checked, cross checked and ultimately acted upon within reasonable time, to have any meaningful impact.

Establishing a Criminal Profile Directory:

All TRs must maintain records of persons with a history of poaching and/or wildlife trade in their locality. This will include details about physical appearance, identification marks/signs, employment, family, key associates, criminal history, convictions if any, pending cases etc. Sudden and long absences of such persons from their normal place of stay must be investigated. Sudden acquisition of movable and immovable assets must also be investigated for possible sources of such transactions.

Photographic dossiers can be very useful in investigation. Maintenance of crime dossiers at the State level is very important. These dossiers can be collated with other states on a need base. In case of TRs located near international borders, such dossiers should have information about poachers from both sides of the border who are known to be active in the area.

In every case, the link of old crime to new offenders and old offenders to new crime should be regularly analysed.

Wireless Communication:

A dedicated wireless system is the backbone of security in a forest environment. In the present day, many forest areas are covered under the GSM or CDMA mobile telephony network of Govt. and private service operators and there is an increasing trend of communicating with field staff on mobile phones. Yet, the importance of wireless connectivity, especially in times of crisis cannot be overemphasised.

A list of wireless stations which have access to dedicated power supply and are working round the clock is to be maintained. Similarly, a list of other wireless stations and their working hours needs to be maintained. Call signs, preferably in code, should be given to key officials of the TR (eg. Alpha for Field Director, Delta for Deputy Director etc..)

The tendency of using wireless stations to primarily share information related to tourism and for visitor movement needs to be checked. This is primarily an enforcement tool and should be used as such. All wireless stations should convey a report, preferably twice a day at a predetermined interval, about activities in their area of command to a designated Control Room. This could include information about:

- Patrols conducted and Areas covered on that date
- Any signs of presence or movement of suspected poachers etc.
- Sighting or signs of wildlife such as tigers etc.
- Any wildlife mortality/kills etc.
- General welfare of staff

Even where there is nothing significant to report, the station should contact the Control Room with a Nothing to Report (NTR) message. If a station is not responding for a period of time, this should trigger a visit to the site to find about the welfare of local staff and possible reasons for the break in communications.

Use of modern gadgets like satellite phones & mobile phones etc may be explored for the purposes of communication. However, it is important that all such communication must be formally recorded/logged.



Firearms:

Several TRs provide official weapons such as rifles, double barrel guns, pistols and revolvers to field staff for discharge of their official duties in the protection of forests and wildlife. In many states, the use of such firearms is codified, clearly laying down conditions of use of such arms while in many other states, the use of such arms is under the general umbrella of "self defence". In such situations, if any person is injured or killed due to use of firearms by staff while on duty, there may be situations where such use of firearms could lead to criminal proceedings against the concerned Government official. This leads to a general reluctance of staff to carry, maintain or use guns, even in case where they are made available.

Field Directors and other senior officials of the TR should be able to explain to Field Staff, the conditions that govern the use of the official firearms provided to them. In case the regulations need to be modified, the matter may be taken up with the respective Forest Department Headquarters and the State Home department under intimation to the National Tiger Conservation Authority.

In the forest, cartridges are perishable commodities as they are exposed to the elements of nature all the time. As such, they must not be stored for long but should be fired occasionally to test the working conditions of the guns. All weapons in the field must be well oiled and cleaned regularly. Gun oil and cleaning rods etc. should be made available at all Patrolling Camps. If senior officials make it a point to check the general state of weapons with their field staff while on tour, they will be doing protection of the PA a huge service.

All field staff should be made to undergo firing practise atleast once a year at a regular firing range. Such an exercise can be easily carried out with support of the local police or Army unit who will also be happy to spare the services of their armourer to examine the general state of being of the weaponry.

All weapons should also be test fired atleast once or twice a year.

All official firearms must be issued to well recognised entities, i.e. at any point of time it should be possible to ascertain the person who is in custody of a particular weapon. Cartridges issued should be accounted for and empties returned to store.

A single firearm must never be carried in the field as it is liable to be targeted by miscreants. Guns are best sent out atleast in pairs. While walking, guns should be carried with the barrel pointing skywards or down and NEVER at chest level pointing ahead or backwards. A gun is not a walking stick and should not be used as one, as this could lead to the butt being damaged or dirt, water etc. entering the barrel and damaging it. In humid areas, it is advisable to plug the mouth of the barrel with a piece of cotton or cloth.

Response:

Despite best efforts, some times mortalities of important wildlife species are going to happen in the field. In many cases, this may be due to natural causes while in some, poaching for profit or human wildlife conflict may be the driving force.

The first step in such a situation is to ensure that there is no attempt to hide facts and the full details of the incident is brought out. If a cover up is attempted, it will only embolden poachers and also subordinate field staff who may fear to report such cases for fear of disciplinary action.

A Scene of Crime:

Significance of the Scene of Wildlife Crime

The scene of crime holds the key to successful investigation of the case. The offender is likely to leave behind vital clues at the scene of crime. Many critical evidences are likely to be lost if the place is overrun by a large number of people.

The quality and quantity of evidences available at the scene of crime are likely to change rapidly with the passage of time. Gathering of people at the scene, weather conditions, light conditions etc. are some of the important factors that contribute to



the destruction of many important evidences from the scene of crime. Delay in visiting the scene of crime might affect the quality of investigation drastically.

