



Project Report

Securing elephant corridors through Human-Elephant
Coexistence, South West Bengal, India

YEAR OF WORK : JAN'2019 TO DEC'2019

Funded by:

International Elephant Foundation

Implemented by:

Asian Elephant Conservation Foundation

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2. List the overall and specific conservation needs this project addressed.

The area includes Mayurjharna Elephant Reserve, its 'Zone of Influence' and interstate elephant migration corridor joining Singbhum Elephant Reserve, Jharkhand and Mayurjharna Elephant Reserve, West Bengal. In July 2016 forest department blocked the entry points to restrict inter-state elephant migration which was again removed in 2017 in which IEF supported project played

an important role. We intend to secure the safe passage of migratory elephants as we found these corridor forests area are vulnerable due to timber-poaching, conversion of forest lands to domestic lands, installation of illegal energized fences which obstructs the route of elephants.

Till August 2018, the local forest offices assisted the villagers to drive away the elephants from crop-fields or supports villagers with firecrackers and fire torches to protect their crops. This is a traditional practice in these areas for more than 40 years. We are working here to replace these traditional way of elephant driving by modern techniques (*low cost crop-guarding measures*) as



the existing practices involve high risk of accident and also retaliation. In 2018, The Supreme Court of India banned these tools for elephant driving and assistance to villagers was totally banned which causes severe damage to crops, life and other properties in villages.

Now, the managing of human-elephant hostility is becoming more challenging as the elephants are becoming regular crop-raiders but presently they are not equipped with alternate of traditional management system. It increased the grievance among villagers and recently the villagers set fires in two offices of forest department and almost every day 'elephant driving personnel' are beaten and one killed till date. We are afraid that, the grievance may ultimately results to retaliatory killing of 'crop-raiding' elephants by 'electrocution' which has been completely stopped for last 2 years.

To stop such unethical and illegal action to restrict elephant movements in South West Bengal the forest department should take strong action against such villagers.



There is a need of awareness, capacity building programme to reduce HEC and also implement alternate method to prevent reinstalling of barriers in these migratory corridors by the government. The project is important to secure the safe passage of elephants in vanishing corridor forests and human dominated landscapes. We realise urgent need to develop updated elephant Distribution map and 'conflict' intensity zone map for better HEI management and upscale existing community sensitization programme for corridor dependent villages to adopt 'conflict' mitigation techniques and strengthen 'Anti-depredation Squad' to secure the safe passage of elephants.

3. Summarize the goals and objectives and describe any changes in goals and objectives from the original proposal.

Project Goals	Objectives	Changes
The prime goal of the project is to restore secured inter-state migratory corridors of elephant herds and engage local community to secure a safe and free passage in entire home range.	This prime goal of the project can be achieved by successful outcomes of other objectives which includes habitat restoration of elephant corridor forest, proper knowledge of 'Elephant Distribution Map (EDM)' and	Due to NO/Low rainfall in the study area, the crop production in the current year is very low in the current year, but the elephant population has increased to 230+ in 2019 from 197+ in 2017.

Project Goals	Objectives	Changes
	‘Conflict Intensity Zone (CIZ) Map’ and effectiveness of Community capacity building, sensitization programme on habitat protection, resource management and human-elephant coexistence.	Due to these dual problems, the crop-raiding pattern of the elephants has been changed. The large herd (40+ to 80+) has been fragmented into several small groups of 5 to 20 elephants and expanded their area of movement. The small groups raid the village houses, grain storages etc and comparatively large herds raiding crop (vegetables) fields in the river beds.
Develop better habitat management plan to continue ecological restoration of degraded corridor forests to ensure fodder, shelter and other resource availability for the elephant herds.	Re-assessment of ecological condition of elephant corridor forest and habitat management/ restoration: We will study the fodder status, water and saltlicks availability, anthropogenic pressure on elephant corridor forests which will be documented for mapping. The fodder plant population frequency will be done by random QUADRAT method (10mx10m for trees and 3.16mx3.16m for shrubs and 1mx1m for forest floor herbs) along transect line. We will also initiate ecological restoration of the habitat including reintroduction of elephant fodders which were identified during previous years study.	This situation forced to modify current resource management and habitat protection plan these new areas are mostly village or suburbs.
Estimation of elephant population and group composition study in study area and update seasonal migration calendar, conflict intensity zone map to review	The migratory herds and residential (local) elephant population estimation & group composition study: We intend to develop updated ‘Elephant	NO Change

