

REPORT

PROGRAM:

RHINOCEROS AND TIGER CONSERVATION FUND

SUPPORTED BY U.S. FISH AND WILDLIFE SERVICES

PROJECT TITLE:

**Educating Local Communities for Mitigating Human - Large
Carnivore Conflict & Conservation of Tigers & Leopards**

Period of Performance: 8/4/2015 to 9/30/2017

In

**Peripheral forest and buffer of Tadoba Andhari Tiger Reserve in Chandrapur
District, Maharashtra State, India.**

Reporting Period – June 2015 – July 2017

Date – April 10th 2018



Tiger Research and Conservation Trust

Registration No: E- 1664 Dated 26th September 2001

Registration Under Section 80G of the Income Tax Act vide Certificate - F.No CIT-I/80G/T-27/2006-07 Dated 27/06/2006

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SUMMARY:

Local communities are the largest stakeholders in the conflict between humans and large carnivores. To mitigate human – large carnivore conflict in the Tadoba / Chandrapur landscape, TRACT has created a leadership initiative within local communities in 86 conflict affected villages. This is to ensure participation of the villagers as individuals and as a community in the efforts to manage and mitigate these issues. This has been achieved through the establishment of village Primary Response Teams called Sangharsh Suraksha Samitis (SSS) [Conflict-Protection Committees] and building capacity within these groups to avoid or handle conflict situations through education and awareness.

In this reporting period, TRACT has worked with 609 local youth (87 conflict mitigating teams) of 87 conflict affected villages in the buffer zone and the forested corridor of Tadoba.

71 teams with 7 members each of the local community were created in 2013-2015 under the program supported by USFWS. 16 more villages that have faced severe conflict in this year were included under this program for conflict mitigation and teams made taking the number of villages under this program to 87

Awareness program for these 87 villages and informal gatherings in the schools for children were conducted. Training workshops for these 87 teams have been held to inform them of the reasons of conflict and to understand their role in this mitigation.

Follow ups, feedbacks, large carnivore presence, livestock losses and conflict cases have been observed in the landscape through the period of the project.

This leadership initiative has resulted in local ownership for the mitigation, a level of ownership towards altering their code of conduct for addressing their security and an overall reduction in the number of conflict cases in the villages under this program.

OBJECTIVES:

The villages in the buffer zone and forested corridor of Tadoba Andhari Tiger Reserve, in the Chandrapur landscape, have suffered high levels of conflict between people and two large carnivores, tigers *Panthera tigris tigris* and leopards *Panthera pardus fusca*. This conflict area surrounds the inviolate core of the tiger reserve and extends into the forested corridor towards the northern wildlife parks. It is primarily a human dominated landscape interspersed with dense forest cover.

This high level of conflict has been the result of various conditions and required a multi-pronged approach for mitigation.

Over the years the State government has contributed support in terms of financial compensation for loss of human life and domestic stock, along with field personnel of the State forest department trained by TRACT to monitor carnivore presence and offer some level of protection to the forest and wildlife. However, it was imperative

to involve the local communities in this effort as they are the largest stakeholders in this landscape and suffered maximum losses from conflict situations. Successful mitigation strategies could only be achieved through the continuation of this collaboration with local leadership, created for the management of this dynamic conflict situation.

Objectives of this program:

1. Continue the efforts to make the 72 local village teams self-reliant and capable of minimizing conflict.
2. Expand the program to incorporate 16 more villages in the conflict region.
3. Implement a communication network among these 87 teams.
4. Strengthen the early warning system for conflict among the local communities

ACTIVITY SCHEDULE: (June 2015-July 2017)

Monthly period from June 2015 - December 2016																			
Activity	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Workshops -1 with 71 villages	x	x	x																
Workshops -2 With 71 villages							x	x	x										
Survey					x	x				x	x								x
Workshops -3 With 71 villages												x	x	x					
Expansion survey																x			
16 new teams Meetings																	x		
16 New teams Identified																	x		
16 New team workshops																		x	x
School awareness				x	x						x	x			x				

2017 January - July						
ACTIVITY	Jan	Feb	Mar	Apr	May	Jun
Feed back – presence / threats	x	x	x	x	x	x
Village visits – to meet teams	x		x		x	
School awareness visits	x		x		x	
Meetings with Officials	x	x	x	x	x	x
Cattle kill data						x

METHODOLOGY:

The TRACT team consisting of two field personnel continued the collaboration and outreach with 497 local leaders of these 71 SSS teams in the villages under this program (2013-2015). The objective of this was to take their training to a higher level and increase awareness in the village, workshops were held every 5 months in each village.

WORKSHOPS:

Workshops – Round 1. June- August 2015:

The first round of these one day workshops was commenced in June 2015 and took nine weeks for all 71 villages to be covered. The positive response from some of the villages and the teams there was very encouraging.

The TRACT team inquired about the presence of wild herbivores and large carnivores near the villages and fields. They also inquired about the work done by the team in their respective communities since commencement of the last program (2013-2014). All aspects and occurrences of conflict in their respective areas and the reasons for the threats from large carnivores were listed and the ways to mitigate them discussed. Local grievances about loss of livestock to tigers and leopards were noted along with any complaints about delay in receiving compensation for livestock loss and the poor amount received per animal as compared to the market value.

People also spoke about the conflict between them and the wild herbivores, in the form of crop damage and the difficulty in registering these cases for compensation with the government.

Workshops – Round 2. December 2015-February 2016:

During this period workshops in all 71 villages were repeated and the drills for conflict situations were conducted again with the teams. The TRACT team checked the peripheral areas of each village with the SSS teams to check for conditions that lure leopards to these villages and lead to conflict.

The SSS teams were questioned about the work carried out by them in conflict cases, in creating awareness among their community and in situations of carnivore presence near their village. Tract also discussed with the teams how they implemented general awareness in their community and about the do's and don'ts to be followed by individuals and as a community.

The TRACT team also addressed issues of the delay in compensation cases in some villages.

Workshops – Round 3. June – August 2016:

The TRACT team focussed on the behaviour of the community towards the SSS team and whether the forest department officials and the forest guard acknowledged the teams work and their importance.

Any changes in the level of conflict in the area was checked, and the additional work done by the team was monitored.

The forest guards present in the villages were also encouraged to have a discussion with the team to ensure that they are utilizing a similar methodology for their mitigating work.

ADVOCACY & SUCCESSES:

Policy advocacy: Integrated development in villages for conflict mitigation:

TRACT has successfully advocated for a State Government scheme which is for the Integrated development of the villages in the buffer of 6 Tiger Reserves in Maharashtra State. Under this program, the State has brought in schemes for mitigation of conflict between people and both tigers and leopards in 166 villages near forested areas.

To reduce threats to people here from large carnivores, the state has sponsored toilets, water supply, solar fencing to farms, solar lights to village lanes, E- learning, LPG gas and other provisions which will reduce the dependence of these communities on the forest, thereby reducing their movement in the forest. This has ensured a reduction in conflict and an improvement to local wildlife habitat and the lives of the communities.

The TRACT team addressed the progress of this scheme in the villages through their workshops and created awareness among communities for the use of the toilets and the LPG gas for cooking.

HAND HOLDING AND FOLLOW UPS:

The TRACT team has maintained a regular communication with all teams. Each team was met with by the TRACT personnel to inquire about their work within their communities. They were encouraged to share their information about conflict with their community members. Repeat drill were done with the teams. Discussions about the code of conduct and the reasons of conflict were done. Their apprehensions about the compensation for crop raids was addressed by getting the forest guards to clear their cases at the earliest.

The TRACT members have continued their work in the schools, discussing general conservation and conflict issues with the school children and the teachers.

The TRACT team networked with the SSS teams to keep track of the carnivore presence near these villages through these teams.

EXPANSION OF THE PROGRAM:

Increasing conflict was reported between people and large carnivores in the southern degraded forest area of Tadoba Andhari Tiger reserve in 2015. Consultations were held with the forest officials in this area in Central Chanda, and based on the number of cattle kill reports and past conflict data, 16 conflict affected villages were selected for expanding this program.

Field survey: The TRACT team spent a month in this area, visiting more than 30 villages which had conflict and high presence of wild carnivores in their area. The team held meetings with the forest guards in this region to understand their level of dialogue with the local community.

Following from these meetings with village heads of 30 villages were conducted to explain the program and ensure their acceptance and involvement. From the completion of this, 16 of the most amicable villages with high conflict were selected.

Team selection: The TRACT team then visited each of these 16 villages again and in consultation with the forest guard and the senior members of the village, the 7 individuals for the new SSS team were selected.

One day workshops were then held in each village, to explain the following through presentations, pictures, manuals and discussions:

1. Sharing of natural resources and land with large carnivores
2. Reasons for carnivore presence near villages and fields
3. Reasons for attacks by large carnivores
4. Carnivore behaviour
5. Ways to reduce threat of attacks by individual behaviour
6. Code of conduct for this
7. Ways to reduce presence of carnivores near village by community efforts
8. Identification of indirect signs of large carnivore to detect presence
9. Ways to alert community to threat
10. Protocol in cases of conflict
11. Network for help during conflict situations
12. Dialogue with the local forest guard to manage co-existence with large carnivores
13. Other issues of crop damage by wild herbivores
14. Manual and how to use it
15. The need in creating awareness in their community through the team

The TRACT team has been in touch with these 16 new teams on a weekly basis to understand the carnivore movement near their villages and to assist the teams with their work.

SCHOOL AWARENESS PROGRAMS:

The TRACT team in the reporting period has conducted short programs among schools in 50 of the buffer villages. The school children (age group 1-4) were informed about the risks to them from large carnivores during:

1. Movement after sunset
2. During open defecation in the scrub near the village periphery
3. In the field if they are by themselves or in a small group
4. When they accompany their elders and are scattered in the bush for collection of wood.

The children displayed positive reactions and were curious about wild animal behaviour and wanted to learn more.

LIST OF 87 VILLAGES: 71 + 16

VILLAGES IN THE FIRST PHASE OF THIS PROGRAM (2013-2014)

(71 Villages: 49 in the Buffer and 21 in the Corridor of Tadoba Andhari Tiger Reserve)

S.No	Buffer Village	S.No	Buffer Village	S.No	Brahmapuri Division
1	Karwa	26	Agarzhari	50	Pitichua
2	Pangdi	27	Adegaon	51	Chandgaon
3	Jamsala	28	Warwat	52	Tulanmal
4	Khatera	29	Mamla	53	Halda
5	Bhadurna	30	Waigaon(Mokasa)	54	Awadgaon
6	Padzari	31	Nimbada	55	Parsodi
7	Karwan	32	Chek Nimbada	56	Bodra
8	Katwan	33	Chek Borda	57	Banwahi
9	Pandharwani	34	Haldi	58	Bikli
10	Piperheti	35	Peth	59	Kunghada(Chak)
11	Shirkada	36	Zari	60	Rengatur
12	Piparda	37	Fuljhari	61	Huma
13	Sonegaon	38	Bembda	62	Pawanpar
14	Wadala	39	Waigaon	63	Kotha
15	Arjuni	40	Nimdela	64	Ghot
16	Ghosri	41	Kolara	65	Mangli
17	Mudholi	42	Deori	66	Chikmara
18	Khutwanda	43	Karbada	67	Kacchepar
19	Tekadi	44	Bamangaon	68	Shedegaon
20	Katwal	45	Satara	69	Dahegaon
21	Sitarampeth	46	Alizanza	70	Dongargaon
22	Kondegaon	47	Doni	71	Nimdhela
23	Bhamdeli	48	Pahami		
24	Junona	49	Singalzari		

25	Dewada				
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PROGRAM EXPANSION - LIST OF 16 NEW VILLAGES

1	Satri	7	Sirsi	12	Kochi
2	Chanakha	8	Temburwahi	13	Sakharwai
3	Panchada	9	Tulana	14	Ranweli
4	Murti	10	Sungthana	15	Kapangaon
5	Nalphadi	11	Bordgaon	16	Kowegaon
6	Asta				

OBSERVATIONS:

1. The dialogue between the forest guard and the teams still needs to be improved
2. Response of forest guards to teams is poor or missing
3. Program needs to continue to assist with the teams until they take total ownership of this effort
4. More incentives are needed for these teams to encourage their work
5. Team members have requested for wages on the days when monitoring is required
6. The villages are demanding funding for secure barns for domestic animals

SURVEYS: (2015)

The TRACT team has been conducting regular surveys of the conduct of the team, the community reactions to the team and the level of work done by SSS.

SURVEY ANALYSIS: TEAM PERFORMANCE

- 71% of the teams feel motivated to work
- 80% of the teams have helped mitigate conflict near their village, mostly against fire -fighting and for monitoring carnivore presence
- Three teams have had 1 member depart the team
- 37% of the teams have had more people in their community seeking to join them.
- Only 25.4% teams have been holding regular meetings with their communities

- 61% villages have reported conflict in their area during this reporting period, with more than half in relation to tigers and livestock
- 56% villages have had livestock losses
- Only 68% of these have applied for compensation for livestock loss
- All these 68% have received compensation
- Almost all of them are not satisfied with the amount of compensation received
- Only 10% of villages have reported attacks by wild animals on people. Most of these cases are by wild boar and only one person has been attacked by a tiger
- 100% of villages have suffered from crop damage by wild herbivores, mostly by wild boar. Other wild herbivores responsible for crop damage are spotted deer, and Nilgai.
- Only 34% have applied for compensation as the process is difficult, slow and compensation received is insufficient
- 65% teams agree that their work will help mitigate conflict
- 65% of the villages generally respect the work done by these teams, the others mostly are indifferent. It's interesting to note that these villages which feel otherwise have not had conflict yet.
- 77% of the teams have directly contributed to conflict mitigation in some form, most of them have worked with the forest guard in their area.
- Only 27% have raised conflict issues with the community about collective measures to be taken to reduce conditions which lure large carnivores to the villages. This is primarily because some villagers still do not accept the team's authority and these changes also require funding.
- 68% of the teams are participating as a group for mitigation resolution with the forest guard and in talking to the community.
- 70% have been using the issued manuals during their informal talks with the community
- 85% feel the manual is very useful

- 98% of the teams have informed the forest guard and TRACT team whenever any issue with large carnivores has arisen.
- 82% of the forest guards are aware of the team in the village. The non-performance of the other teams is the reason otherwise.
- 61% of the teams have helped the forest guards with varying issues in the forest, mostly with fire-watch patrols and monitoring carnivore presence in their area.
- 66% of the teams have seen large carnivores and their signs near their villages. Majority of these reports are of leopards followed by tigers. The teams have also seen sloth bears in their area
- 46% of the teams have identified presence purely with indirect signs and have taken the effort to report this to the local forest guard
- 45% of the villages agree that conflict has reduced since the implementation of the teams
- 63% are overall happy about having these teams in their community

CONFLICT MITIGATION: COMMUNITY MEASURES & THE GAP

1. 76% villages ensured that their livestock is secure at night
2. 66% have followed the instruction in the manual in conflict situations
3. 36% villages have taken individual precautions about their movement in the forest alone etc.
4. Only 27% of the villages are using toilets
5. Only 25% have stopped collecting firewood, this has been due to the distribution of LPG gas through the government schemes
6. On average, every village still has 30-40 stray dogs, this lead to leopards coming close to the village to prey on them.
7. 63% of the families dump their garbage outside the village precincts.
8. 100% of the villages understand that biodegradable garbage can be made into fertilizer, but no one has sought to achieve this.
9. 100% of the teams and their community realise that plastic can harm animals
10. 100% realise the threat to them by open defecation and the pollution to air and water

SSS TEAM INPUTS / OWNERSHIP TO MITIGATION:

Some of the inspiring examples of the SSS team's successful conflict mitigation through the reporting period are mentioned here. This clearly shows an ownership to the concept of handling conflict at their level and minimising the damage to the habitat and the animals; securing themselves and their community

Village Chak Borda: The SSS doused fire in the forest adjoining their village before the forest staff could reach the location. Their timely work undoubtedly saved a large area of forest. The team informed the villagers, and the village men and women took utensils from their homes filled with water to help the SSS team in dousing the fire. They were mildly injured during the process.

