



The Human Leopard Coexistence Project

Final Report

Submitted to : Wildlife Trust of India

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I am very much privileged getting opportunity to study the precious schedule 1 species, Leopard and their conservation. The way human leopard conflicts are raising in Terai Tea Estate landscape from last decade due to habitat loss, fragmentation, encroachments etc. , it was difficult to take up conservation programme for the leopards without the help I have received from my entire team members, governmental and non governmental institutions, Terai Branch Tea Association etc. I would like thank all the individuals and organisations those who have made it possible to implementing of this project.

I am grateful to Wildlife Trust of India (WTI) for approving this project proposal and provide me and my entire team the financial support through Rapid Action Project (RAP) to carry out this Human leopard Coexistence Project. Without the financial support from WTI it would have not been possible to minimise Human Leopard Conflicts in the tea estates of Terai region. I am very much thankful to entire WTI team for providing us all the support for this project, specially Mr. Vivek Menon, Mrs. Snehaa Sundaran, Mr. Amrit Menon and Miss Sukanya David for all the support. I am also thankful to Mr. Rana Dey , Secretary of Terai Branch Tea Association for his support.

I am deeply thankful to Mr. Rajendra Jakher, CCF Wildlife North of West Bengal Forest Department for giving me and my team enormous support, advice and motivation to complete this project.

I am thankful to DFO, Darjeeling Wildlife Division and Kurseong Division, Range Officers of Sukna, Bagdogra, Bamonpokhri and Tukuriajhar Range of West Bengal Forest

Department for giving me and my team a great support regarding this project.

Executive Summary

The Human Leopard Coexistence Project was approved in September 2021 by West Bengal Forest Department and in November by Rapid Action Projects (RAP) of Wildlife Trust of India (WTI). As human leopard conflicts are raising in a rapid rate in the tea estates of terai region, so we have taken up this initiative to mitigate this conflict.

Tea plantations are one of the home for leopards in this region due to the easy availability of prey and safety factors. Leopards are staying in tea estates and killing livestock's for their survival. Tea estates are also a good shelter for them. As tea estates are located outside protected areas so it is a problem to monitor the movement of leopards in these estates. The population density of leopards are also not known properly outside protected areas and inside tea estates are also rising conflict issues day by day.

In the initial phase of the project we have interacted with concerned DFO s and Range Officers regarding the conflict incidents in tea estates and got the data of the conflicts with human and leopards of last three years.

After getting the information we have taken the guidance of Mr. Rajendra Jakher, CCF Wildlife North and finalises 18 tea estates as our targeted project area. We have also meet with Secretary of Terai Branch Tea Association and Indian Tea Association (TBITA) regarding the same. After that we have conducted a mega meeting with all the tea estate management and discuss about the project. We have conducted two such meetings, one in Sukna Nature

Interpretation Centre and one in Tetai Club of TBITA and we have started our field work.

In our field work we have conducted more than 200 workshops, group meetings, sensitisation and awareness campaigns with the residents of tea estates. We have specially interacted with women tea pluckers about do's and don'ts regarding tea plucking activities to avoid conflict with the leopards. We have also created "Leopard Movement Monitoring Team" with the enthusiastic youth of tea estates and provide them training regarding crowd management during conflict situations, monitoring of leopard movement and information sharing, identifications of leopard and other pug marks and how to conduct awareness activities in tea estates. All time consist of 10 members in each team. We have created whatsapp groups with them in each tea estates for getting proper information about leopard movement and other conflict issues. We have also provide them equipments like torch lights, siren, whistle and crackers for conflict mitigation management.

We have also constantly liaison with West Bengal Forest Department regarding conflict incidents and data and information sharing trough out the project.

We have also put few camera traps to identify the leopard in few targeted tea estates and kill sites.

After a year long interventions, we have seen that conflict incidents are decline in a drastic manner. Only one single incident occurs in Mohorgaon Gulma Tea Estate till now. Residents of tea estates and tea pluckers are also gradually understands the importance of leopards in our ecology and do's and don'ts during tea plucking and conflict incidents.

To conclude, this project till now address the human leopard conflict issues in tea estates in a good manner. Residents are well

aware about the importance of sharing space and the protection of leopards. We need to continue this activity for a better management and mitigation of human leopard conflict and create a peaceful coexistence in this northern region. Tea estate management are also happy about the interventions and results, so they are asking for adding more tea estates and continue the activities.

Project Details

Project Title	The Human Leopard Coexistence Project
Chief Coordinator	Miss Shimu Saha Solitary Nature and Animal Protection(SNAP) Foundation
Team Members	<ol style="list-style-type: none"> 1. Koustav Choudhury 2. Pradyut Roy 3. Sanatan Goswami 4. Sandeep Chowdhury 5. Ritwik Biswas
Project Approval	November 2021
Project Period	November 2021- December 2022
Project Objective	<ol style="list-style-type: none"> 1. Identify and map conflict area and select targeted sites in the 15 tea estates. 2. Create a dialogue between the tea estate owners, community and forest department to initiate primary response teams with help of meetings and sensitisation. 3. Initiate conflict mitigation practices involving all stakeholders. 4. Draft a leopard conservation management plan.

Introduction

Northern West Bengal landscape consist of forest areas, tea estates, human settlements and mountains. This region is one of most the finest region for wildlife of India. As human populations are raising in a drastic rate so the forest coverage are gradually sinking due to urbanisation. Tea estates are one of the major human settlements near first areas, so this tea estates are home for schedule one leopard species due to easy availability of prey species and shelter. From last few decades human leopard conflict incidents are rising in a rapid rate, every year leopards and human loses their lives or got injured due to this conflict.

So to address this issue Solitary Nature and Animal Protection (SNAP) Foundation team lead by Miss Shimu Saha has started this Human Leopard Coexistence Project with the financial support from Wildlife Trust of India. The project supported by West Bengal Forest Department. We have mainly focused on creating proper sensitisation and awareness activities in tea estates regarding the importance of leopards in our ecology and coexistence and proper monitoring and information sharing of leopard movement and conflict incidents inside tea estates.

Total perimeter of project location : 83.1 Km and total project location : 466 Sq Km.