Project Goals	Objectives	Changes
existing elephant depredation management plan for implementation in sample sites.	Distribution Map' and 'Conflict Intensity Zone Map' to help forest managers and policy makers to develop need based management plan. The 'Elephant Distribution Map' and 'Conflict Intensity Zone Map' will be done at three different levels and based on last 5 years data: 'Elephant distribution and Conflict Intensity' within i. elephant reserve area ii. non forests area iii. village area To develop an effective management plan we need to enumerate these sub-groups and establish their home ranges. During the survey, total number of elephants in a herd along with the group composition will be recorded to understand the population trend and sex ratio.	
We intend to change the retaliatory attitude for villagers and achieve '0' retaliatory killing of elephant and minimise human life and property damage by 50% by 2020.	The community capacity building and sensitization programme on elephant habitat protection, resource management and human-elephant coexistence: Sample villages from the 'High-Moderate-Low Elephant Distribution Area'	NO Major Change. But, as stated earlier, the wild elephant depredation areas are increasing rapidly due to resource scarcity in traditional routes; it is difficult to categorize between Moderate and Low conflicts intensity zones.

Project Goals	Objectives	Changes
	with high intensity of 'conflict' will be chosen to do capacity building programme to mitigate human-elephant hostility. We intend to implement new ideas developed during previous years study by replacing traditional mitigation policies (crackers, fire torches etc) by modern technologies like alternate livelihood, crop alteration, save period of cultivation, unpalatable long-awned (bristles) paddy, chilly etc. through training and field verification. We will facilitate training and installation of low-cost crop/village guarding system in sample villages for protection of house and crop-field. The village education programme will be upscale to all interaction prone districts of Southern West Bengal. We will arrange participatory awareness programme through seminar/workshop/photography/painting/literature competition and develop education pack and documentary for distribution along with communication and publicity materials. We	

Project Goals	Objectives	Changes
	will also encourage young conservationist through institutional participants to enhance research capacity by volunteering. Orientation & training of 'Anti-depredation Squad': We will organise orientation & training of 'Anti-depredation Squad' formed during IEF project (2017) & arrange training programme for five more 'ADS' members formed by villagers to mitigate HEC: We will also strengthen 'Anti-depredation Squad' in Dalapani – Kankrajhore and other inter-state migration corridor and one mobile unit to monitor and secure safe passage of elephants during migration.	
Survey of elephant migration passage in entire range in West Bengal to know the vulnerability and form a team to secure these passage and escort the herd to prevent them from railway accident, electrocution etc.	There is also a need to study the vulnerability of elephant migration corridor in entire home range in South West Bengal as we have found that the elephant corridors are highly fragmented by highways, roads, and railway tracks. The elephant herd follows the old route when they are coming to West Bengal but taking a new route due to resource availability	NO Change

Project Goals	Objectives	Changes
	which is highly risky because of railway tracks. It has also taken life of 3 elephants in August 2018. We will also study those routes where railway tracks are passing through elephant's routes/habitats and set up a monitoring team with village people.	



Image: Elephant death by electrocution and railway accidents

4. For each objective, describe the specific actions taken to achieve that objective.

Objective	Actions taken against each objectives
The prime goal of the project is to restore the secured inter-state migratory corridors of elephant herds and engage local community to secure a safe and free passage in entire home range.	We set up network with Govt agencies and NGOs, Institutions, media and stakeholders groups. We collaborated with academic institutions to encourage students to take part in elephant conservation project. Local advisory meeting was organized in different places.

Objective	Actions taken against each objectives
	We developed proper knowledge of Elephant Distribution Map' and 'Conflict Intensity Zone Map'. The community capacity building, sensitization programme on habitat protection, resource management and human-elephant coexistence are ongoing.
Develop better habitat management plan to continue ecological restoration of degraded corridor forests to ensure fodder, shelter and other resource availability for the elephant herds.	To develop an effective habitat management plan we studied the fodder status, water availability, and anthropogenic pressure on elephant corridor forests. The fodder study was done by QUADRAT method. We also initiate the ecological restoration of the habitat through fodder plantation etc.
Estimation of elephant population and group composition study in study area and update seasonal migration calendar, conflict intensity zone map to review existing elephant depredation management plan for implementation in sample sites.	We enumerated the sub-groups and documented their home ranges. As suggested by Indian Government, Total Count by 2km transects was done for enumeration of the elephant population in sample areas focussing on the corridors. The update of seasonal elephant depredation area map development is under process.
We intend to change the retaliatory attitude for villagers and achieve '0' retaliatory killing of elephant and minimise human life and property damage by 50% by 2020.	Sample villages from the corridor zone was identified to do capacity building programme to mitigate human-elephant hostility. We did some awareness programme through seminars meeting etc. We invited encourage young conservationist through institutional participants to enhance research capacity by volunteering and the process is yearlong open. We implemented new ideas like alternate livelihood, crop alteration, save period of cultivation, unpalatable long-awned (bristles)