When Leopard movement was seen in the village, the SSS team divided and took turns doing night patrols and monitoring in the village along with the youth of the village. Making noise with utensils and bursting fire crackers resulted in the leopard moving away from the village without any conflict with people or livestock.

Village Tekadi: Sloth bear movement was reported near the village and one person was injured by the animal. The SSS promptly helped the victim to be taken to the hospital, and informed the Forest department about the attack. Night patrolling was done in the village by the team to ensure no more attacks took place and to monitor the movement of the bear.

This SSS team has been conducting wildlife awareness meetings regularly for the villagers. Information about wildlife movement is regularly received by the TRACT team.

Village Ghosri: SSS team became aware of a poaching case of wild hare, and immediately informed TRACT and Forest authorities. Their timely reaction and assistance helped the department in apprehending the poacher.

The SSS team has doused fire in the adjoining forest of Tadoba after dark with the help of their community people. This team takes initiative in outreach and talking to the members of the village in conflict meetings, conducts group discussions and problem sharing meetings. The team has also helped villagers to find their missing livestock and assisted in the compensation process at the time of attacks.

Village Kondegaon: The SSS team has provided a good response at the time of workshops and helped in spreading awareness. Crop damage is a major problem in this village and the team has assisted the village farmers to obtain Solar fencing from the department. Thus, the crop damage has been reduced by a considerable amount. The team also helped the villagers to claim crop raid compensation from the department.

The community here are very environmentally aware and wildlife conscious, they refrain from activities which can harm wildlife or create conflict, such as grazing livestock inside the forest or dumping waste outside villages.

Village Nimdela: Last year (i.e. 2015-2016) leopard movement near this village was frequently resulting in attacks on cattle and stray and domestic dogs. The villagers

requested for this animal to be captured and destroyed. The SSS team informed the department about the negative views of the community.

The leopard managed to enter a home after a few days, whereby the SSS team stepped in to resolve the situation. They instructed the youth to cordon off the area, kept the mob in control until the arrival of the rescue team, and helped the department to rescue the animal without creating any mob situation.

This team has always been very helpful to the department, and has done a lot of work for the community.

Village Bhamdeli: The SSS team members here are also involved in tourism and development, and are conscious of the harmful effects of pollution. They have created a Plastic Pollution Control team which searches for any plastic scattered around the village and removes this garbage and ensures its correct disposal. They also have created an awareness program for this issue.

Due to their high vigilance and increased levels of activity of the team this village has not reported any case of forest fire or major conflict with wild animals.

The team has also assisted in safely removing sloth bears and leopard out of the fenced resorts near the village.

Village Mangli: This village is located within the buffer forest zone and frequently records wildlife movement. However, the SSS team and villagers have optimistic values for forest and wildlife and help the TRACT team and department in creating awareness and tolerance regarding wildlife.

The village is active in other committees and help in creating revenue from MFP collection

Village Bhadurni: The SSS team continually assist the department in monitoring large carnivore densities.

On one occasion, a tigress gave birth to cubs and subsequently was reported missing. The SSS team informed the department and cordoned the area until the arrival of the department's officials and then aided the department in monitoring the area until the tigress was located.

On another occasion a sloth bear had become trapped in a pipe near railway tracks, and was unable to free itself. The SSS team informed the department and helped with the subsequent rescue and release mission.

Village Pitichua: Leopard movement was frequently recorded near this village, the villagers had informed the department but received no response. The SSS team carried out night patrols, helped spread awareness and informed the villagers about keeping cattle pens secure. They also provided the points described in manual to the villagers for codes of conduct to be followed at instances of carnivore movement.

No conflict occurred during this episode thanks to the SSS team activity.

Village Piperheti: This team is one of the most successful teams under the program. They immediately inform the department and TRACT in any case of conflict situation, such as forest fire, cattle injury/kill, and assist the department in dealing with these

conflicts. The team has regularly spread awareness regarding the various schemes provided by the department and inform the villagers about the benefits it can provide to help save wildlife. Through the government funding scheme mentioned earlier, this village has successfully been implemented with toilets.

Village Waigaon (Bhoyar): This SSS team consistently monitors the village and its surrounding forest during summer periods and helps the department in any case of fighting fires. The team assists local villagers at the time of claiming the compensation in any case of conflict.

Village Piparda: Leopard movement has been frequent near this village, with regular attacks on goats and calves. The SSS team helped the villagers by doing night patrols and deterred the animal away from the village by making noise with utensils and sticks. This team has regularly aided the forest department in forest fire controls.

Village Chek Nimbada: The TRACT team received a call from one of the members of this SSS team regarding presence of a Sloth bear in a field adjoining the village. One of the local farmers sighted the bear and instantly switched on the current in the Solar fencing, potentially endangering the animal. The SSS team realizing the threat to the bear, immediately shut off the current and monitored the animal. However, with the absence of any help from the forest department, the team used the protocol of the issued conflict manual to plan the safe exit of the bear from the fenced farm without any injury to the bear or person.

Village Peth: The SSS team helps the village by clearing the shrubs and bushes along the periphery to prevent it acting as cover for wild animals, which may result in surprise attacks on people, hence avoiding conflict. The villagers have implemented solar lights individually outside their homes to keep the area well lit and deter wild animals.

There is 100% LPG distribution in the village which has considerably reduced firewood collection.

Village Tulanmal: When a wild tigress gave birth to two cubs near this village, the SSS team immediately informed the forest department and helped them in cordoning the area until the cubs and tigress were safely shifted to the forest.

The SSS team has planted around 1000 trees in the village vicinity under the government scheme.

The team is very active and informs the department and TRACT of every wildlife movement in their vicinity and any conflict situation.

Village Khatera: Due to various schemes run by government, the dependency on forest products is very minimal and the team is very environmentally aware. The team takes initiative at the time of workshops and village meetings and help create awareness. The village works in coordination with the department.

Village Banwahi: The team is very active and organizes various wildlife awareness meetings in the village. They have been using the conflict manual and the instructions in it about the various code of conducts in their meetings with the community. The team does patrolling with the department and has a reduced conflict since they have started their work.

Village Doni: The SSS team has assisted the villagers in crop raid compensation claims and dousing forest fire with the help of their other community members. The team helps creating awareness regarding cleanliness and organizes sanitation drives from time to time.

(2013-2015)

FIGURES – DATA CHARTS FROM 71 VILLAGES: (49 IN BUFFER & 22 IN CORRIDOR)
Data indicates percentage of villages

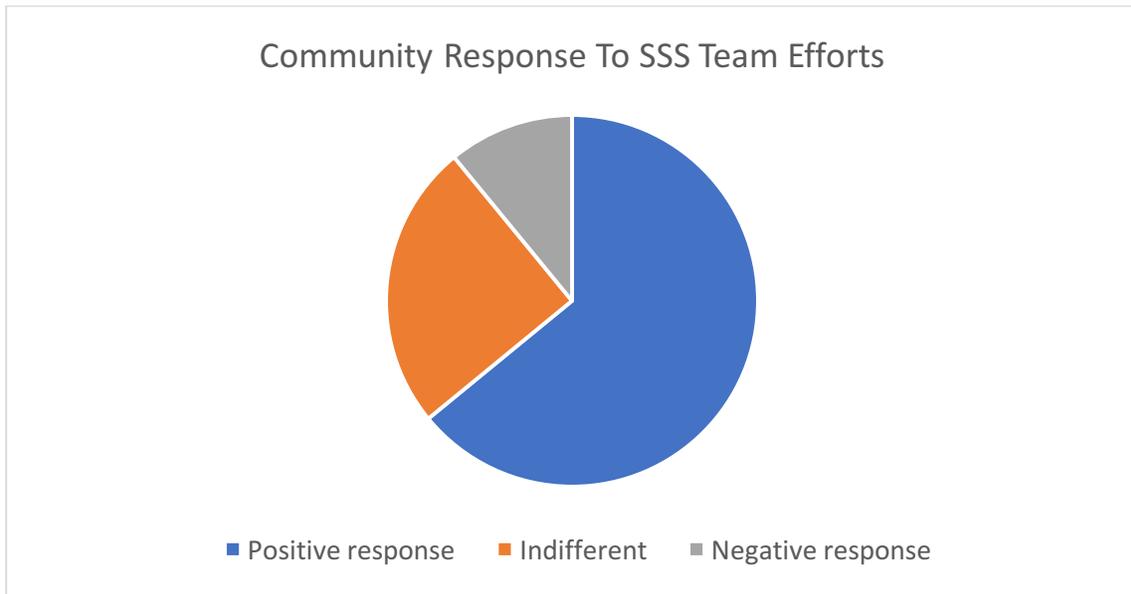


Figure 1: Response of the village community to the SSS team and their efforts

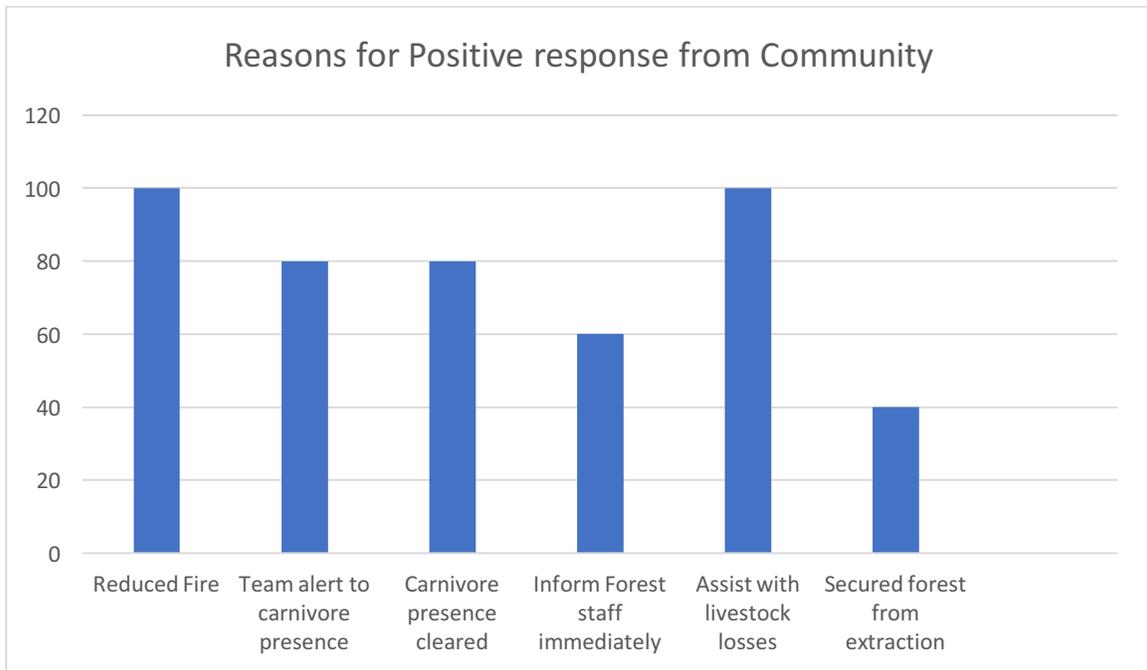


Figure 2: Reasons for the support & positive response to SSS teams from the village community

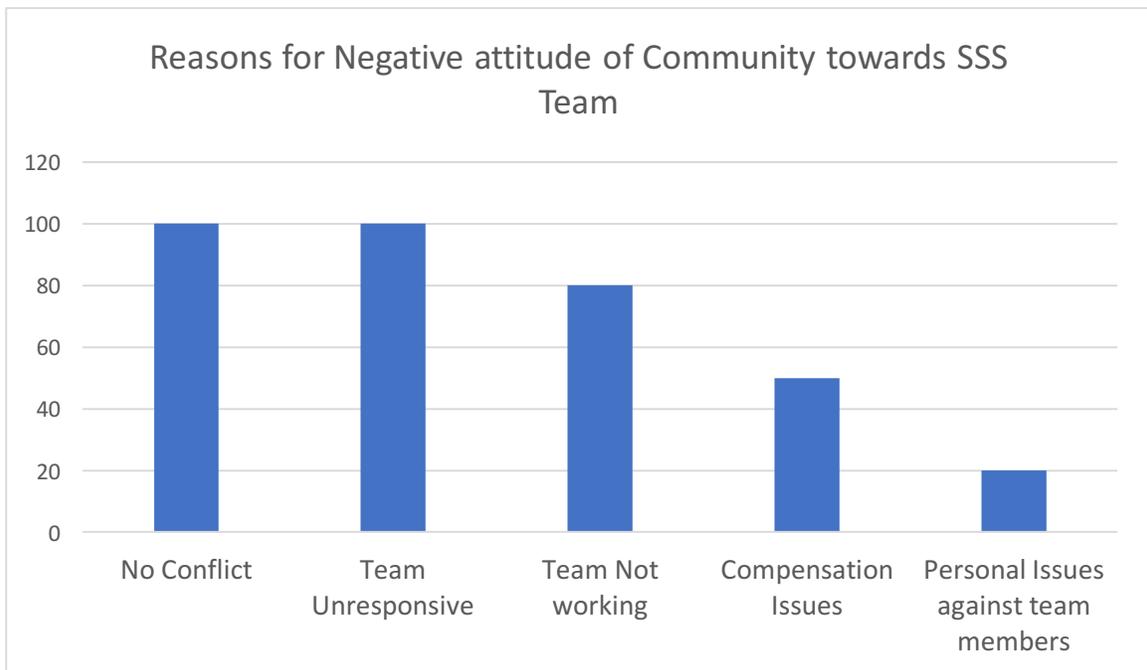


Figure 3: Reasons for lack of support or negative response from the village community