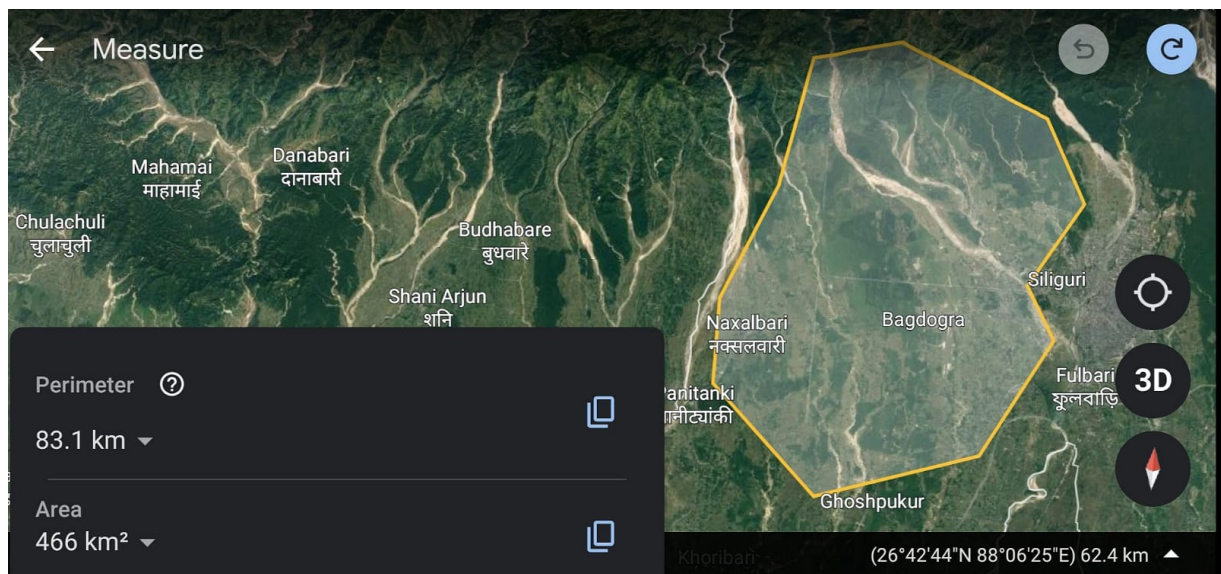
The project activities are here under

Project Location

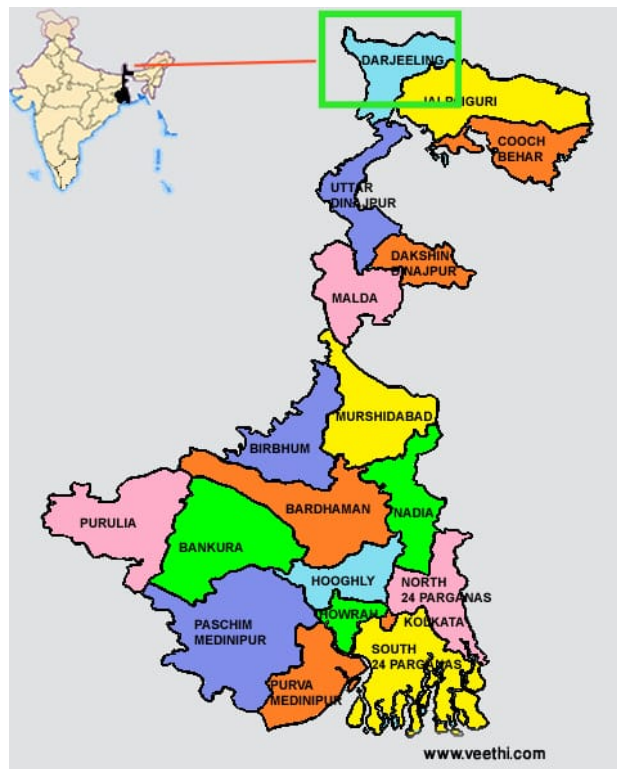
Area under this project covered Siliguri Subdivision areas of Darjeeling District, which consists of Sukna, Bagdogra, Panighata and Naxalbari areas. Our project location are mainly tea estates of this region. This area has a unique landscape consist of sanctuaries, reserve forests, tea estates, human settlements and international borders.

Geo Location : 26.72°N 88.41°E

Total Project Area : 466 Sq Km.



Total Project Area



Human Leopard Conflicted Tea Estates in Project location

Project Location marked in Map of West Bengal

Characteristics and Inventories of Flora and Fauna

The distribution of vegetation in Northern West Bengal is dictated by elevation and precipitation. For example, the Himalayas, the Doors are densely wooded with sal and other tropical evergreen trees. However, above the elevation of 1000 meters, the forest became predominantly subtropical. West Bengal has 3.26% of its geographical areas are under protected areas, sanctuaries, national parks, tiger reserves etc. others are reserve forests. Northern West Bengal are the home for Asian Elephants, One horn Rhinos, Leopards, Indian Gaurs, Deer Species and many more herbivores and carnivorous along with avian and reptile species.

Methodologies and Activities

Approval of this project was conveyed to us in September 2021 by West Bengal Forest Department and in November 2021 by WTI under RAP. Hence we have stated our field activities from November 2021.

The methodologies and objectives of the project are :

1. Identification of Human Leopard Conflicted tea estates.
2. Coordinating with tea estate management and West Bengal Forest department.
3. Conducting sensitisation and awareness program with the residents of tea estates and tea pluckers regarding the importance

of leopard in our ecology and do's and dont's during tea plucking and conflict situations.

4. Formation of Leopard Monitoring Team and provided them training and leopard movement monitoring kit.

5. Camera Trapping to identify the leopard presence in tea estates.

Details of activities are here under :

1. Workshops and Meetings with Forest Officials and Tea Estate Management :

After the inception of the project we have conducted 5 administrative level meeting with the Divisional Forest Officer of Darjeeling Wildlife Division and Kurseong Division and Chief Conservator of Forest, Wildlife North and taken there guidance, advice and follow there instructions for the success of the project. We have also meet with the concern Range Officers and constantly communicate and share the project update with them. We have also conducted a mega workshop with the support from Darjeeling Wildlife Division with 5 targeted tea estate management in Sukna NIR, where we have discussed with them about the project, from that workshop we have identified “Sardars” of those tea estate who are later joined as team leaders for “Leopard Movement Monitoring Team”. Sukna range also conducted a meeting with Asst. Managers of

targeted tea estates and discuss about the importance of this project to them.