Objective	Actions taken against each objectives
	paddy, chilly etc. through training and field verification in sample villages. We are also strengthen 'Anti-depredation Squad' formed by local villagers in strategic locations and one mobile unit to monitor and secure safe passage of elephants during migration.
Survey of elephant migration passage in entire range in West Bengal to know the vulnerability and form a team to secure these passage and escort the herd to prevent them from railway accident, electrocution etc.	We are reviewing documented corridors where railway tracks are passing through elephants routes/habitats and setting up a monitoring team with village people.

5. Describe any activities that differ from the original proposed actions and explain the reason for the change.

The less availability of crops during summer in field turns the elephant to obligatory storage-grains raider as they raids the grain storage in village huts, houses in search of foods and the intensity of damages increases.

Now, apart from other precautionary measures, we need to introduce 'Underground grain storage system' in villages which is full proof from elephant depredation. We are working on this storage systems' viability, cost and technologies on priority basis though it was not mentioned in the proposed project.

6. Describe the conservation outcomes for elephants, other wildlife, habitat and human communities, and list major findings and accomplishments to date.

Project site is an ecologically important elephant home range including inter-state migration corridor joining Singbhum Elephant Reserve, Jharkhand and Mayurjharna Elephant Reserve, West Bengal. The project initiated a community movement for physical barriers free elephant corridor on priority basis. The proposed project helps to understand the ecological condition of elephant habitat including corridor forest and mitigate human-elephant hostility. The capacity building programme in corridor dependent villages is also very important to secure the safe passage of elephant and the project team is working on the same.



This project plays an important role to protect and restore the degraded elephant habitat which is very vital for the conservation of East-Central India population of the elephant as these long ranging animal need higher quantity resources along with the migration routes. We conduct several community awareness, sensitization and capacity building programme to reduce the intensity of conflicts which help to reduce the retaliatory attitude. We expect to reach '0' retaliatory killing of elephant and life and property damage reduce by 50% by 2020.

The project helps the wildlife managers at policy levels to know the vulnerability of elephant migration corridor in entire home range in South West Bengal. The new corridors (migration routes) are changing by the elephants due to resource availability but we have identified these new routes are highly risky because of railway tracks.

Proposed project updated the 'Elephant Distribution Map' and 'Conflict Intensity Zone Map' to help forest managers and policy makers to develop need based management plan including the agricultural plan according to the migration calendar to minimize crop raiding impact. The project is developing local level conservationist to continue the human-elephant interaction mitigation in the project area.

We hope habitat management programme, strengthening 'Anti-depredation Squad' and 'Early Alarm System' through yearlong Conservation Education and Community Capacity Building programme to reduce Human-Elephant 'Conflict'.

Major accomplishments for this project period:

-  *'ZERO' retaliatory killing of elephants in last year.*
-  *Successful implementation of alternate ways to mitigate human-elephant 'conflict' like 'chili fumes' etc. to deter elephants from crop field.*
-  *Successful experimentation on underground elephant proof granaries in village house to minimise the crop raiding impacts*
-  *Effective implementation of elephant location information through SMS at ground level.*
-  *The study of bee sound effect as sound deterrent on elephant herds*

**7. Approximately how many humans/communities are/were impacted by your project?
Approximately how many elephants are/were impacted by your project?**

Approximately 77 villages were covered so far and our voice on elephant conservation has been reached approximately 25000 people. Most of the villages are enjoying the benefit of early information sharing system through bulk SMS system and by introducing prior alert system and more than 750+ people were directly interacted to sensitize, capacity building programme on HEC mitigation.

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As introduction of new techniques is always a slow learning or communicating process as the villagers has blind faith on their traditional system. We hope when in post-monsoon, we install set up in sample villages, they will understand the effectiveness and adopt the methodologies. We have offered different technical knowledge support and learning opportunities on human-elephant interaction for new and existing 'Anti-depredation Squad' members formed during IEF project (2017 and 2018). They learned to make and install 'Early-alarm System', trip-alarm etc. The villagers were also offered knowledge on livelihood, crop alteration, save period of cultivation, unpalatable long-awned (bristles) paddy, chilly etc. through training and field verification. We will upscale these programmes in coming months to measure the success rate in implementation areas. We also organized awareness programme through seminar, photography, painting competition. We also offered young conservationist to enhance research capacity by working with us.