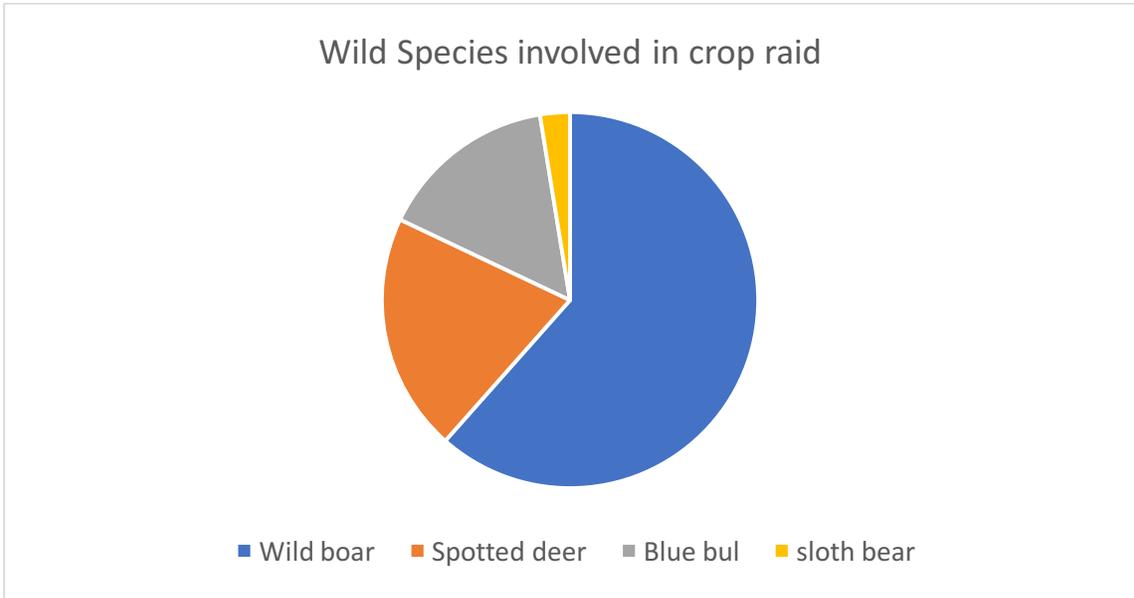


Figure 4: Species responsible for crop damage. Does not indicate amount of damage

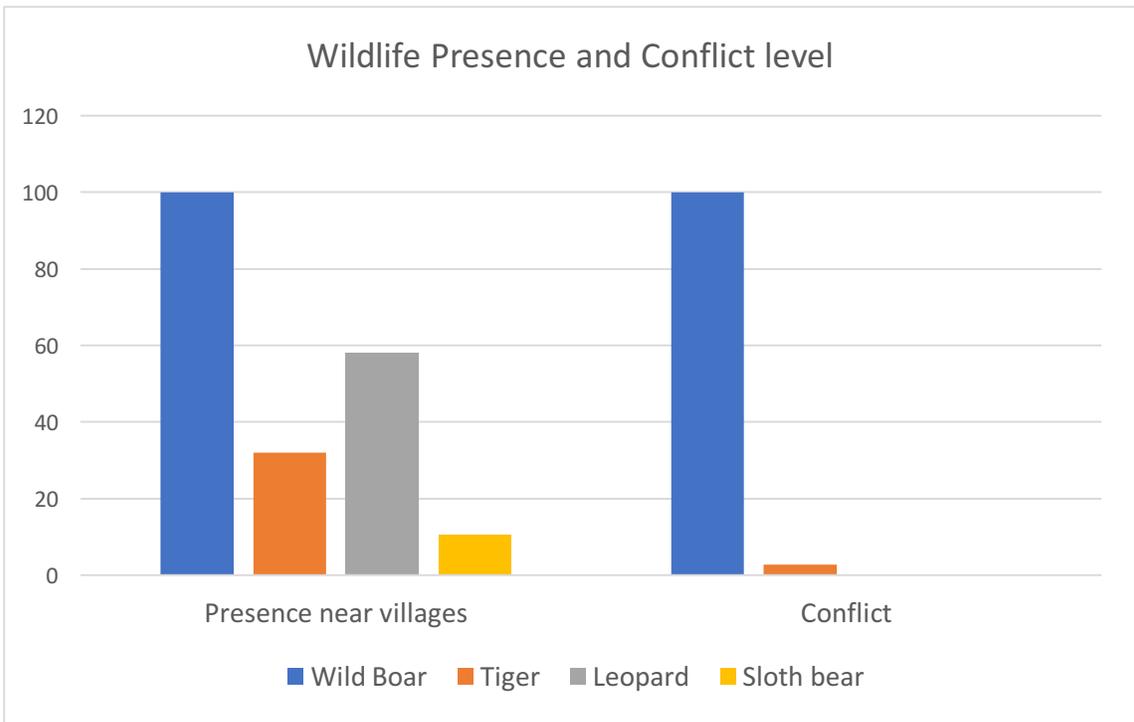


Figure 5: Post program - Presence of wild species near village & level of conflict

**PRESENCE OF TIGERS & LEOPARDS NEAR VILLAGES & THE LEVEL OF CONFLICT:
21 OF THE 71 VILLAGES IN CORRIDOR OF TADOBA (IN BRAHMAPURI DIVISION)**

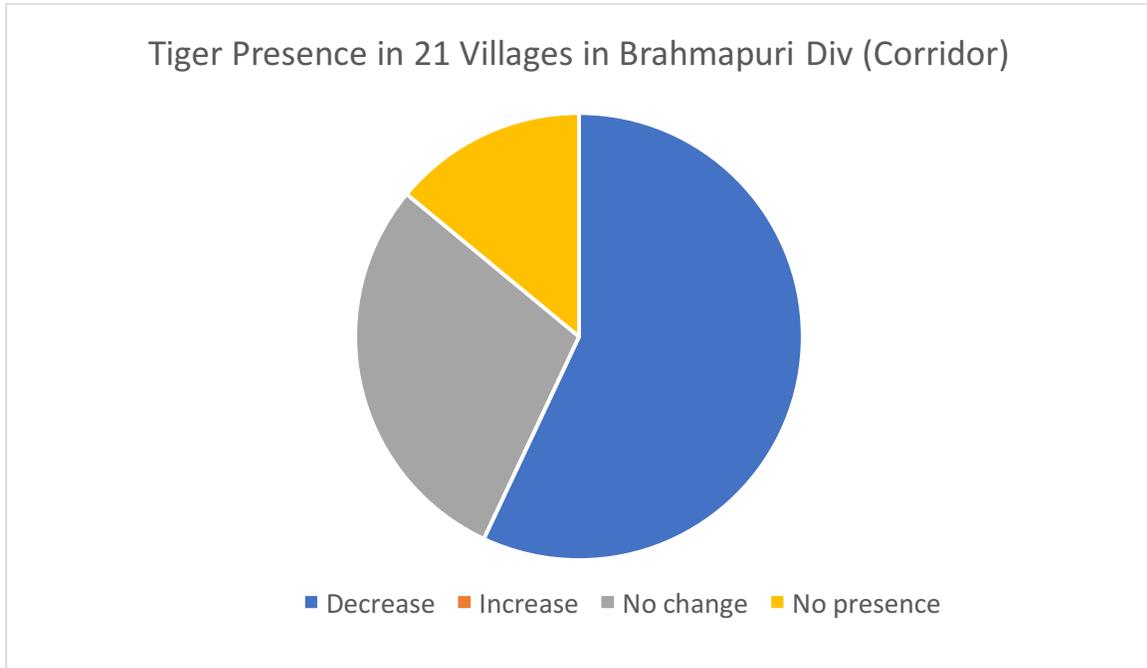


Figure 6: Change in tiger occupancy near 21 villages in the corridor as compared to pre-2015 March

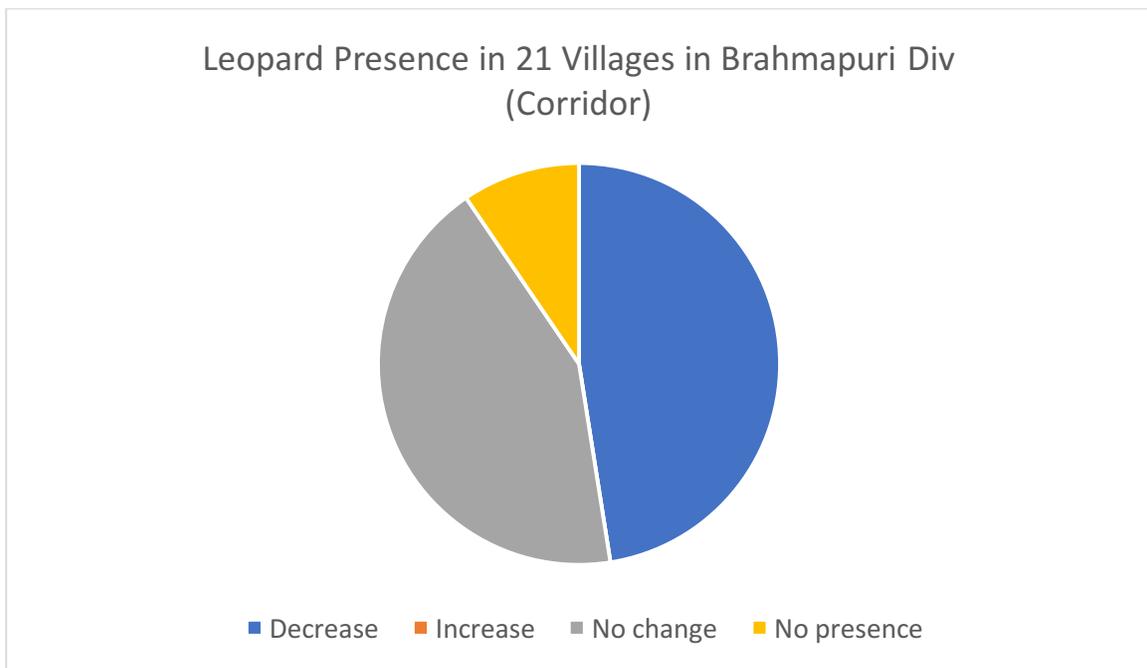


Figure 7: Change in Leopard occupancy near 21 villages in the corridor as compared to pre-2015 March

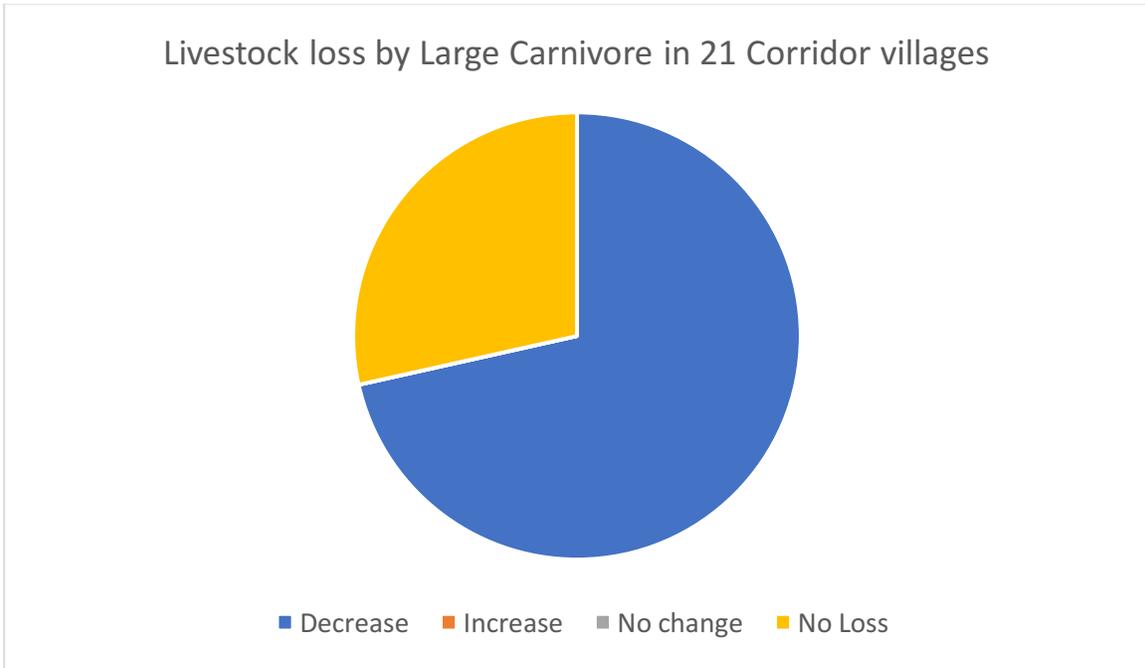


Figure 8: Change in the loss of livestock near 21 villages in corridor as compared to pre-2015 March. These are not indicative of the amount of loss.