We have also conducted one mega workshop in Terai Club with Terai Branch Tea Association and all their member tea estates regarding the project, where we have discussed about the importance of this project and human leopard coexistence. Later on we have conducted 6 such interactive workshops with the tea estate managements of targeted tea estates of Kurseong Division.

Results :

This administrative meetings with the forest officials and tea estates managements and associations helped us a lot to successfully complete the project objectives. We have got enormous support from West Bengal Forest Department and other stakeholders though out the project period.

2. Sensitisation and Awareness Activities in Tea Estates :

After getting all the necessary permission from West Bengal Forest Department and consultation with tea estate managements we have stated our field work. We have finalises 466 Sq Km of landscape consist of 18 tea estates and urban human settlements as a project area. We have started sensitisation and awareness activities regarding the importance of leopards in our ecology, do's and dont's during tea plucking activities and during conflict situations and

importance of human leopard coexistence in all targeted tea estates from Novemeber 2021. We have already conducted 86 such mass awareness with the residents of tea estate labor lines, 31 such meetings with the women tea pluckers and 11 sensitisation workshops with the school kids of the tea estates.

Results :

After the year long sensitisation, awareness and group meetings etc. the residents of tea estate labor lines are now gradually understands the importance of human leopard coexistence and how to sharing space with leopards. The women tea pluckers are also following the do's and dont's protocol during tea plucking activities , which is very useful for them as shown by the result (single incident recorded in all 18 tea estates after the inception of the project). The perception towards leopard of the tea estate residents are also gradually changing, they are now gradually understands the importance of leopards in our ecology and how to peacefully coexists with them.

Name of Tea Estates	Total Workshops/ Group Meetings	Total Participants	Total Leopard Conflict Incidents Before the Project (Last 3 Years)	Total Leopard Conflict Incidents after starting the Project till now	Total Report by Leopard Monitoring Team
Sukna T.E	9	890	2	0	11

Name of Tea Estates	Total Workshops/ Group Meetings	Total Participants	Total Leopard Conflict Incidents Before the Project (Last 3 Years)	Total Leopard Conflict Incidents after starting the Project till now	Total Report by Leopard Monitoring Team
Gulma T.E	12	1050	1	1	16
New Chamta T.E	9	770	1	0	14
Mohorgaon T.E	9	700	2	0	9
Azmabad T.E	14	1300	2	0	19
Bijohnagar T.E	12	1200	2	0	17
Marapur T.E	9	700	1	0	11
Merriview T.E	9	650	1	0	8
Fulbari T.E	6	400	1	0	3
Naxalbari T.E	10	1100	1	0	13
Atal T.E	6	800	1	0	11
ORD T.E	7	600	1	0	8
Trihana T.E	2	160	2	0	2
Champasari Area	7	450	3	0	4
Bagdogra T.E	4	430	2	0	2
Ganguram T.E	1	130	1	0	2
Hansqua T.E	1	120	1	0	3
Longview T.E	1	50	1	0	1
Total	128	11500	26	1	154

3. Leopard Movement Monitoring Team :

During our awareness and sensitisation programme in tea estates we have identified youth those have some basic understanding, knowledge and feelings about the wildlife and its conservation. We have also interacted with the tea estate management, sardars of the tea estates regarding the where about of those identified youth, after getting information about them we have include them in our Leopard Movement Monitoring Team and trained them about how to monitor leopard movement, information sharing, creating awareness etc. and also distribute siren, torch lights, whistle, reflective jackets etc to them. We have specifically involve “Sardars” of every tea estates as the team leader for each Leopard Movement Monitoring Team. We have formed 15 Leopard Movement Monitoring Team with the youth of the targeted tea estates. Each LMT consist of 10-12 youth of the tea estates and created “Whatsapp Group”. Whatsapp Groups are specifically used to share information regarding leopard movement and conflict incidents among the stakeholders fast and effectively.

Results :

We have got a great result regarding Leopard Movement Monitoring Team, as we have got so many effective information which will reduce several conflict situations in tea estates. Local youth are also involved very mush in the protection and information sharing activities, they are also taken up awareness and sensitisation activities in their own language, which is very much effective to

mitigate the conflict. The perception of those youth also gradually changing and they are now some how understand the importance of leopard in our ecology and coexistence with leopard in tea estate landscapes.

Name of the Forest Range	Total Tea Estate	Total LMT	Total LMT members
Sukna Range, Darjeeling Wildlife Division	4	4	36
West Range, MWLS, Darjeeling Wildlife Division	1	1	6
Bagdogra, Kurseong Division	5	4	32
Bamonpokhri, Kurseong Division	2	2	16
Tukuriajhar, Kurseong Division	4	4	42
Panighata, Kurseong Division	2	2	12
Total	18	17	144

4. Camera Trapping in Kill Sites to Identify the Leopard and Pug Mark Data Collection for Analysing the Movement Pattern:

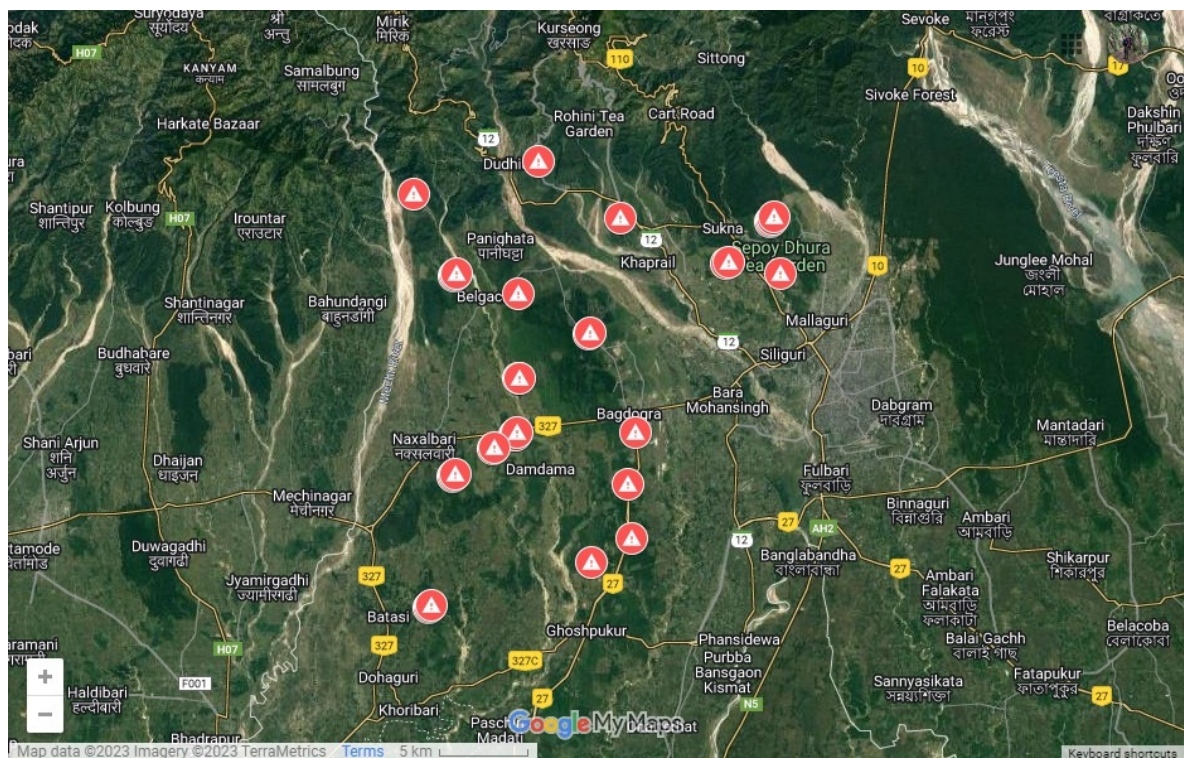
Camera trapping is one of the effective method for wildlife monitoring and study of habitat. It is also useful for conflict mitigation management. We have got 10 camera traps from Wildlife Trust of India for this project.

We have identified few most conflicted tea estates and put those camera traps in each kill sites to identify the details about the leopard like Sex, Approx Age etc. We have also analyse those data to identify individual leopard and try to understand the home range of leopard inside the tea estates.

We were also putting camera traps in tea estates to identify the movement pattern of the leopards.

Results :

We have got several effective data from camera trap regarding the movement pattern of the leopard, age, sex etc. We have shared those data with West Bengal Forest Department for better conflict mitigation management. This camera trapping activity helped us to understand the basic movement pattern and home range of the leopards inside the tea estate.



Challenges

In the initial phase of the project due to labor wages related issues between tea estate management and labor unions, we have faced a huge problem regarding sensitisation and awareness with the tea estate residents and also formation of teams and monitoring of leopards. We have also faced some political problem regarding the formation of team. But despite of all the odds our team shown enormous passion and dedication for the protection of leopards and mitigation of human leopard conflict in tea estates of terai region.

Outcome

Due to constant sensitisation and awareness activities regarding human leopard coexistence, the residents of tea estates of terai region are well aware now. They are now gradually understanding the importance of leopard in our ecology and how to share space with them. Tea estates management are also very happy and communicate with the residents of tea estates regarding the importance of coexistence. Local youth are also motivated and provide us proper information regarding leopard movement inside the estate. They are also playing a key role in mitigation as they are creating awareness among the tea estate residents now. Constant monitoring of leopard movement inside tea estates and information sharing are very much use full for the protection of leopard. Distribution of siren and

whistles are also provide us great result as now leopard monitoring team using the siren before tea plucking activities, which scare the leopard away from the area and mitigate the conflict. Tea pluckers are also using whistle during plucking time, which is very use full till now.

After a year long interventions of SNAP Foundation and WTI team with the support form West Bengal Forest Department, only one minor incident recorded in entire project area this year and the perception of the labor line residents of the tea estates towards leopards are also changing gradually.

Recommendations

Extensive monitoring of leopard movement inside tea estate are highly recommended for proper information sharing and mitigation of conflict. Constant sensitisation and awareness activities are also need to be carried out in tea estates with the residents of tea estates regarding the importance of human leopard coexistence and do's and don't during tea plucking activities, emergencies and conflict situations are also highly recommended. Proper scientifically understanding of the distribution and population density of the leopard, movement patterns, identification of home range and prey base analysis are also highly recommended to mitigate human leopard conflict and create a peaceful coexistence in tea estates of terai and doors region.

Conservation Management Plan

Basic Leopard Conservation Management Plan based on Threat

Threat	Approches
Over livestock depredation by leopards and other carnivores.	<ol style="list-style-type: none">1. Understand patterns and drivers of conflict (where, when, why, how) and hotspots that required priority action.2. Develop multi-pronged strategy for livestock prevention, sharing economic losses like community based livestock insurance, improving attitudes through alternative livelihood support and awareness generation among the affected group.

Threat	Approches
<p>Extensive livestock pressures leading to degradation, competition with wild herbivores.</p>	<ol style="list-style-type: none"> 1. Understand spatio-temporal patterns of livestock use, pressures and the herders dependencies. 2. Explore community based options for reducing livestock numbers, rational grazing in tea estates. 3. Prioritising alternative livelihood activities for tea estate women residents.
<p>Development pressure and problem related to trapping & caging of leopards.</p>	<ol style="list-style-type: none"> 1. Coordination with tea estate authorities regarding development activities which are creating problem for leopard movement inside the tea estates for better management. 2. Coordination with tea estate authorities regarding the unnecessary trapping and caging of leopard and make them understand the importance of sharing space and coexistence. 3. Coordinate with tea estate management reading regularisation of bush cutting activities inside tea estates.
<p>Less tolerance towards leopards.</p>	<ol style="list-style-type: none"> 1. Increase awareness among the tea estate residents regarding the importance of space sharing and coexistence. 2. Awareness about Wildlife Protection Act, 1972 to the tea estate residents and make them understand the laws to protect our precious schedule one leopard species. 3. Create awareness about the compensation scheme of West Bengal Forest Department regarding livestock loss.
<p>Less knowledge about the population density of Leopards inside tea estates.</p>	<ol style="list-style-type: none"> 1. Regular understanding and estimation of leopard population density, distribution and movement pattern identification for better leopard management. 2. Hotspot mapping and prediction modelling for better leopard management. 3. Identification of leopard home range and analysis of prey base availability.