Age Group (both gender)	Unit	Activities
6 to 14 years	Primary and upper primary School : 17	Support to underprivileged children by giving school stationeries, awareness programme, Sit & draw etc
15 to 18 years	Secondary School & Higher Secondary School : 12	Interaction/discussion and film screening on elephant conservation
Open	Local clubs/community offices/village : 23 (out of 77 corridor dependent villages visited till May'19)	Discussion on village specific HEI problems & mitigation ideas.

The project site covers the migration range of 197+ elephants (Source: All India Synchronized Elephant Population Estimation – 2017). Presently the population reached 235+ (June 2019) in number including migratory herd, which we are monitoring, tracking to secure route. Unfortunately, we could not avoid death of 3 elephants by accidental electrocution and 2 elephant calf by dehydration.

8. Describe any problems discovered or that occurred during this grant period.

Due to NO/Low rainfall in the study area, the crop production in the current year is very low in the current year, but the elephant population has increased to 235+ in 2019 from 197+ in 2017. Due to these dual problems, the crop-raiding pattern of the elephants has been changed and we need to study the changes and plan the mitigation policies accordingly. Simultaneously, the elephants are fragmenting their herds into several small groups of 5 to 20 elephants to expand

their area of influence. The small groups are mostly raid village houses, grain storages etc and comparatively large herds find new area along the river beds.

There is also another problem we are encountering is the lack of interest of the villagers in alternate mitigation policies as they are habituated and comfortable with the easy ex-gratia payment system of the government. During our work with villagers, we experienced that they sometimes delays the elephant driving to increase the man-days and this malpractices increases their daily wages but increases the daily expenditure of government for management of HEC.

**Translocation of injured elephant
(The elephant was injured by retaliatory action of
villagers during repeated crop-raiding)**



We are continuing the proposed awareness programme for more than 63% stakeholders but not able to motivate the remaining as they are more interested in cash compensation than crop protection. We also tried to introduce 'SEED against SEED' programme but the farmers are interested to take cash money as better option.

We also experiencing that the overenthusiastic public creates severe problem during elephant management which may be fatal too. Another nuisance in the study area is mobile photographers

We also found that the rail-tracks are getting busier rapidly and during an investigation on previous accidents, we found that the both passenger and goods trains run above the speed limit mentioned and no assessment was done along the train routes which cuts the elephant corridors in many points.

9. Was your project successful? State short and long-term goals that you are using to evaluate your accomplishments.

We have achieved project goals on time and already secured the safe passage for elephants in inter-state borders and achieved '0' retaliatory killing of the elephants till date. Though the death of human life has increased to 13 numbers (April 2018 – January 2019).

Short-term goals to evaluate accomplishments:

1. Change the retaliatory attitude of villagers and achieve '0' retaliatory killing of elephant and minimize human life and property damage by 50% in coming 3 years: During project period,

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only one person was killed by elephants and no incidents of retaliatory killing took place. During evaluation we considered it as a project success.

2. Securing the safe passage to migratory elephant herds through the existing inter-state corridors was one of the priorities of the project. In this current year, the inter-state barricade to restrict elephant migration has fewer impacts on elephant migration. The Anti-Depredation Squad stayed in the region for more than 30 days continuously, but they were mostly engaged in tracking elephant movements in night to protect the crops from damage rather than blocking the migratory routes.
3. Estimation of local and migratory elephant population and elephant depredation management development & implementation in sample sites is also a vital goal of the project to develop a management plan for Human-Elephant Interaction. The achieved the objective partially and still working on the same to understand the group composition.

Long-term goals that to evaluate accomplishments.

1. Suggest suitable alternatives of inserting physical barrier on state border to restrict elephant migration.
2. Develop better habitat management plan for ecological restoration of degraded corridor forests to ensure fodder, shelter and other resource availability for the elephant herds.

10. Based on this Project, what is the “next step” for this project and does it have implications for future conservation actions?

The current project is an emergency initiative to secure elephant migration routes in Jharkhand-West Bengal border. We will focus on the securing migratory passage with the West Bengal itself. As discussed earlier, the most of the migratory passages are converted human dominated landscape from forest land. The villagers too put illegal high-tension energized fence, poisons etc. on elephant routes to divert the herd movement away from their villages or farms. We will start the campaign against such activities during this project tenure and upscale the direct activities in field in coming future.