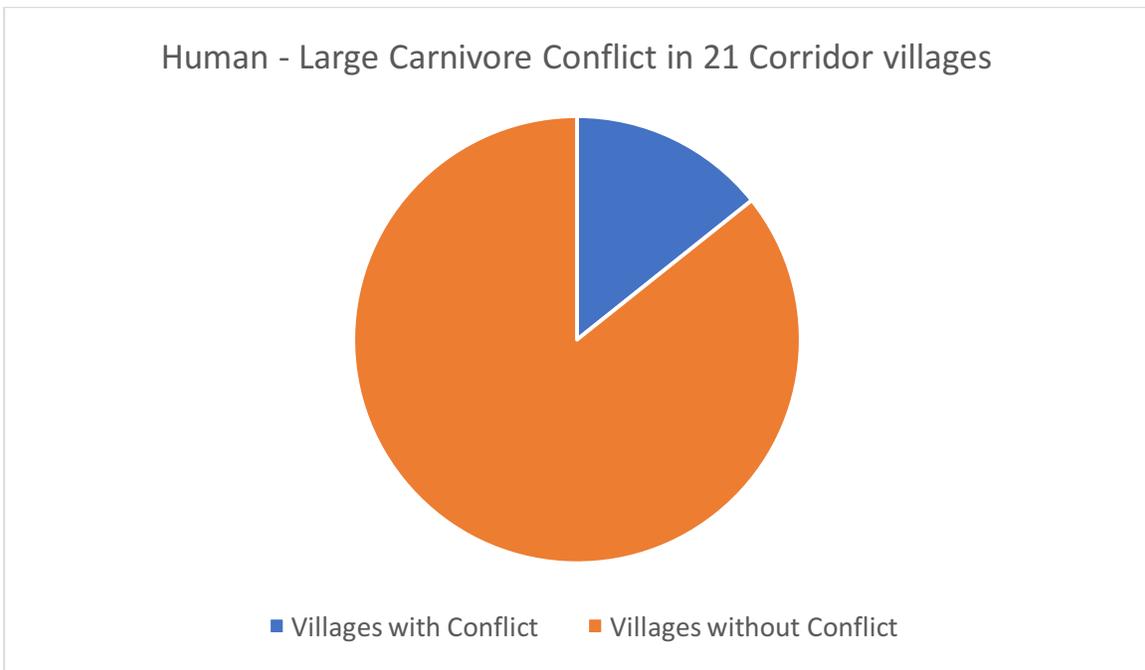


Figure 9: Villages with conflict post program

PRESENCE OF TIGERS & LEOPARDS NEAR VILLAGES AND THE LEVEL OF CONFLICT: IN 49 VILLAGES IN BUFFER OF TADOBA:

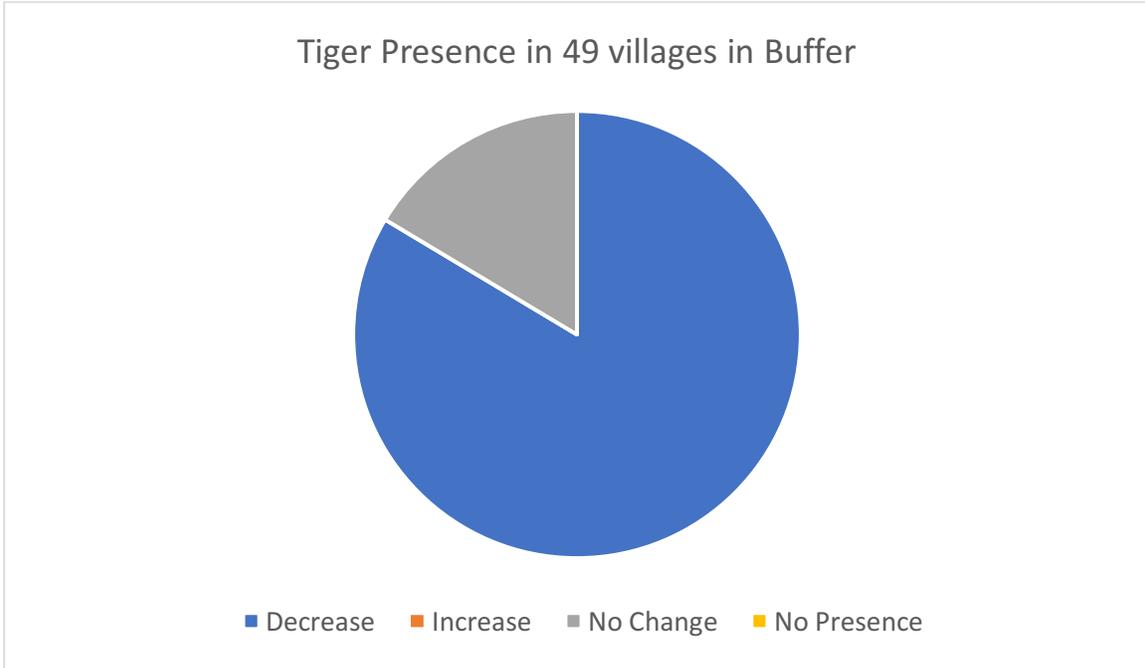


Figure 10: Change in tiger occupancy near 49 villages in the Buffer as compared to pre-2015 March

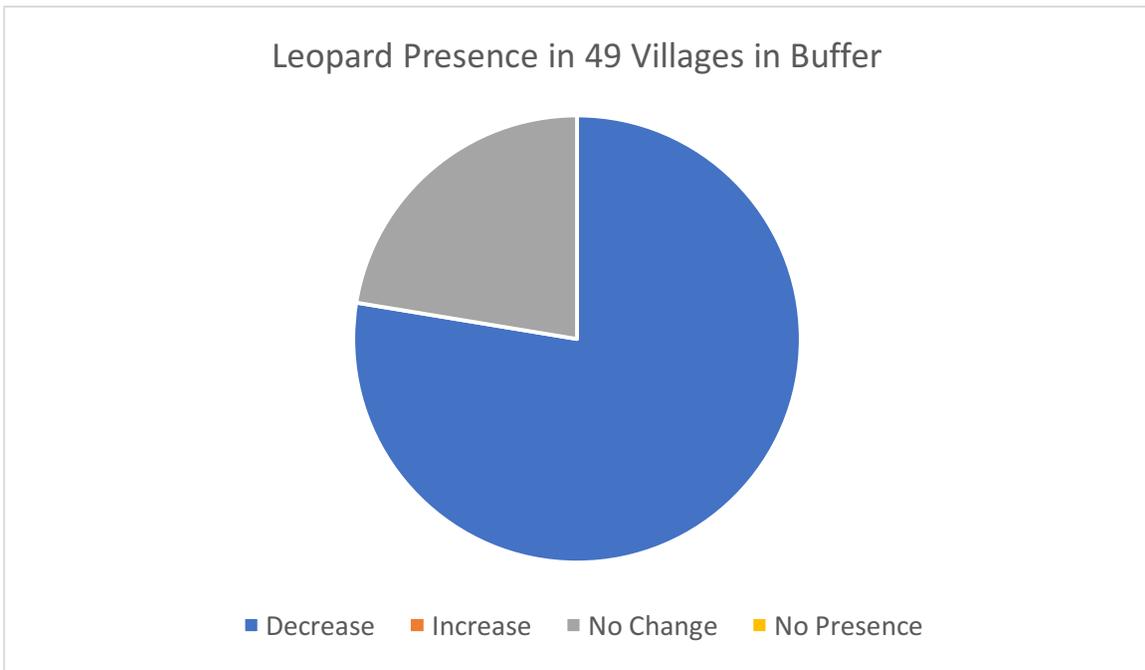


Figure 11: Change in Leopard occupancy near 49 villages in the Buffer as compared to pre-2015 March

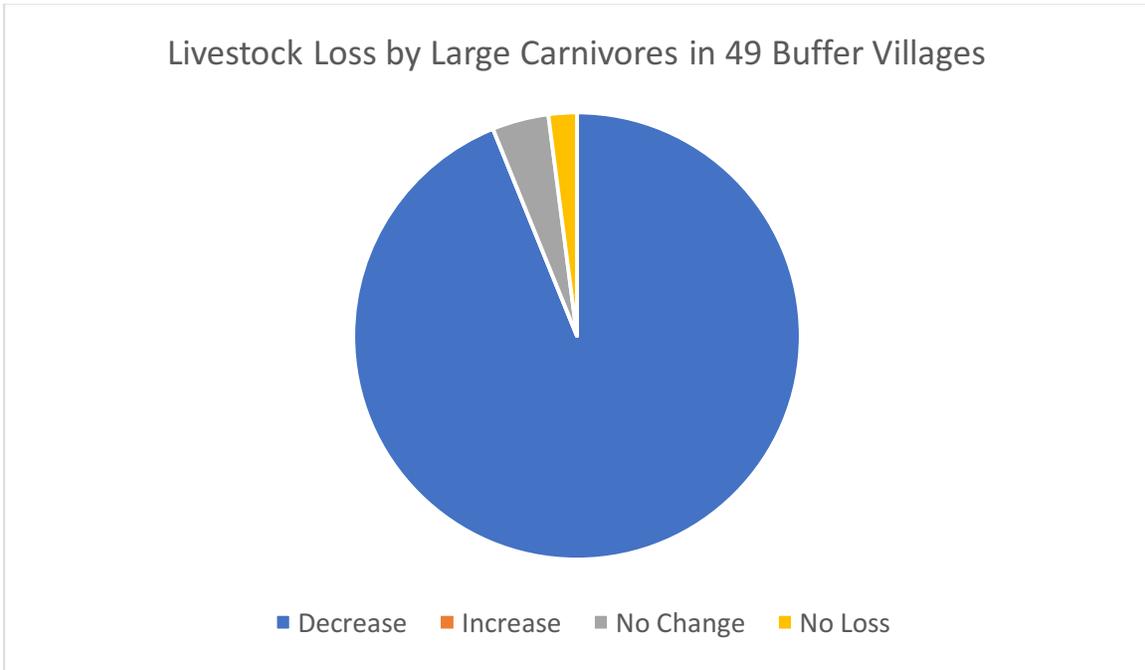


Figure 12: Change in the loss of livestock near 49 villages in Buffer as compared to pre-2015 March. These are not indicative of the amount of loss.

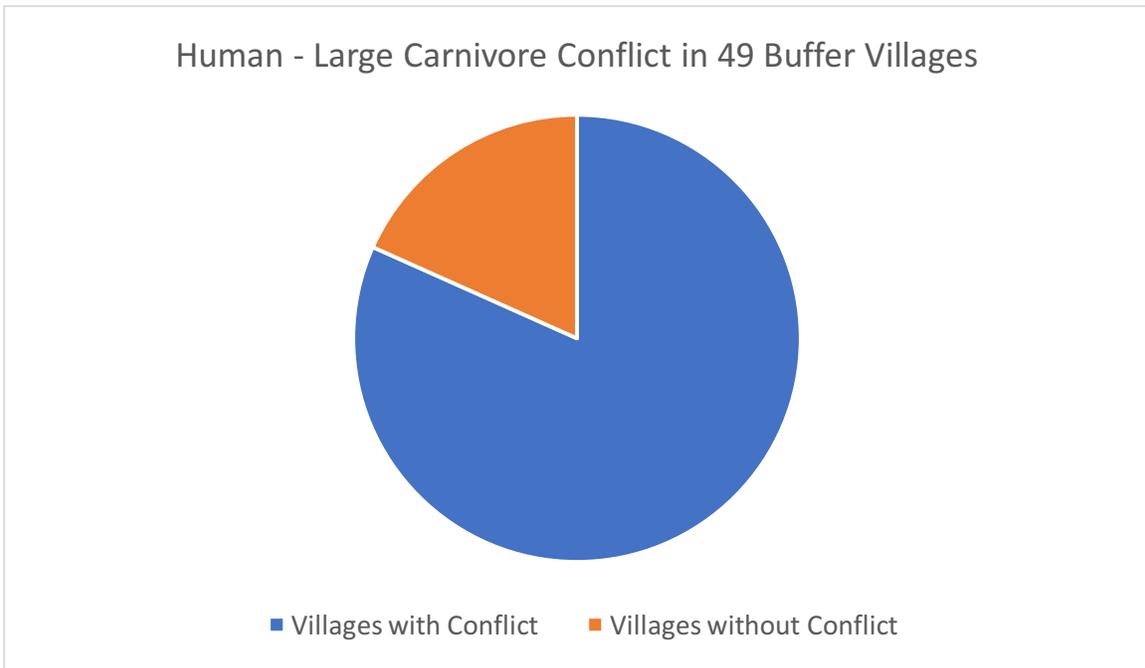


Figure 13: Villages with conflict post program

POSITIVE CHANGES POST PROGRAM:

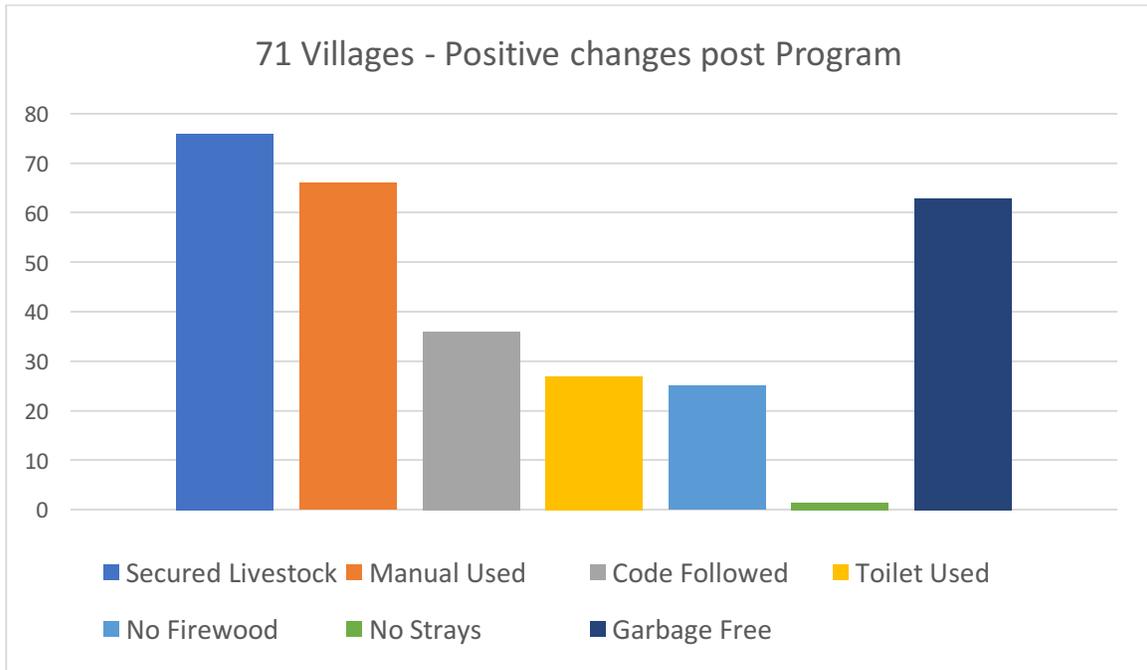


Figure 14: Villages under the program with positive changes for mitigation

REDUCED CONFLICT POST PROGRAM:

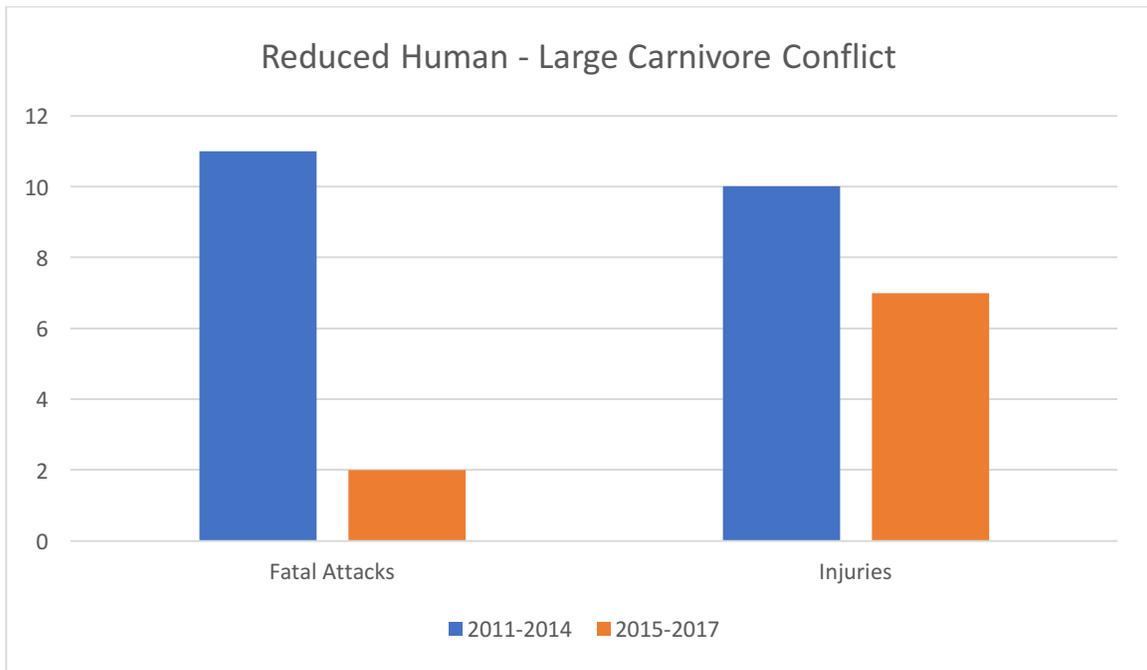


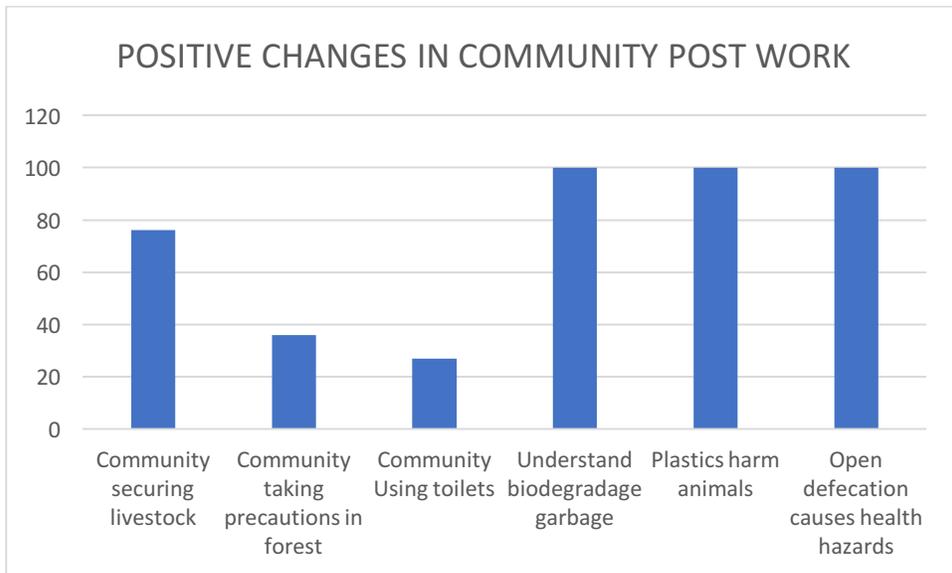
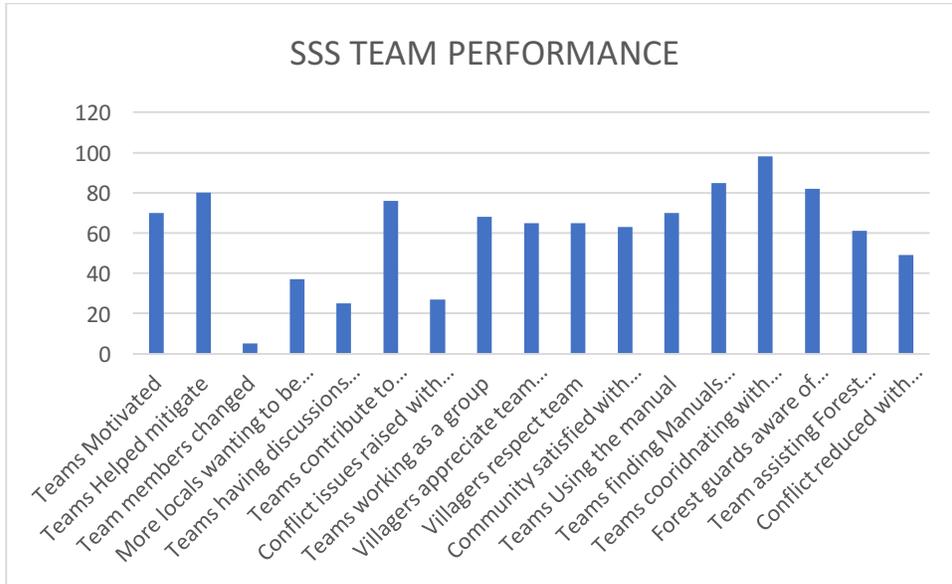
Figure 15: Decreased attacks on people by tigers and leopards before and after program

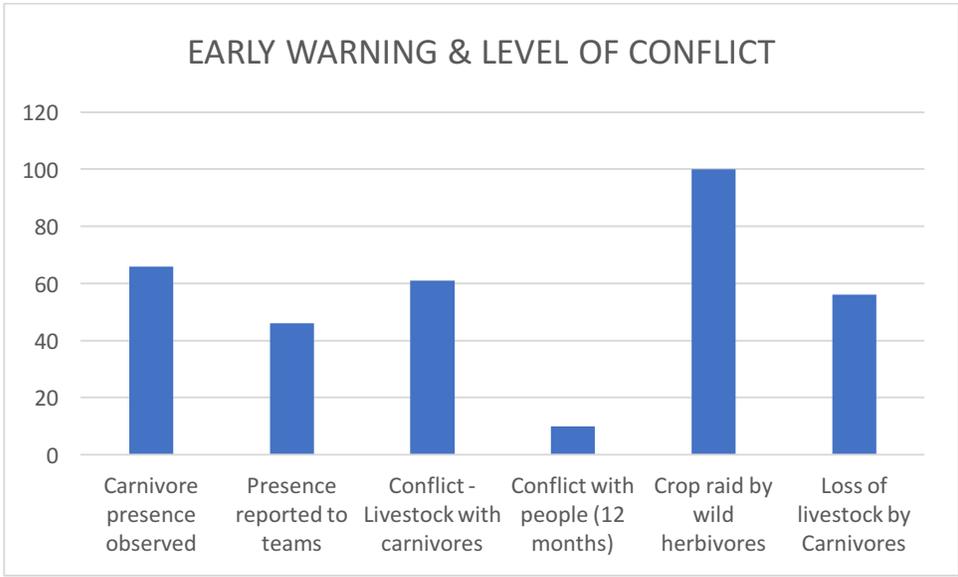
SURVEY FORM: 2015-2016

1. Have the teams been motivated in their work?
2. Has there been one or more occasions where they have helped mitigate conflict?
3. Has there been any new members on the teams?
4. Are more people wanting to be part of the teams?
5. Have the teams been having regular discussion meetings?
6. Has there been recent (<6months) conflict between people and carnivores?
7. Has livestock been killed?
8. If yes, has compensation been filed for?
9. Has any compensation been received?
10. Are they happy/ok with how much compensation has been received?
11. Has there been any attacks on people from carnivores in the past 12 months?
12. Has there been conflict with crop raiding by herbivores?
13. If yes, have they filed for compensation?
14. If they have suffered crop damage and not filed for compensation briefly outline why not
15. Do villagers feel the teams are working/helping?
16. Do villagers respect the teams?
17. Have they directly contributed to conflict mitigation?
18. Have they raised conflict issues with the community?
19. Are the team's participating as a group for mitigation resolution?
20. Have they been using the issued manuals?
21. Do they feel the manuals are useful?
22. If issues have arisen, have they informed the forest guard of the problems?
23. Are the forest guards aware of the team in the village?
24. Have they helped the forest guard in the past 12 months with any issues? (e.g. Fire control)
25. Has anyone witnessed tigers/leopards/sloth bears near the village?
26. Has anyone reported presence of carnivores near the village by indirect signs? (eg pug marks, scats)
27. Has the community addressed conflict issues by the following means
 - a. Ensuring their livestock is secure at night?
 - b. Follow the manual when conflict situations arise?
 - c. Taken individual precautions (e.g. Not entering the forest alone)?
 - d. Are they using the new public toilets?
 - e. Have they stopped collecting firewood?
 - f. How many stray animals do they have? (dogs)
 - g. What is the system for garbage collection? (burn, dump etc)
 - h. Do they understand biodegradable garbage can be made into fertilizer?
 - i. Do they realise plastic can harm animals?

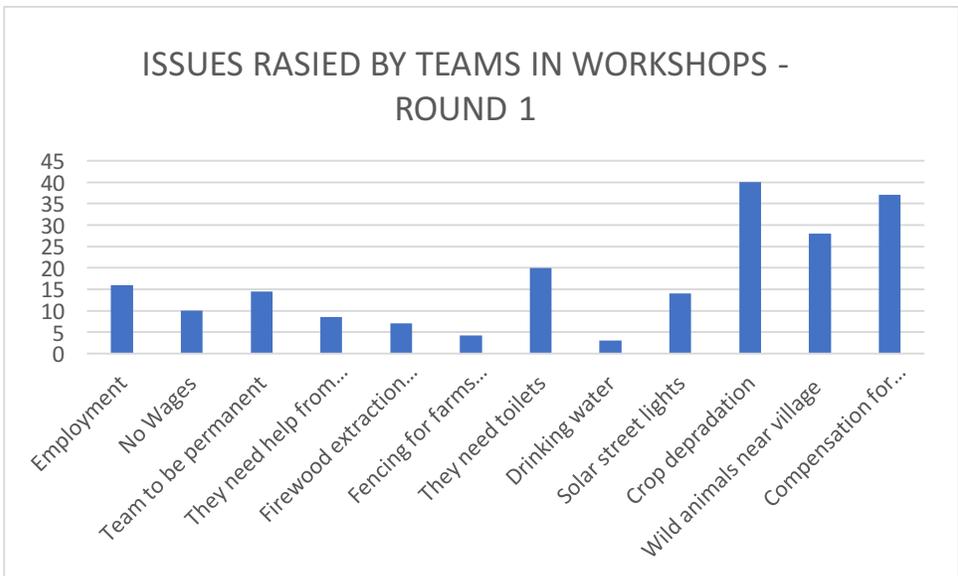
- j. Do they realise when they use the toilet in the open, the dry dust they breathe contains this human waste? (it causes diseases)
- 28. Overall would the community agree that conflict has reduced since the implementation of the teams?
- 29. Overall are they happy about having these teams in their community?

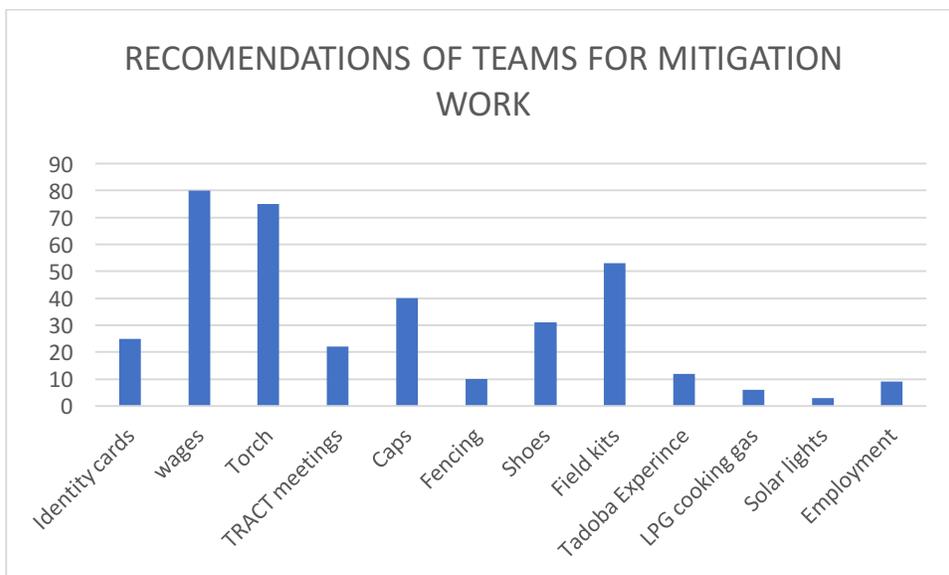
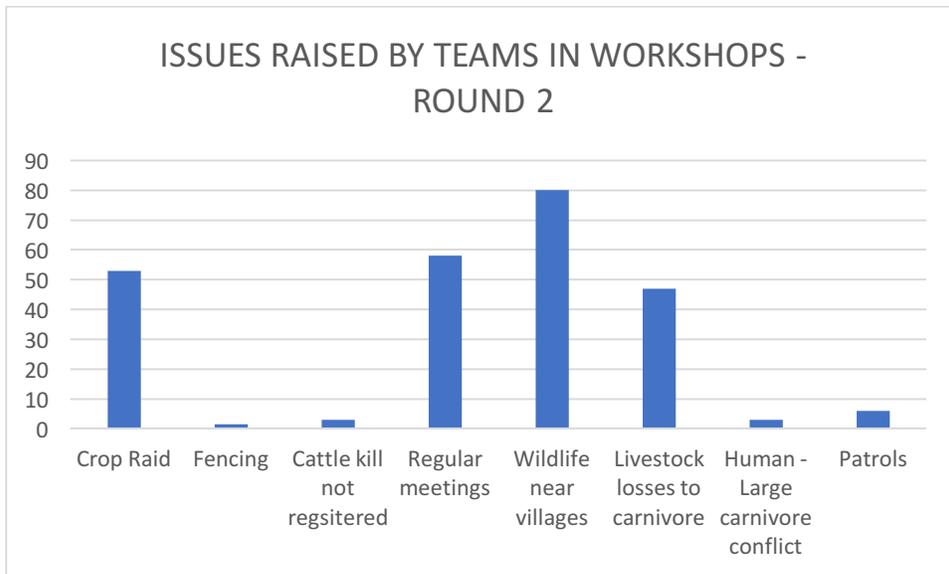
SURVEY ANALYSIS: 2015-2016





FEEDBACK FROM WORKSHOPS: 2015-2016





EXPECTATIONS OF THE TEAMS:

The teams who have been working for this cause have been asking for torches and shoes to facilitate their work. They have also requested for Identity card for their teams. The teams have been given jackets to be worn during their work to give them a visible identity. Extra manual copies have also been given to them along with banners for the code of conduct to be followed by individuals and the community to minimize conflict. Banners for individual villages have also been given to be used by the team for their meetings.