Threat	Approches
Crowd management during conflict situation	<ol style="list-style-type: none"> 1. Coordination of local administration, forest department and NGOs for better mitigation management and crowd controlling. 2. Formation of Leopard Monitoring Team in each tea estate for better management.
Garbage dumping and open livestock shelters	<ol style="list-style-type: none"> 1. Encourage tea estate residents for cleaning up garbages near their residents. 2. Encourage tea estate residents to create closed enclosure for their livestocks.

Detailed Leopard Conservation Management Plan

Further study required to draft of detailed leopard conservation management plan

1. Mapping & delineation of landscape boundaries, geographical settings to analyse the conflict situation and the reason for conflict.
2. Collection of Baseline knowledge like physiography, water resources, prey base analysis (livestock composition), home range, population density of leopard, details of human settlement and development activities.
3. Analysis of current and future threat for the leopard population in the landscape due to human encroachment, change of landscape pattern, development activities etc.
4. Population density estimation of leopard population outside protected areas and inside tea estates.

Further study required to draft of detailed leopard conservation management plan

5. Description of the stakeholders , their mandates, capacities and their actual and potential influence on conservation, local livelihood and governance.

6. Identification of priority leopard conflicted landscape.

7. Frame work for multi-sectoral cooperation and information sharing.

Photographical Documentation



Workshop with Tea Estate Management



Workshop with Tea Estate Management



Workshop with West Bengal Forest Department



Awareness Workshop with Tea Estate Residents



Workshop with Tea Estate Residents.



Workshop with Tea Estate Residents.



Workshop with The School Kids



Camera Trapping in Kill Sites



Camera Trap Image



Camera Trap Image

Training in tea belts to stop human-animal clash



Tea workers being trained on the outskirts of Siliguri in handling intrusion of leopards. File picture

BINITA PAUL

Siliguri: The Solitary Nature and Animal Protection Foundation (SNAP) along with the state forest department have launched a training programme for tea estate dwellers of the Terai and the Dooars belt in north Bengal to evade attack by big cats.

The initiative, funded by the Wildlife Trust of India, has been taken following frequent intrusion of leopards in the region leading to loss of cattle, human injury and casualty.

Initially, around 20 gardens which are under the Darjeeling wildlife division and Kurseong division of the department and where the leopard infestation is high, have been identified for training.

“We are organising the training programme so that tea workers can have a clear understanding about the leopard that has entered their locality. Also, they are being taught how they can avert a leopard

attack and can save themselves and their livestock,” said Koustav Choudhury, a representative of SNAP.

In north Bengal, entry of leopards in tea gardens is a common affair. The animal enters the gardens to deliver cubs and also to get hold of easy prey. On a number of occasions, sightings of leopards have stopped regular activities in tea estates. Also, there have been incidents of leopards attacking people in the tea belt, which leads to injury and sometimes deaths.

In the course of the training, experts are teaching tea workers how to gauge the movement of a leopard by checking pugmarks, scratch marks on a tree, scat and how to identify whether it is a male or female.

“We are also providing details about the body language of

leopards, which need to be observed to understand its behaviour. This way, one can escape an attack and also make an assessment of the animal’s movements in the locality,” said an official of the state forest department. During the training, the foresters and experts are even emphasising on prompt sharing of communication.

“In due course, a social media group would be created where they can share information about the animal with us so that it can be easily trapped. Teams of trainees would be formed in each garden and be provided with sirens, carbide guns, searchlights and GPS kits to handle the situation and thwart the animal,” the official added.

Representatives of tea gardens have welcomed the initiative.

JOBS GET HEAD HUNTED

বাড়ছে সংঘাত, কতটা তৎপর বনকর্মীরা?

শান্ত্রী মজুমদার

গরম পড়তে শুরু করতেই উত্তরবঙ্গের বিভিন্ন বন সংলগ্ন বসতি এলাকাগুলিতে বাড়তে শুরু করল পশু-মানুষ সংঘাত। সম্প্রতি গরুমারায় হাতির আক্রমণে মারা গিয়েছেন দু'জন। নকশালবাড়ি এবং বাগডোগরায় ইতিমধ্যেই চিতাবাঘ বেরিয়েছিল লোকালয়ের কাছে। তা নিয়ে চিন্তা রয়েইছে। তাই বিভিন্ন স্বেচ্ছাসেবী সংগঠনগুলিকে নিয়ে আগাম কাজে নামছে বন দফতর। হাতি এবং চিতাবাঘের সঙ্গে মানুষের সংঘাত কমাতে শুরু হয়েছে প্রচার এবং সচেতনতা।

কার্শিয়ং ডিভিশনের নকশালবাড়িতে চাকনাজাত এলাকায় দিন ১৫ আগে লোকালয়ের কাছে একটি গাছে চিতাবাঘ দেখে আতঙ্ক ছড়ায়। যদিও কাউকে সেটি আক্রমণ করেননি। দিন দশেক আগে বাগডোগরা এলাকায় আজমাবাদ চা বাগানেও বেরিয়েছিল চিতাবাঘ। আক্রমণে একজন সামান্য আহতও হন। বন দফতরের হিসেব, এই সময় চিতাবাঘের প্রজননকাল। তাই চা বাগানগুলিতেই এই সমস্যা বেশি তৈরি হতে পারে। তবে তার জন্য ইতিমধ্যেই স্বেচ্ছাসেবী সংস্থাগুলিকে নিয়ে কাজে নেমেছে দফতর। উত্তরবঙ্গের পিসিসিএফ উজ্জ্বল ঘোষ বলেন, “হাতি এবং চিতাবাঘ দু'টির ক্ষেত্রেই সমস্যা কমাতে স্বেচ্ছাসেবী সংস্থাগুলিকে নিয়ে কাজ হচ্ছে।”

তেরাই ব্রাঞ্চ টি অ্যাসোসিয়েশনের সম্পাদক রাণা দে বলেন, “বাগানে পাতা তোলা এবং গাছ ছাঁটার সময়ই