Prompt action at the scene of crime may also lead to the arrest of culprits. Promptness in reaching the scene of crime might lead to obtaining valuable information from the persons who may have information related to the offence. The first set of information received from such persons may be very valuable in establishing the direction of the investigation while the same version obtained at a later stage is likely to be modified or edited due to various other considerations. It is important for the investigating officers to understand that in many wildlife offences, the carcass may have been moved, often by other carnivores etc. to a place other than where the offence was actually committed, thus further complicating the scenario. As such, there can be a primary scene of crime and it is possible to have several extensions. In order to investigate a crime successfully, it is absolutely essential for the investigating officer to pay undivided attention to **protect, observe, process and record** the scene of crime properly. Any damage, or tampering of the scene of crime, whether intentional or otherwise, would adversely affect the quality of investigation.

It is important to establish linkages between the scene of crime and the suspect(s) through the circumstantial, corroborative and physical evidences. From the forensic point of view, it is only the physical evidences that provide the I.O. and the court the following information about the crime:

- Nature of crime
- Time and place of commission
- Targeted species
- Manner in which the crime was committed i.e. modus operandi
- Particular weapon/tool used
- Number and nature of persons involved (any specific group, tribe etc.)

The scene of crime should be thoroughly searched in a systematic matter so as to locate and collect all evidence linked to the crime. Access to the scene of crime should be carefully restricted so that evidence is not destroyed. Some of the things they may look for are:

- Weapons, bullets, empty cartridges.
- Blood stains, hair, bone pieces, vomits, saliva, glass, paint, finger prints.
- Shoes, tyre marks and tracks.
- Cloth or other fibres, caught on bushes
- faecal material.
- Footprints.

- Matchstick, matchbox, cigarette butts, gutkha pouches.
- Implements possibly used for carrying out the crime
- Places where the offender(s) may have stayed or sheltered or laid an ambush in the forest.

Forensic Tools such as fingerprinting, collecting of specimens of blood, footprints, examination of cartridges, weapons etc. should be made use of to strengthen the linking of the offenders with the crime.

When evaluating and examining such crimes, it is important to try and link such crimes to previously identified offenders. This linking of "New Crimes" to "Old Offenders" based on key evidences including modus operandi and forensic tools will go a long way in building the criminal Profile Directory of criminals in and around a given TR.

Flow Chart for Action When a Wildlife Crime/Mortality is Detected:

- Inform the concerned senior officer immediately.



- Reach the spot at the earliest possible time with basic tools & forensic kit.



- Cordon off the area with the help of rope or tape.



- To facilitate collection of evidence, divide the crime area in to grids or radial circles.



- Note down every bit of information on the spot in a notebook or in a recording device. Please note that the weakest ink is still stronger than the best of memories, which can fade with time.



- Do not disturb/ touch/ manipulate the evidences unless photographs have been taken and sketches prepared. Take photographs from different angles. Try to make a video recording of the crime scene.





- Record foot prints of animal(s), human beings, and tyre marks of vehicle if any. Plaster casts may also be prepared of these.



- Search and collect all possible evidences carefully in original condition with preservatives if needed. Search must be carried out at the eye level, ground and above eye level also. Properly pack and label the physical evidences.



- Make a note of names, addresses of witnesses and record their statements.



- Details of the crime scene like location, time, date, weather condition etc. may be recorded.



- Collect evidences from scene of crime, carcass of animal, body parts, and suspects on the spot.



- Surrounding area of the spot must be thoroughly searched.



- Route/ escape followed by the suspect(s) must be checked for evidences.



- After recording evidences from carcass for wounds, bullet injuries, symptoms of poisoning, seizure & labelling, the body should be sent for post mortem.

Please note that information about such mortality/crime/seizures should be brought to the notice of the Chief Wildlife Warden and NTCA at the earliest [possible].



Collaboration with other Enforcement Agencies:

Memorandums of Understanding with other enforcement agencies like Shashatra Seema Bal (SSB), Border Security Force (BSF), Central Reserve Protection Force (CRPF), Railway Protection Force (RPF), Indo- Tibetan Border Police (ITBP), Assam Rifles etc will prove to be a very useful strategy in combating poaching and illegal trafficking.

Media Management:

Wildlife crimes attract a lot of media attention. If not handled properly, Park Management authorities often face undue criticism. Efforts should be made to provide fair and accurate information to the media, without any attempt to hide or distort facts. A statement/press release should be made available, giving details of the incident for providing information to the media and public. If considered necessary, a Press Conference may also be organised. Only the authorised officer should talk to the media and sweeping statements should be avoided. In situations where the media persons want to visit the field, this can be facilitated after keeping into account other operational exigencies. Please note that the media is also performing its role in reporting such instances and if they are not provided the information, they may resort to reporting unverified and inaccurate versions of the incident, which can do greater damage.

And Finally....

A Security Plan is worth the paper it is written on, only if it is implemented in letter and more importantly in spirit. The key is to carry out regular security audits by senior officials, test preparedness and response times regularly so that in times of a real crisis, the entire system responds like a well oiled machine. As is often said in the Army, "Sweat hard in peace, so that you bleed less in war".

CONTINGENCY PLAN

Emergency situation of following type may take place:

- POACHING
- FIRE
- DISEASE
- FLOOD

To deal with any of the above situations, prescriptions are given in the Tiger Conservation Plan of the Tiger Reserve. However for quick planning and understanding following steps are suggested:



POACHING

- Information/seizure/ dead animal/ body parts at site
- Collection of evidences at the site
- With forensic tool kit, photographs etc
- Booking of offence and related prosecution process.
- *Supervision must be at the level of Range Forest Officer.*

FIRE

DISEASES-Epidemics

- Precautions- Treatment of water holes, vaccination of cattle of adjoining areas
- Proper disposal by burning of dead bodies
- Treatments

FLOOD

- Construction of mounds,
- Use of rafts
- Floaters,
- Drainage of excess water
- Pathway or elevation
- Vaccination for possible outbreak of diseases.

Notes



Notes