Pic 01: TRACT team with village heads before workshop



Pic 02: TRACT team encouraging SSS team member to address the community



Pic 03: TRACT team ensuring leadership of SSS team members in village workshop



Pic 04: TRACT team with local elder in village checking the saplings grown by the SSS team behind the school premise



Pic 05: SSS team member helping forest staff douse forest fire



Pic 06: TRACT team assisting locals with The new LPG gas connections as an alternative to firewood use



Pic 07: TRACT trustee Harshawardhan Dhanwatey with the TRACT team checking carnivore presence



Pic 08: TRACT team & SSS team addressing open well which are threats to wildlife



Pic 09: TRACT team with the SSS team of women



Pic 10: Toilets under the State government scheme for villages to mitigate conflict



Pic 11: Poonam Dhanwatey, Trustee TRACT, with the TRACT team checking conditions near village



Pic 12: School awareness programs



Pic 13: Monitoring LPG distribution under State Government scheme to villages



Pic 14: Program workshops filmed for being showcased in documentaries

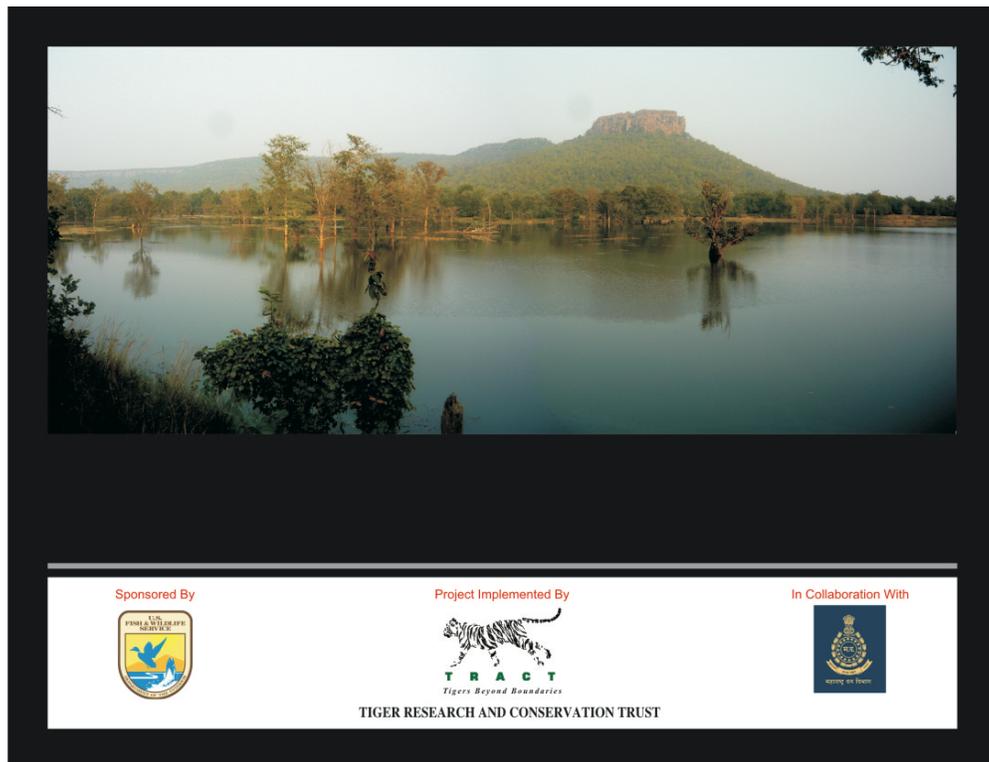


Pis 15: Poonam & Harshawardhan Dhanwatey conducting workshop in village

MANUAL FOR CONFLICT MITIGATION



Manual: Conflict Mitigation handbook: front cover



Manual: Back cover

CONFLICT MITIGATION COMMITTEE (CMC) Leadership in Local Communities for Conflict Mitigation

Member _____ Village _____

Protocol For Village Meetings (to be Conducted by Members of CMC)

- Share information about tiger/leopard presence near village
- Gather information about Tiger/Leopard presence from Grazers
- Display Information about Mitigation measures in Village
- Share importance about tigers and conservation in schools
- Conduct awareness meetings every 15 days in village
- Create awareness about Tiger/Leopard behavior in forest
- Ensure proper disposal of livestock carcass by burning/burying
- Clear village periphery of shrubs and bushes
- Ensure proper disposal of domestic waste or garbage from village
- Keep the wells in the village and fields covered
- Ensure secure barns for livestock
- Reduce strays dogs from village premise/precinct
- Encourage use of toilets by community



Manual: Conflict Mitigation handbook, with the basic

Rules / Code of Conduct for Villagers

Do's-

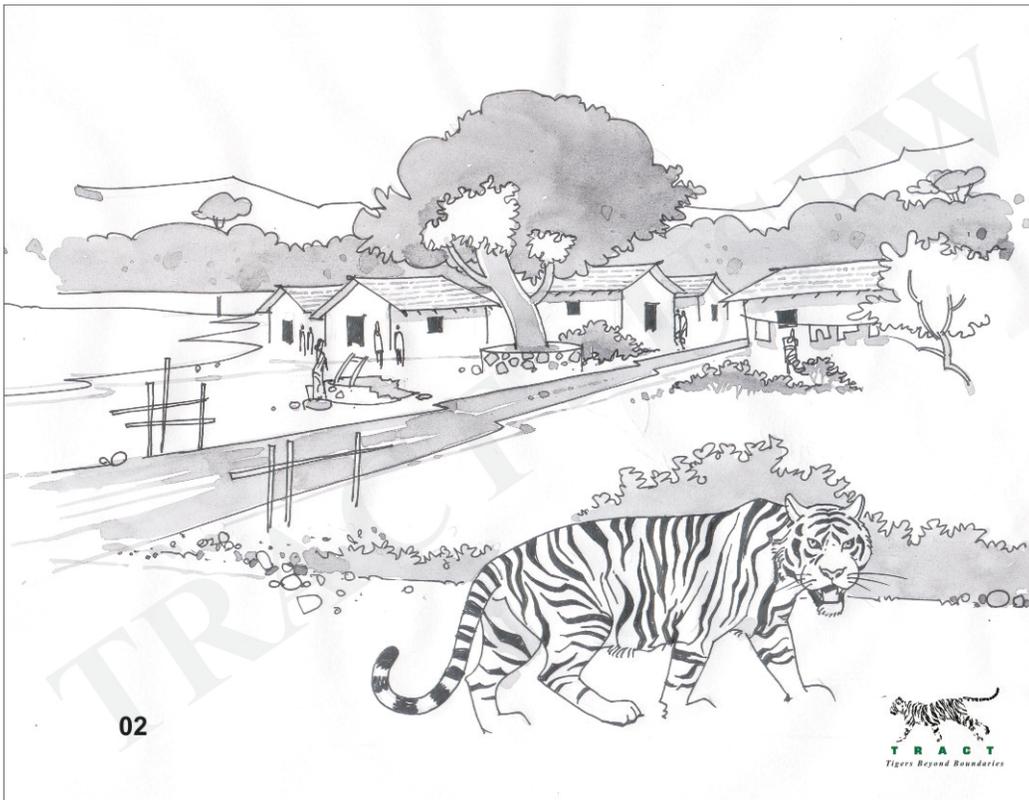
- Collect Minor Forest Produce and firewood in a group
- Be alert about wildlife presence near villages
- Make loud noises while going through the forest
- Grazers should be on alert about carnivore presence in forest
- If any cattle kill happens, immediately inform the Forest Guard and CMC
- Give information about large carnivore movement to Forest Guard, CMC

Don'ts-

- Do not trespass or venture alone in the forest
- Avoid going in the forest before dawn or after dark
- Avoid defecating in the open, near bushes and after dark
- Do not take livestock for grazing inside dense forest
- Avoid using the water bodies in the forest after dark
- Avoid areas with carnivore presence

01





Tiger / Leopard sighted near Village Occasionally

- Confirm the sighting
- Inform your CMC and forest guard on phone or in person
- Do not throw sticks or stones at the carnivore, it may attack
- Alert the villagers about carnivore presence
- Keep people away from the area of carnivore presence
- Do not surround the carnivore
- Keep a watch on the area till the animal moves away
- Give way for the carnivore to retreat to the forest
- Do not obstruct the carnivores movement

03



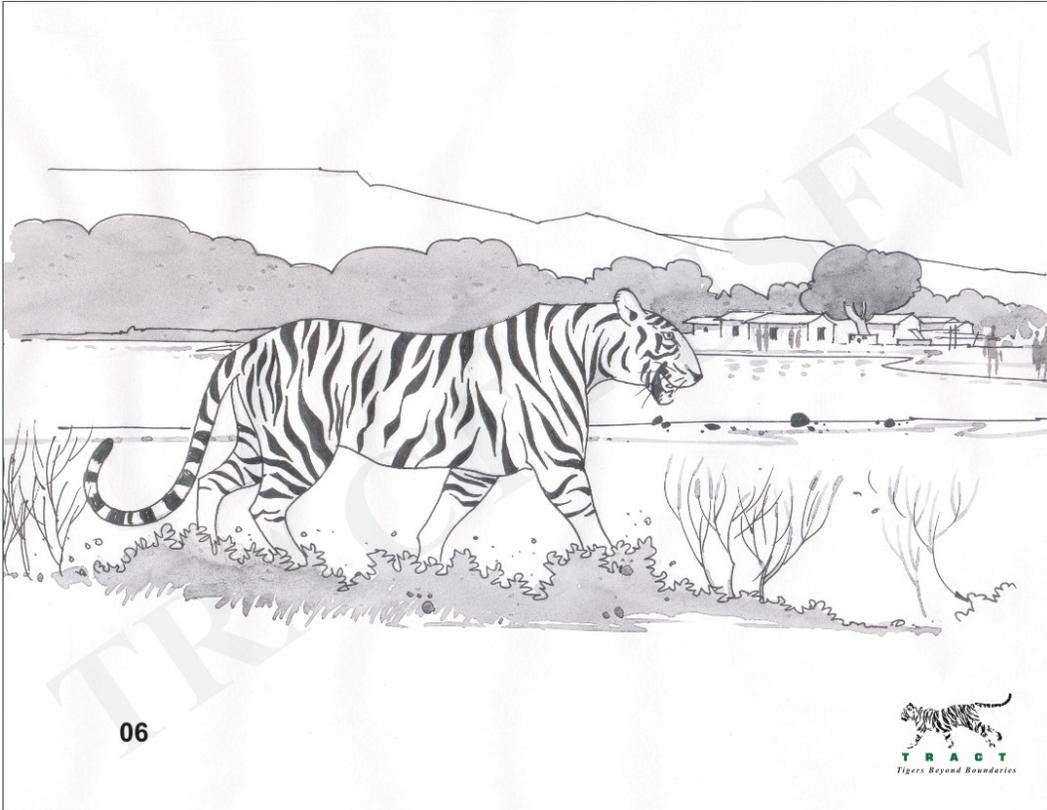


Tiger / Leopard enters the Village

- Verify the information
- Inform your CMC, Forest guard and TRACT staff
- Cordon the area with the help of CMC and village youth
- Keep people away from the carnivore
- Keep children and elderly secure in their houses
- Do not throw sticks and stones, it will irritate the carnivore
- Do not create noise near the carnivore
- Keep a watch on the animal from a safe distance
- Give clear passage to carnivore to leave village
- Try to take a picture from a safe distance

05



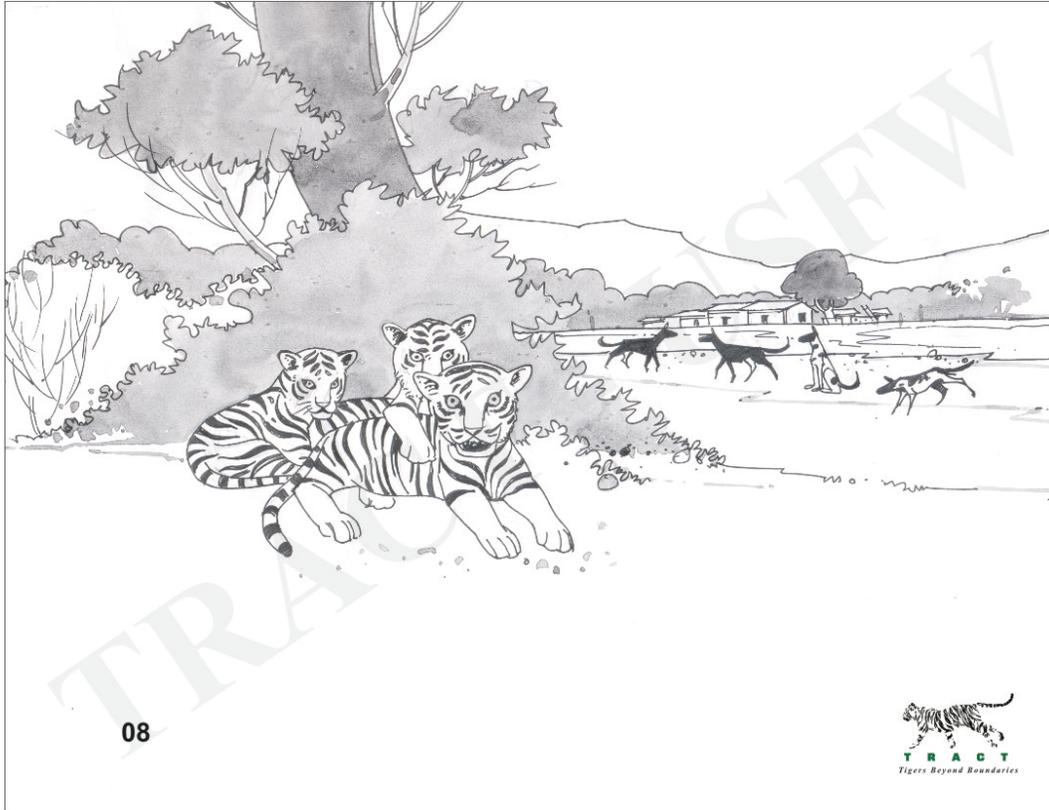


Frequent presence of Tiger / Leopard near Village

- Inform your CMC, Forest guard and TRACT staff
- Alert the villagers, grazers, children, farmers going to fields
- Keep a watch on the carnivore's movement
- Keep people away from the area
- Do not disturb or irritate the carnivore
- Secure the domestic animals after dark
- Avoid the area after Dusk or before Dawn
- Keep children and elderly people in doors and safe
- Do not defecate in the open or near the bush
- Create groups of local youth for monitoring carnivore movement
- Burst crackers after dark to scare the carnivore away from village
- Ensure street lights are on after dark