চিতাবাঘের আক্রমণের সমস্যা বেশি থাকে তবে বন দফতরের সঙ্গে যৌথ উদ্যোগে আমরা চেষ্টা করছি সংঘাত কমাতে। কীভাবে হচ্ছে কাজ? সমতলের ১৫টি বাগানে কাজ করছে স্বেচ্ছাসেবী সংস্থা স্ল্যাপ। সংস্থার কর্ণধার কৌশল চৌধুরী বলেন, “বাগানে চিতাবাঘ কোথায় রয়েছে, তা আগাম জানলেই ৫০ শতাংশ সংঘাত কমিয়ে ফেলা যায়। আমরা প্রাথমিকভাবে বাগানের সর্দারদের প্রশিক্ষণ দিচ্ছি। কিছু উপকরণ দিচ্ছি। যাতে চিতাবাঘ থাকলে সেই এলাকাগুলিতে সাবধানে কাজ হয়।”

বন দফতরের কর্তারা জানান, ইতিমধ্যেই বাগডোগরা এবং সুকনা এলাকায় অন্তত ৫০টি হাতি দু'টি দলে ভাগ হয়ে ঘুরে বেড়াচ্ছে। বন দফতর সূত্রে খবর, লকডাউনে জনসমাগম কম ছিল দু'বছর থেকে। তা থেকে হাতির গোষ্ঠীগুলির মধ্যে এলাকায় আগাম চলে আসার প্রবণতা দেখা যাচ্ছে। তাই চা বাগান মালিকদেরও কেউ কেউ হাতি-মানুষ সংঘাত কমাতে উদ্যোগ নিচ্ছেন। বাগডোগরা থেকে সুকনা পর্যন্ত এলাকায় অন্তত ৮টি চা বাগান পড়ে। তাঁদের একটি নকশালবাড়ি চা বাগানের কর্ণধার সোনিয়া জব্বার নিজেই একটি সংগঠন গড়ে সংঘাত কমাতে নেমেছেন। সোনিয়া বলেন, “হাতির চলাচলে একটা নিরাপদ জায়গা দিলেই সংঘাতের রাস্তা কমে আসে। তার জন্য আপাতত চারটি বাগান এবং সংলগ্ন গ্রামগুলিকে নিয়ে কিছু কাজ করছি। বাচ্চাদেরও সচেতন করছি।” গত বছর কার্শিয়ং ডিভিশন এলাকায় হাতির আক্রমণে অন্তত ৬ জন মারা যান।

চিতাবাঘের সঙ্গে সংঘাত কমাতে পদক্ষেপ

নিজস্ব সংবাদদাতা

শিলিগুড়ি


চা বাগানগুলিতে চিতাবাঘ-মানুষ সংঘাত কমাতে এ বার নতুন প্রকল্প হাতে নিচ্ছে বন দফতর। সঙ্গে থাকছে ওয়াইল্ড লাইফ ট্রাস্ট অফ ইন্ডিয়া এবং বন্যপ্রাণ নিয়ে কর্মরত স্ন্যাপের মত সংস্থা। এলাকার ১৮টি চা বাগানে বিশেষ দল গড়ে সংঘাত কমাতে পদক্ষেপ শুরু হবে শীঘ্রই।

গত এক বছরে শিলিগুড়ি সংলগ্ন এলাকায় বৈকুণ্ঠপুর, কাশিয়াং এবং দার্জিলিং বন বিভাগের এলাকায় অন্তত ৫টি চিতাবাঘ জখম হয়েছে। কয়েকটি মারাও গিয়েছে বলে বন দফতর সূত্রে দাবি। নতুন প্রকল্পে ১৮টি চা বাগানে প্রশিক্ষণ দিয়ে একটি করে বিশেষ দল গড়া হবে বলে জানান বন আধিকারিকরা। বন্যপ্রাণ নিয়ে কর্মরত সংস্থা স্ন্যাপের তরফে প্রকল্পটি নিয়ে যৌথ ভাবে কাজের প্রস্তাব দেওয়া হয়েছিল বন দফতরকে। উত্তরবঙ্গের মুখ্য বনপাল (বন্যপ্রাণ) রাজেন্দ্র জাখর বলেন, “প্রকল্পটি ভাল বলে আমরা যৌথ ভাবে কাজের প্রস্তাব গ্রহণ করেছি। প্রকল্প সফল হলে তা অন্যান্য এলাকাতেও চালানো হবে।”

বাগানগুলিতে চিতাবাঘ বের হয় মূলত পাতা তোলার সময়ই। তখন সেখানে খাঁচা পেতে হয় সেটিকে ধরা হয়। না হলে তাড়িয়ে দেওয়া হয় জঙ্গলের দিকে। কিন্তু স্ন্যাপের তরফে দাবি, একটি এলাকা থেকে চিতাবাঘ সরিয়ে দিলে এলাকা ফাঁকা থাকে না। সেখানে অন্য কোনও চিতাবাঘ এসে পড়ে। এরকমও দেখা গিয়েছে, সরিয়ে দেওয়া চিতাবাঘ ফের আগের জায়গায় ফেরার চেষ্টা করে। স্ন্যাপের কর্ণধার কৌস্তভ চৌধুরী বলেন, “আমরা একটি প্রশিক্ষিত দল গঠন করব। যারা ১৮ বাগানে পাতা তোলার আগে বাগানকর্মী এবং চিতাবাঘের মধ্যে দূরত্ব তৈরির কাজ করবে।” অর্থাৎ, বাগানে চিতাবাঘ রয়েছে, এরকম এলাকা চিহ্নিত করে চিতাবাঘটিকে অন্যদিকে তাড়িয়ে পাতা তোলার কাজ চালাতে সাহায্য করবে দলগুলি।

Annexure 1

West Bengal Forest Department Permission Letter


GOVERNMENT OF WEST BENGAL
DIRECTORATE OF FORESTS
Office of the Principal Chief Conservator of Forests (Wildlife)
& Chief Wildlife Warden, West Bengal
Bikash Bhawan, North Block, Third Floor, Saltlake City, Kolkata – 700 091.
Tel No. 2334-6900/2358-3208, Fax. 91-033-2334-5946
E-mail: pccfwl-wb@nic.in/pccfwloffice.fd-wb@bangla.gov.in, Visit us at www.wildbengal.com
Memo No.: 1717/WL/4R-11 (Pt-XV) /2021 **Date:** 02/07/2021

To: Ms. Shimu Saha
Director – Projects
Solitary Nature & Animal Protection (SNAP) Foundation
E-mail: snapindia.ngo@gmail.com

Sub: Permission for awareness and sensitization based Human- Leopard Co-existence Project.