We know that the 1 year or 2 years are not enough to study, draw management plan and implementation. In the coming year we will do ecological restoration of the elephant corridor forests and integrated habitat management. We will also conduct higher number of community capacity building programme to develop alternate livelihood options and also implement the ‘conflict’ mitigation recommendation in sample villages.

We have experienced ‘ZERO’ death of elephants by electrocution, railways accident and retaliatory actions for couple of months but we will also need to focus on ‘ZERO’ human casualties in coming years.

11. Provide at least one human interest story. This story should enable the reader to identify with the people, a problem, day-to-day situations, achievements or a funny or strange occurrence during the course of the project.

We all are well aware that the elephants are social animal and have strong family bonding. The study area has lateritic soils and very hot I summer. This year the temperature recorded upto 48°C and most water sources dried up.

A herd of elephants entered the village adjacent crop field and village in search of food on 16th May'19 evening. On the very next morning, the when the herd was moving towards nearest forests, a elephant calf was found unable to move with the herd and only accompanied by mother. The calf ultimately unable to reach the forest area and died in between forest and village land.



The mother tried to carry it to the forests, but failed to do so. The forest department and local volunteers and local members of Anti-depredation Squad was trying their best to keep public in safe distance from the mother elephant. But, the villagers were busy with their mobile phones to taking photographs, selfies with the dead elephant calf.

Suddenly, the mother elephant, who was standing nearest forest area around 100meters away, came out and killed a mobile photographer who was busy with mobile for taking photographs.

The pathetic incident was an eye opening incident we considered as it showed the affection, love of a caring mother towards its baby, as well as the risk of mobile photography. After that, the people offered all sort of help to the forest department and ADS team to manage the elephant herd to secure a safe passage for the herd.

12. In 500 words or less, summarize the progress and results achieved. This will be used for media and donor recruitment.

Mayurjharna Elephant Reserve, the only elephant reserve in West Bengal for Eastern India population, is gradually losing its resources and potentials too. The number of elephants in 'Mayurjharna Elephant Reserve' (414.06sq.km.) and extended 'Zone of influence' (1436sq.km) has increased by approximately 67.80% during last 08 years (i.e. 118+ in 2010 to 198+ in 2017). The project site links Singbhum Elephant Reserve, Jharkhand and Mayurjharna Elephant Reserve, West Bengal through four elephant migration corridors. Since July 2016, West Bengal government blocks these corridors by 'Energised fence', 'Elephant Proof Trench', human-barrier with fire torches etc. to restrict inter-state elephant migration which turns the elephants more aggressive and increase the depredation in the corridor-dependent villages.

This IEF project aims to secure existing Jharkhand-West Bengal Inter-State Elephant Corridors through habitat management, and stakeholders' capacity building for Human-Elephant Coexistence. Prime objective of the project is to find out the ways to mitigate Human-Elephant 'Conflict' in the corridor dependent villages, secure safe passage for the elephants and conduct training programme for villagers to strengthen model 'Anti-depredation Squad'.

During our studies, we found that, Dalapani (Jharkhand)-Kalrajhore (West Bengal) is only active elephant corridor with high priority of conservation. Majority of migratory herds take this route to enter West Bengal. The corridor has more than 37 species of elephant fodder and the forest is a continuous one in entire Jhargram division (Bhulaveda and Belpahari forest range). In 2018 approx, 125+ elephants used the corridor for to and fro journey. The elephant herd consists of approx 18+ migratory elephants with short home range use Mahilong (Jharkhand)-Kalimati (West Bengal) corridor frequently in post-monsoon to pre-winter and Chandil (Jharkhand)-Matha (West Bengal) and Jhunjhaka (Jharkhand) – Banduan (West Bengal) elephant corridors are no longer exists in the West Bengal region.

The project succeeded to secure free passage to the migratory elephant herds in the inter-state elephant migration corridor in Jharkhand-West Bengal border areas, which facilitate the elephant movements. The community participation in these corridor forest villagers was really appreciable for securing the safe and free passage to the migratory elephant herds. It is also great news that no retaliatory killing of elephant took place in 2017-18 (till July of 2018). After a stay of 7 to 9 months, we estimated 11 calves with the herds were returned to Jharkhand, which also indicates

that the natural conditions are favourable for elephants in the project site and extended home range.