07





Cubs sighted near Village

- Confirm the sighting of cubs
- Cordon the area, keep people away
- Do not touch or handle the cubs
- Inform your CMC, Forest Dept and TRACT staff
- Shift them only if they are under threat
- Ensure safety of cubs from stray dogs and other threats
- Do not Feed the cubs without consultation with authorities
- Nobody should throw stones or sticks at them
- Keep watch until help arrives
- Do not allow anyone to touch them
- Take their picture for record

09





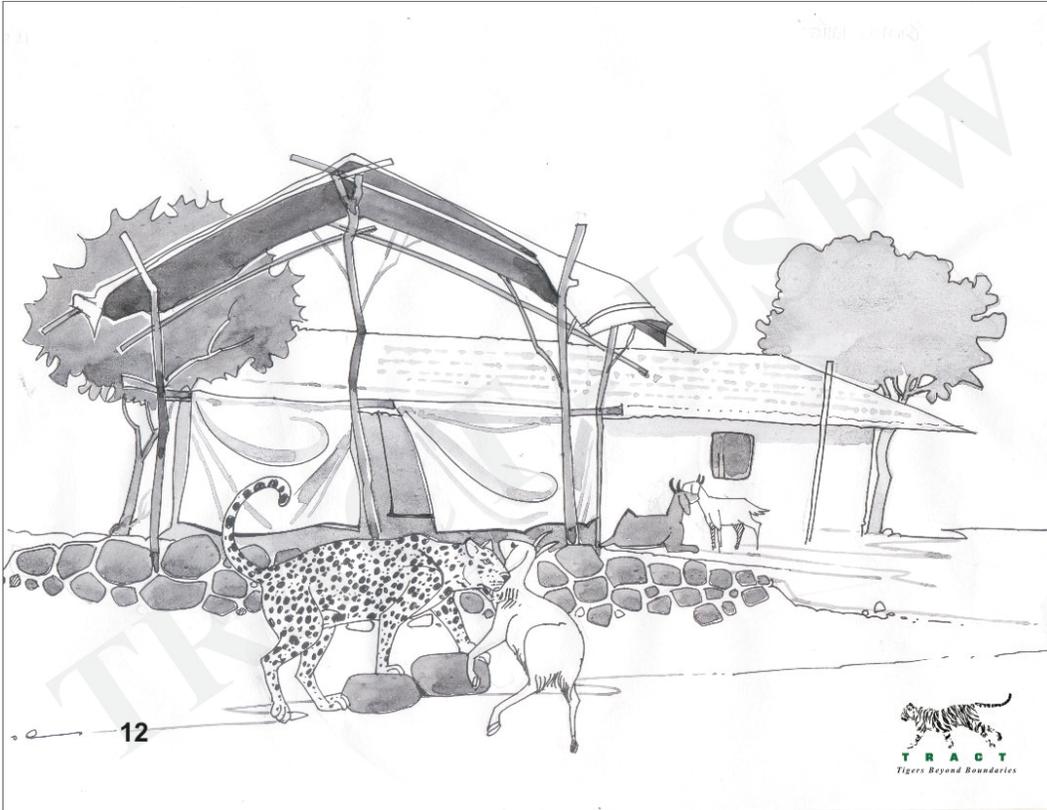
10

Tiger / Leopard enters a House

- Affected family to be secured away from the house
- Close the doors , windows and other openings of the house
- Inform your CMC, Forest Dept and TRACT staff
- Keep a lookout so that the animal does not escape
- Ensure others are safe in their homes with doors, windows closed.
- Keep children and elderly people away from the site
- Keep yourself safe
- Do not try to enter the premise to take pictures
- Do not enter or open the premise without supervision of authority
- Be alert until help arrives and the issue is resolved
- Assist the rescue team as per their directions
- Keep people at bay when the rescue team is working

11



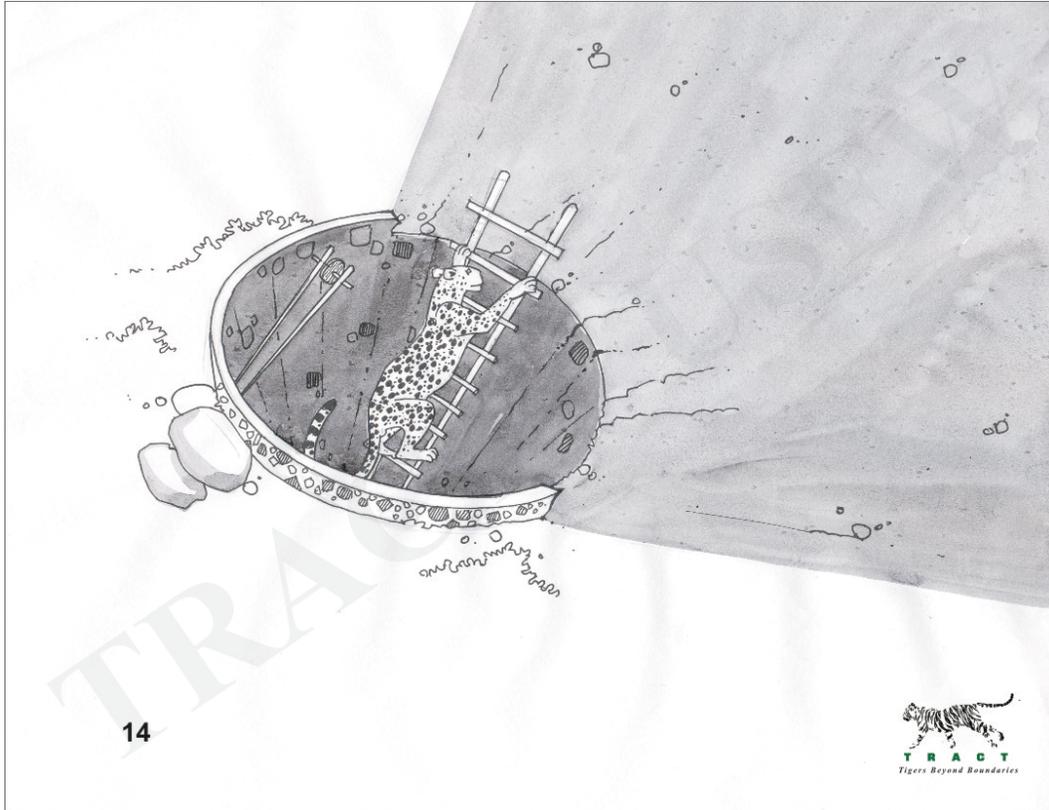


Tiger / Leopard enters Cattle Shed

- Confirm the episode
- Cordon the area and keep the mob away
- Keep children and elderly people secure in their homes
- Do not try to save the domestic animals
- Inform your CMC, Forest Guard and TRACT staff
- Do not come out of your house until the carnivore leaves
- If rescue team needs to immobilise animal, assist in keeping people away

13



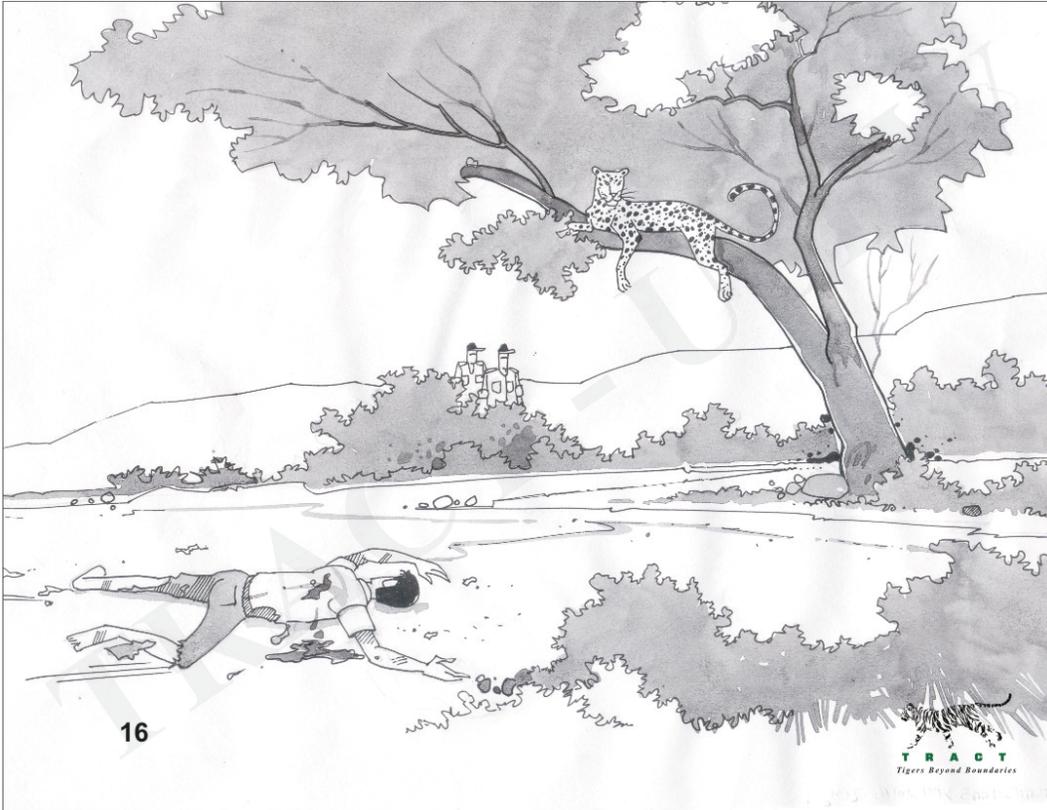


Tiger or Leopard falls in a Well

- Check the carnivores condition
- Cordon the area
- Inform your CMC, Forest Guard and TRACT Staff
- Keep people from crowding the the well
- Keep children and elderly people away from spot
- Lower a wooden ladder in well, Ensure ladder reaches the top of the well. Keep distance from well and let the carnivore clime out. Ensure area is clear of people
- If the carnivore is injured with threat of drowning, lower a cot into the well with ropes tied to the 4 legs, ensure that the carnivore is secure on the cot and then raise the cot above the water level till rescue team arrives

15





Fatal Attack by Carnivore on Human

- Confirm the news
- Inform your CMC, Forest Guard and TRACT staff
- Cordon the area, keep people from crowding
- Keep children and elderly people secure in their homes
- Do not shift/ move the victims body till authorities arrive
- Check for carnivore presence near attack site
- The carnivore may be lurking nearby, keep people away from the site of attack

17



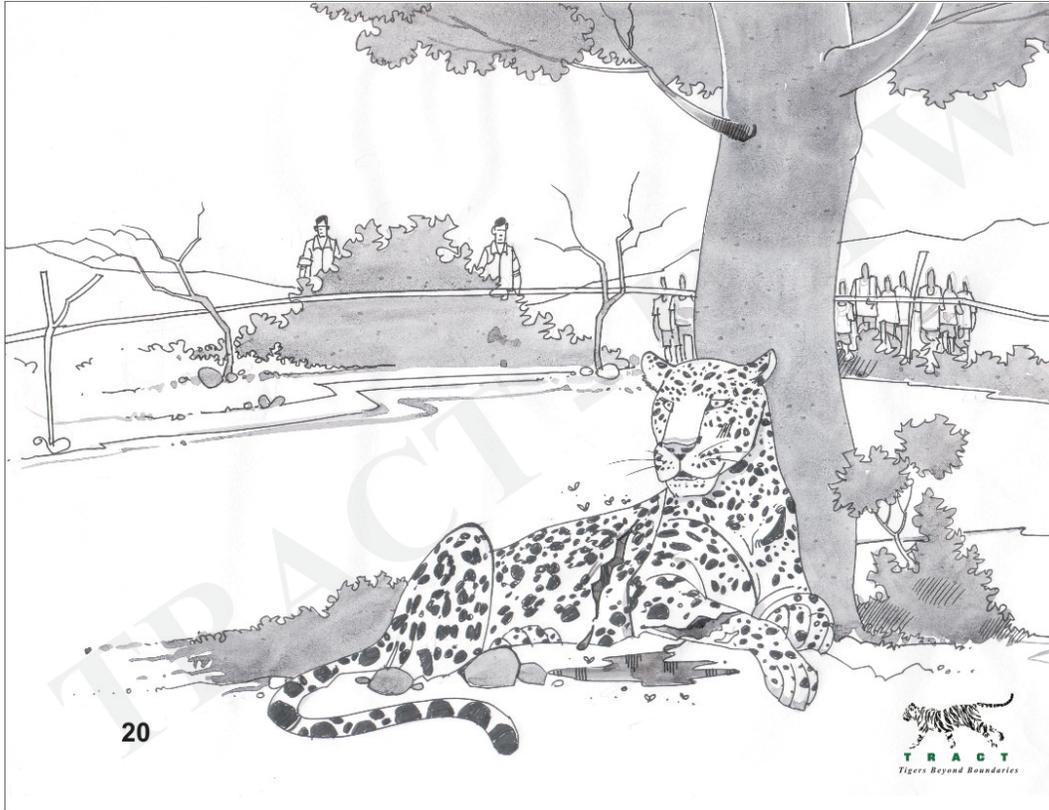


Wild Animal found dead near Forest / Road

- Confirm death of injured animal from a distance
- Inform your CMC, Forest Guard, and TRACT staff
- Cordon the area, do not allow anyone to touch the carcass
- Do not take any organ or part of the carcass
- Do not move the carcass
- Remain on site until the Rescue team arrives
- Assist in the documentation of episode

19





Injured Animal Sighted near Village

- Confirm episode and species of animal injured
- Inform your CMC, Forest Guard and TRACT staff
- Do not let anybody near the injured animal
- Do not let anybody throw stones or sticks at the animal
- Do not let people crowd the injured animal to take pictures
- Keep a safe distance, the animal may attack
- Take picture of animal from distance for record
- If abnormal vocal calls from any wild animals are heard near village, inform the Forest Dept immediately. It can be an injured or snared animal calling for help

21



Attack by Tiger / Leopard on human

- Inform your CMC, Forest Guard and TRACT staff
- Shift the injured person to a safe place
- Administer First Aid
- Cordon the area of attack, the tiger/leopard may still be there
- Take a picture of the injured person
- Admit the injured into Hospital
- Ensure no retaliation by community towards carnivore
- Monitor area for revenge action by locals
- Monitor area for carnivore presence
- Keep locals alert in the area of attack

22



Wild Animal Trapped in Snare/ Trap

- Inform your CMC, Forest Guard and TRACT Staff
- Do not go near the animal, it may attack
- Do not throw sticks or stones on the animal
- Do not disturb, scare or irritate the animal
- Do not attempt to free the animal without supervision of Management
- Keep a watch on the animal from a safe distance
- Take picture from a distance
- Help department in releasing the animal
- Keep people away