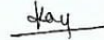
Ref.: Your e-mail dated 12.08.2021.

Permission is hereby accorded for Research Project “Human- Leopard Co-existence Project” as proposed in your letter under reference subject to following terms and conditions:-

- Before starting the research work, the researcher will meet with the concerned DFO and appraise him about the previous works done, proposed research work and explain the methodology. The permission is given in the name of Ms. Shimu Saha and her presence is must in field with her team to conduct research. DFO will guide the team and they should visit only those places which are specified by the DFO.
- The team should not indulge themselves in any other activity other than what is permitted in the letter under reference.
- The approval is for a period of 1 (one) year, i.e., from September 2021 to August 2022.
- In no way target species to be mishandled by the researchers.
- The team has to arrange their logistic support by themselves only.
- No disturbance or harm should be caused to any wildlife or wildlife habitat or the ecosystem.
- Not permitted to carry any type of weapons including fire arms, crackers, chemicals and poisonous substance.
- Feeding wildlife or birds is prohibited.
- Entry into Protected Areas shall not be allowed during the scheduled “Closure Period”.
- Entry into the forest areas is subject to timings or as permitted by the concerned officers/competent authorities having jurisdiction over the Wildlife Sanctuary / National Park. Entry into the forests is prohibited between sunset and sunrise.
- The team will abide by the provisions of Wildlife (Protection) Act, 1972, Indian Forest Act, 1927 and Guidelines for Human – Leopard Conflict Management issued by MoEF, GoI (issued on April 2011) and any other directive issued by the competent authority. All restrictions/ Rules in vogue are to be followed.

1 of 2

- l) Failure to comply with the conditions and violation of Wildlife (Protection) Act, 1972 would amount to withdrawal of permission & subsequent punitive action.
- m) The Forest Department will not be responsible for any damage or loss suffered by the research/ survey team and also their equipments during the course of their fieldwork.
- n) Biannual briefing of all the works done by researcher to be given to concerned DFO.
- o) On completion of work, 2 (two) copies of Project Report along with the photographs in Hard and Soft copy need to be submitted to the Principal Chief Conservator of Forests, Wildlife & Chief Wildlife Warden, West Bengal and 1 (one) copy be submitted to office of the concerned DFO in which research was done. They may have to present their field work to the Forest Department as and when asked.
- p) Copies of all publications arising out of the study shall be furnished to the Principal Chief Conservator of Forests, Wildlife & Chief Wildlife Warden, West Bengal.
- q) Forest Department of West Bengal has to be given proper credit in the ensuing research project.



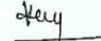
(Rajesh Kumar)
Addl. Principal Chief Conservator of Forests
Wildlife, West Bengal &
ex-officio Addl. Chief Wildlife Warden, West Bengal

Memo No.: FZ/4(3)/WL/4R-11 (Pt-XV)/2021

Date: 02 / 02 / 2021

Copy along with copy of research proposal forwarded for information and necessary action to:

1. The Addl. PCCF, North Bengal, West Bengal.
2. The Chief Conservator of Forests, Wildlife (North), West Bengal.
3. The Chief Conservator of Forests, Hill Circle, West Bengal.
4. The Divisional Forest Officer, Darjeeling Wildlife Division/ Kurseong Division, West Bengal. They are requested to inform this office, if she does not agree on certain points related with study or methodology.



(Rajesh Kumar)
Addl. Principal Chief Conservator of Forests
Wildlife, West Bengal &
ex-officio Addl. Chief Wildlife Warden, West Bengal

Annexure 2

Appreciation Letter from Tea Estate Association



TERAI BRANCH INDIAN TEA ASSOCIATION

Email: tbita@rediffmail.com

P.O. BAGDOGRA
PIN. 734014
DIST. DARJEELING

14th December, 2022

To
Miss Shimu Saha
Solitary Nature and Animal Protection (SNAP) Foundation
Siliguri

Appreciation Letter

Dear Miss Shimu Saha,

I am writing this letter to extend my appreciation towards successful completion of "The Human Leopard Coexistence Project" in Terai Tea Estates under Terai Branch Tea Association (TBITA) with satisfactory results. This project helps a lot to our selected tea estate managements to deal with leopard conflict in this region. Constant monitoring of leopard movement and sensitization programs with the tea estate residents were really helpful for mitigation of human leopard conflict from the beginning of this project. Local tea estate youths are also motivated and work really hard after getting training and siren, lights, whistles etc from SNAP Foundation for the protection of leopards in this area.

I am also especially thankful to Wildlife Trust of India for funding this project and West Bengal Forest Department for all the support for the success of this project.

So, I recommend that, this monitoring and sensitization activities will continue for better human leopard conflict mitigation management in terai tea estate landscape.

Best wishes!

Regards

Rana Dey
Secretary
TBITA

Annexure 3

Media Appreciation Publication

চিতাবাঘ-মানুষ সহাবস্থান প্রকল্প 'সফল' বাগানে

শান্তপ্রী মজুমদার

চা বাগানগুলিতে শ্রমিকদের উপর চিতাবাঘের আক্রমণ নতুন কিছু নয়। গত ২০১৮-২০২১ সালের মধ্যে কাশিয়ং এবং দার্জিলিং বন বিভাগের মহানন্দা অভয়ারণ্যেই এরকম ২৫টি ঘটনা ঘটেছিল। কিন্তু গত এক বছর থেকে ওই দু'টি বন বিভাগের ১৮টি চা বাগানে স্বেচ্ছাসেবী সংগঠনকে নিয়ে যৌথভাবে চালানো 'চিতাবাঘ-মানুষ সহাবস্থান প্রকল্প' মোটামুটি সফল বলেই মনে করছেন বনকর্তারা। তাঁদের দাবি, গত এক বছরে প্রকল্পের আওতায় থাকা বাগানগুলিতে চিতাবাঘের আক্রমণের ঘটনা ঘটেনি। আরও কিছু চা বাগানে এই প্রকল্পের অনুমতিও দিতে পারে বন দফতর।