23



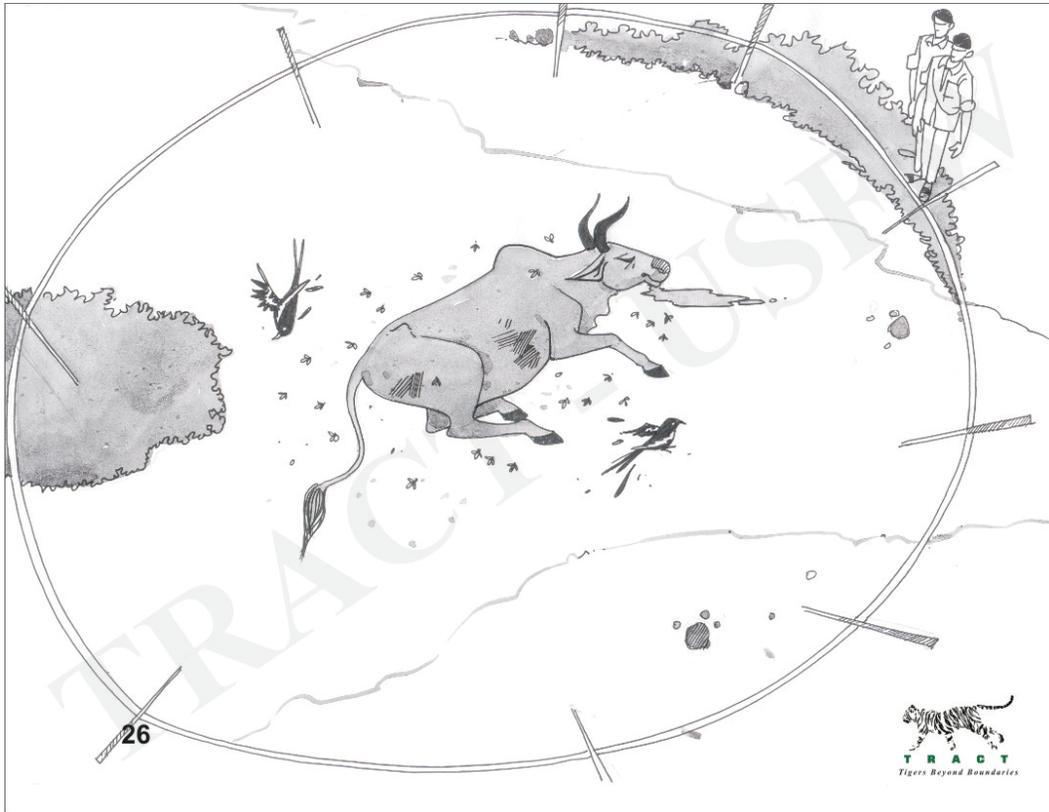


Forest Fire or Fire near Village

- Inform the villagers
- Inform your CMC, Forest Guard and TRACT staff
- Ask people to come for help to douse fire
- Form groups of local youth to help
- Douse the fire near village first
- Use wet branches with leaves to beat the fire on the ground
- Create fire lines around the fire
- Ensure there is no escape fire later
- Monitor burnt area for a while to ensure fire is doused
- Save small animals and nests from fire

25





Poisoning near Water body or on Prey carcass

- Check for dead bees/ insects / birds near water / carcass
- Inform your CMC, Forest Guard and TRACT staff immediately
- Do not disturb or touch the carcass
- Cordon the area with thorny shrubs and dead wood
- Ensure that no other creature or animal consumes the poisoned carcass or water
- Monitor the area until arrival of Forest authorities on site
- Question locals about probable culprit
- Share information of culprit with authorities

27





28

Strangers camping near forest areas

- Approach the strangers and take their picture
- Inquire about where they have come from and their home town
- Inquire about their reason for being here and their profession
- Check if they have livestock
- Get information about the number of persons in their group/family
- Check their photo identity card and take their mobile numbers, name and address
- Do not give them any information regarding the Wild life of the area
- Do not share any information of tigers/leopards
- Do not participate in poaching
- Inform Forest Guard, TRACT staff and CMC immediately

29



Poachers sighted near village or forest

- Inform Forest guard, TRACT staff and CMC immediately
- Inquire about suspects reason for being here
- Inquire about suspects home town
- Try to get suspects names and mobile numbers and photographs
- Do not give them any information regarding wildlife
- Do not assist them in any way
- Try to detain them till help arrives

30



Poaching / Threat Alert

- Keep an eye on the Blacksmith of the village, he may make the snares for poachers
- Get regular updates about presence of Tigers/leopards from grazers
- Be alert about snares/traps near the fields, lakes and in the forest
- If you find any threat to wildlife, inform the Forest guard, TRACT staff and CMC immediately
- Check the local bus stops / market for presence of suspicious individuals
- Be alert about any unusual vocalisations of tigers/leopards. It may be trapped or snared and calling for help.

31



Solutions to Crop Raid By Herbivores

Natural Fencing



Barbed Fencing



- Natural Fences- Cactus, Ketki, Babool and Bel
- Dig a trench 3' wide and 2.5' deep around the fence
- Alternate crop - Mulberry, Turmeric and medicinal plants

32



1.	Tadoba Andhari Tiger Reserve (TATR)	07172 - 251414
2.	TATR - Buffer - DCF Gajendra Narwane	07172 - 252218
3.	Bramhpuri Division - DCF Ashish Thakare	9405189629
4.	Central Chanda Division - DCF Gajendra Hire	9423217664

TIGER RESEARCH AND CONSERVATION TRUST

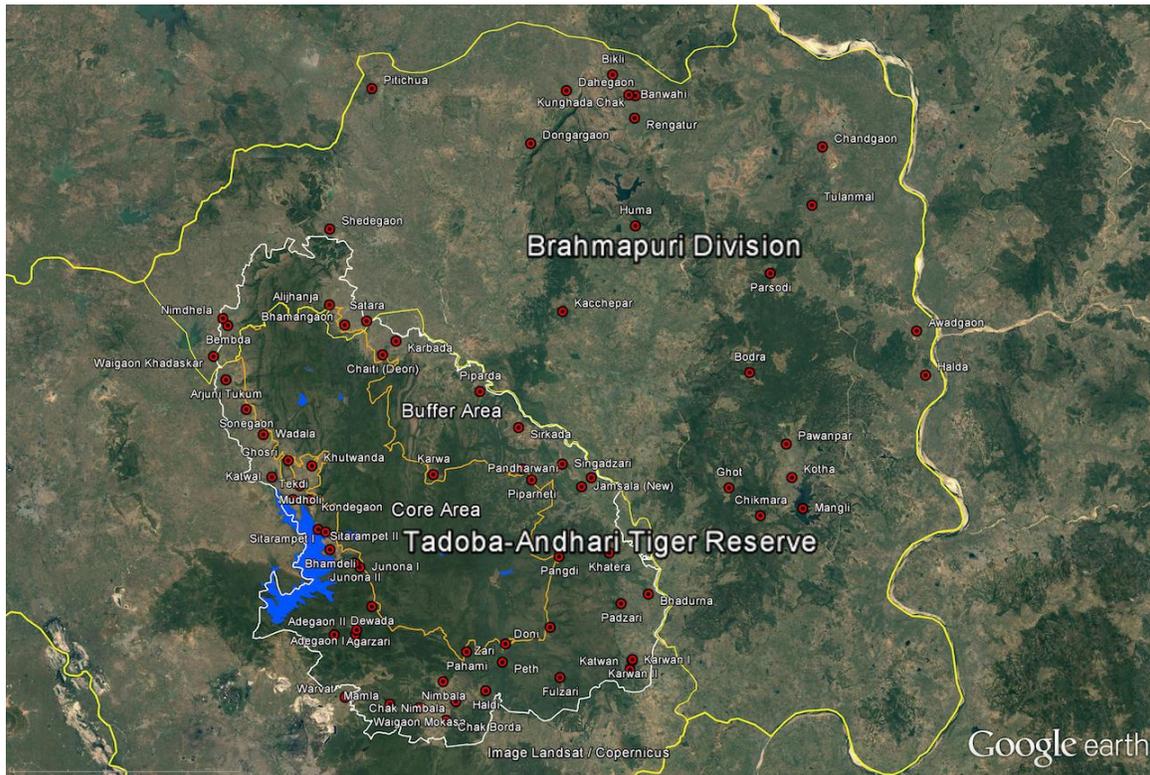
59, 60, Shivneri, Ramdaspath, Nagpur-440 010 (Mah) INDIA

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Poonam H. Dhanwatey - + 91 98224 67227

OBJECTIVES ACHIEVED:

1. **609 local leaders with capacity to mitigate conflict for themselves and their community**
2. TRACT is making a **film** to capsule the reasons of this conflict between people and tigers/leopards, the solutions and the participation of local communities in this mitigation. All activities of this program will be showcased in this documentary.
3. The **reduced level of conflict** between people and large carnivores in the area under this program
4. **Expansion of this program** to a larger landscape with 16 new villages and 112 new local leaders
5. The **livestock losses** are also less than before
6. **No tigers or leopards were killed** or attacked during this reporting period because of conflict in and near these villages.
7. The **capacity of the 71 team** with 497 local leaders was taken to a higher level
8. Most of the 71 teams are on the **same page as the forest department** on mitigation
9. Majority of the team have taken **ownership** of this effort to mitigate conflict by themselves
10. The teams could be of immense help to the local forest staff
11. This **network** has helped understand and monitor the carnivore presence near these conflict villages
12. **Awareness programs in schools** were conducted with more than 700 children sensitised about conflict and their role in mitigation
13. This program has been filmed for being **showcased as a solution for conflict** mitigation with participation of local communities.

MAP:



Map indicates the Tadoba Andhari Tiger Reserve with its core area (625 sqkm) and its buffer zone (1100 sqkm) with the 49 villages in the buffer which are in this program. The villages beyond the buffer zone on the north-eastern side are in the forested corridor in the Brahmapuri Forest Division.

FAILURES, CHALLENGES

The project has been led and taken forward for a motivated team of Ashish Damdhare and Vikas Tumram. Their visits to the villages and informal and formal discussion with the villagers has created a lot of awareness within the communities.

Through their work they have addressed a variety of other queries of the local people, ranging from concerns about the crop depredation by herbivores to the delay in compensation for the same and for the livestock losses by conflict with large carnivores.

1. Challenges: Participation

The team has faced challenges in their effort to gather momentum and enthusiasm in some villages for this local participation in mitigation. This has been primarily due to 3 reasons:

- a. Villages with low conflict has seen a lack of enthusiasm in the team to work as they did not find this effort relevant. With no recent attacks by tigers or leopards, they felt that there was no need to invest time in this exercise. The teams have been made in these few villages and the workshops were

conducted, but the teams have not taken any effort to patrol the area, or take this discussion forward with the communities.

- b. There are some villages where large carnivore presence has been occasionally observed in the fringes, but no conflict has been recorded felt that they should be given wages for their participation and their effort to patrol their areas.
- c. A third set of a few villages who did not want to participate in this effort are known to indulge in frequent illegal activities in the forest. They felt that this participation may result in their activities coming to the fore.

Opportunities:

The teams in these villages have been made and the capacity of the team members have been built to understand the mitigation and the reasons for conflict.

In case of any conflict, they will be better prepared to handle the situation. This also gives the management an advantage of understanding these communities better and to address other issues in a more apt manner.

2. Challenge : The team becomes part of the mob

It has been observed that the teams work well in creating awareness and in alerting the community about threats from carnivore presence. But in some cases, when a fatality occurred due to an attack by a tiger, some of the team members inclined towards the mob and did not address the situation as they were expected to do.

Opportunity:

This given an opportunity to takes this training and awareness forward, to ensure that these leaders in conflict realize their role as mitigators even in the tense and stressful situations

RECOMMENDATIONS

With a high dispersal of tigers from the protected areas and the breeding in some of the green pockets in the forested corridors, the area shared by large carnivores, people and domestic livestock will keep increasing. As more forest land gets degraded areas and is used for farming; as more people trespass in these fringe forests for their dependence on forest produce, chances of conflict between people and tiger/leopards increase.

The only way to address this forced co-habitation is by creating awareness in all village communities about the reason for conflict and about the importance of their understanding and participation in minimizing this conflict. People's acceptance of their role in securing themselves is of utmost importance.

The landscape with presence of large carnivores is huge, covering more than 6000 sq kms with very many villages in it.

1. It is important to continue this awareness program in these villages in the buffer and the corridor as repeated workshops and drills always help. The program has created a network of motivated individuals who wish to work for their community and are sensitized about the well-being of wildlife. These teams are a good source of information to the management about the carnivore presence and of the threats to both, people and carnivores.
2. The program needs to be spread to more areas as the conflict is dynamic and erupts in different areas without prior intimation. It is mandatory to conduct these workshops and awareness programs in as many villages as possible as a pre-emptive effort.
3. These teams can be used by the management for more activities, as green soldiers. With their skills and new capacity to understand the conflict and the situation, they can be additional hands to assist the management. This will ensure trained leaders in each community for the managers and in turn ensure some wages and livelihood opportunities for these individuals.
 1. The dialogue between the forest guard and the teams still needs to be improved
 2. Response of forest guards to teams is poor or missing
 3. Program needs to continue to assist with the teams until they take total ownership of this effort
 4. More incentives are needed for these teams to encourage their work
 5. Team members have requested for wages on the days when monitoring is required
 6. The capacity of the teams should be improved and they can be used for other conservation activities or employed as green guards.

CONCLUSIONS:

The concept of local participation in conflict mitigation is new and was commenced by TRACT under this program in 2013. This has gained momentum with different managers adapting this concept.

There is a remarkable change in the attitude of the local communities, as they took this awareness forward by addressing threats to their community by themselves, realizing the threats from garbage pollution near their village, about ensuring security to the school going children from a near-by leopard and much more.

The teams have been networking with TRACT team to share problems and concerns.

The areas under this program have seen a reduction in conflict cases. Many instances of conflict have been averted due to the alertness of the teams and sharing of information about the presence of large carnivores.

TRACT Team:

Project leaders: Poonam H Dhanwatey
Harshawardhan Dhanwatey

Project administrator: Abhilasha Wakdot

Project Coordinator – Ashish Dhamdhere

TRACT Field Team: 1. Vikas Tumram
2. Pramod Bagde
3. Zeenal Wajrinkar
4. Divaker Daiwalkar

Acknowledgements:

We are thankful to all the village SSS teams who worked without wages for the well-being of their community, those who went forward and ensured security to the wild animals as well near their villages and fields.

We acknowledge the participation of the Forest field personnel in all these villages, the forest guards and the Foresters for their involvement in the project.

We are thankful to the Shannon Finnegan, Sarika Khanwilkar, Devavrat Pawar and Nikhil Dhanwatey for their inputs in the project; Mr. Akshay Naik and Mr. Majumdar for their guidance through the duration of the project.