কাশিয়ং বন বিভাগের বাগডোগরা, বামনপোখরি, পানিঘাটা এবং টুকুরিয়া ঝাড় রেঞ্জগুলিতে বাগানে পাতা তোলার সময় চিতাবাঘের আক্রমণের মুখে পড়ার ১৯টি ঘটনা ঘটেছিল তিন বছরে। দার্জিলিং বনবিভাগের মহানন্দা অভয়ারণ্যেও এরকম ৬টি ঘটনার নজির ছিল। কিন্তু গত সেপ্টেম্বর থেকে বাগানগুলিতে প্রকল্প নেয় বন্যপ্রাণ নিয়ে কর্মরত সংস্থা স্ল্যাপ। তারপর থেকে আক্রমণ প্রায় নেই বলেই দাবি বন কর্তাদের। উত্তরবঙ্গের মুখ্য বনপাল

(বন্যপ্রাণ) রাজেন্দ্র জাখর বলেন, “চা বাগানের কর্মীদের সচেতন করা এবং কীভাবে চিতার আক্রমণ থেকে বাঁচা যায় তা শেখানো হয়েছিল। আক্রমণ অনেক কমেছে। আরও কিছু বাগানে ওই প্রকল্প বাড়াতে চাইলে আমরা অনুমতি দেব।”

স্ল্যাপের तरফে এই প্রকল্প নেওয়া হয়েছিল। সংস্থার কর্ণধার কৌস্তভ চৌধুরী বলেন, “বাগানগুলিতে ৮-১০ জনের একটি করে শ্রমিক দল তৈরি করা হয়েছে। চা বাগান থেকে চিতাবাঘ তাড়ানো প্রায় অসম্ভব। তাই সেগুলির গতিবিধির উপর নজর রেখে পাতা তোলার আগে সাইরেন, বাঁশি বাজিয়ে গতিবিধি নিয়ন্ত্রণ করলেই সমস্যা কমে।” চিতাবাঘের পায়ের চিহ্নও দেখতে শেখানো হয়েছে বাগানের শ্রমিকদের। সংস্থার तरফে মনে করা হচ্ছে, গতিবিধির কিছু ধরণ চিহ্নিত করতে পারলেই আক্রমণ বা পশু-মানুষ সংঘাতের উপর অনেকটাই বেশি নিয়ন্ত্রণ পাওয়া সম্ভব। অগস্টে গুলমায় চা পাতা তোলার সময় গত এক মহিলার উপর চিতাবাঘ আক্রমণ করে। সেখানে সতর্কতা পদ্ধতি অবলম্বন করা হয়নি বলেই দাবি বাগান কর্তৃপক্ষের। রাঙাপানির হাতভোরা চা বাগানেও জুনে চিতাবাঘের আক্রমণ হয়। তবে ওই বাগানটি প্রকল্পের আওতায় নেই।

Annexure 4

Leopard Monitoring Team Details

Name	Tea Estate	Contact No
Narayan Oraon	Bijoy Nagar TE	9733802452
Naresh Khaka	Bijoy Nagar TE	9635518816
Rahul Khaka	Bijoy Nagar TE	8670283279
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Prabhat Oraon	Bijoy Nagar TE	8972751575
Sumit Karketta	Bijoy Nagar TE	9110196056
William Tigga	Bijoy Nagar TE	7908657269
Niraj	Bijoy Nagar TE	8250611249
Rosan	Sukna TE	9547332081
Mantu Barua	Sukna TE	8597675654
John Munda	Sukna TE	7679253182
Malai Munda	Sukna TE	8436639747
Fuldan Barua	Sukna TE	9064186098
Musar Chand	Azmabad TE	9641975035
Lakhan Gowala	Azmabad TE	8851765305
Karmanayak	Azmabad TE	9641888394
Bijay Nayak	Azmabad TE	6296252052
Binu Oraon	Atal TE	9832361343
Michel Kharia	Atal TE	7384211918
Nuwash Kiro	Atal TE	7063849020
Subhash Raj	Atal TE	7811063594
Sukar Chand Lohar	Atal TE	9800508381
Bhola Singh	Atal TE	8670304029

Name	Tea Estate	Contact No
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Dilip Toppo	Merryview TE	9635435643
Kishor Ekka	Merryview TE	7319052233
Kuldip Toppo	Merryview TE	9635907017
Sujit Lakra	Merryview TE	8016019086
Kulley Oraon	ORD Terai TE	9382840761
Bikesh	ORD Terai TE	9382327127
Biktor Oraon	ORD Terai TE	9749993909
Kulley Newar	ORD Terai TE	7076635572
Kundan Newar	ORD Terai TE	7602352845
Raj Kishan	ORD Terai TE	6297325147
Sandip Birik	ORD Terai TE	8927991725
Bimal Xalco	Marapur TE	9907996307
Firoj Lakra	Marapur TE	7679341617
Filip Lakra	Marapur TE	7679488496
Sukhnath Mahato	Marapur TE	7586948020
Govind Naik	Fulbari TE	8768375896
Pradip Bakshi	Fulbari TE	8317888388
Ranjit Minj	Fulbari TE	8436829400
Sankar Chettri	Fulbari TE	9932908562
Subrata Biswas	Fulbari TE	8327249162
Prakash Mahali	Gulma TE	7679368278
Bikash Chettri	Gulma TE	8371885834
Sukhdev Oraon	Gulma TE	8016458498
Sumit Biswas	New Chamta TE	7872907199

Name	Tea Estate	Contact No
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Sukhen	Mohorgaon TE	9932630201
S.K Thakur	Bagdogra TE	9382353504
Rajib Saha	Naxalbari TE	9593610631
Palash Bhowmick	Rangapani TE	9434068669
Alok Chettri	Simulbari TE	8116630280
Pradip Oraon	Simulbari TE	8348929286
Naresh Waiba	Muni Baraline TE	9775401459