The community capacity building programme conducted till date were focused on HEC mitigation techniques like low-cost crop-guarding system, fore-alarm system, alternate livelihood practices,



Image: Distribution of chilli tume creation ball to use as elephant repellent as part of experiments

crop alteration, save period of cultivation of cash crops, unpalatable long-awned (bristles) paddy, chilly etc. through training and field verification in corridor dependent villages to mitigate human elephant hostility. The project has an important role in communication and confidence building of stakeholders to minimize retaliatory attitude. During community interaction, we explained '*how we can change the conflicts to coexistence*' through few precautionary activities. We are developing local conservation stewards through to monitor the elephant

population migration and human-elephant hostility.

13. List all organizations associated with this project and their roles in the project.

Associated Organization	Role
National Council of Science Museum, Government of India	1. Community capacity building (development of fore-alarm, elephant presence detector etc.) programme and training of volunteers.
Directorate of Forests, Government of West Bengal.	1. Supporting the project through knowledge sharing, infrastructural supports and providing local staffs. 2. Direct involvement as stakeholder and collaborative arrangement of conservation education/capacity building programme.
Central Rice Research Institute, Orissa	1. Knowledge sharing about the unpalatable long-bristles paddy varieties and interested in farmer's orientation from elephant depredation zones.

Local cable channels, FM radio, electronic and print media	1. Awareness generation among local people and other stakeholders. 2. Publicity of project in local areas.
Local NGOs and institution	1. Development of agricultural planning according to elephant migration calendar. 2. Resource support for alternate livelihood development.
	1. Network with the stakeholders and participate in the awareness and capacity building programmes.
Undergraduate Colleges and Universities.	1. Capacity building programmes for students and engage them as volunteers in the conservation project.

14. Include an itemized financial report of International Elephant Foundation funds spent as a separate page of the report.

BUDGET ITEM	IEF Grant	Expenses	BALANCE
<u>Staff costs</u>			
Principal Investigator 12 months @ \$100 pm	\$1575	\$1575	-
Co Investigator 12 months @ \$75 pm			
Consultant 15 days @ \$25			
Field Asst/Interns 12 months @ \$50 pm			
<u>Travel expenses</u> (networking, survey, capacity building):			
Local conveyance @ \$50 pm x 12 months	\$1560	\$1687	(-)\$127
2wheeler hire cost @ \$60/month x 12months			
Fuel 80 L/month @ \$1.5/Ltr x 12 months			
Boarding and meal cost during field survey, awareness etc: @ \$200 x 12 months	\$1800	\$2077	(-) \$277 Living cost for the project team was increased due to more participants from local forest ranges
Equipment (No equipment need to purchase. The project has the following equipments which was	\$250	\$250	\$NIL We purchased the speaker



BUDGET ITEM	IEF Grant	Expenses	BALANCE
purchased during previous works and also received from IdeaWild) - Garmin eTrex 10 Worldwide Handhelp GPS - Canon 700D Digital Camera - SONY HD Video Camera - Measuring tape, Boards, Ropes etc. - EPSON VS250 SVGA HDMI 3LCD projector - HP Laptop - Holy Stone F181C RC Quadcopter Drone with HD Camera - Portable Megaphone - Binoculars Need to purchase: Speakers etc. @ \$150 Maintenance. @ \$100			and the laptop was repaired
Supplies (Consumable) Seeds/plants from nursery for fodder and indigenous species plantation \$1000 Printer cartridge, paper, power cells, candles, rope etc. \$100	\$600	\$623	(-) \$23
Services (itemize) Communication materials like posters, leaflets, booklets, pamphlets, banners, stickers @ \$850 Railway/Highway side caution boards @ \$1000 Pre-Mid-Post project evaluation of community attitude towards HEC and Human-Elephant Interaction intensity @ \$200 Community facilitation programme for underprivileged tribal indigenous children of human-elephant conflict zone @500	\$2200	\$1973	(+) \$227 Caution boards were printed but installation is due to change of selected sites
Workshop for capacity building: Community capacity building workshop: @ \$100 x 10 workshops	\$1500	\$1662	(-) \$162 The number of group meeting for capacity building in villages were

BUDGET ITEM	IEF Grant	Expenses	BALANCE
Education and awareness seminar in schools, colleges & universities: Co-Sponsored by the College/Universities: @ \$50 x 10 workshops			organized in three additional places
<u>Miscellaneous expenses</u> Inception and follow up meeting with stakeholders group, Press meet, communication & publicity materials for media (TV &radio), project report publication, distribution @ \$500	\$500	\$379	(+) \$121
TOTAL	\$9985	\$10226	(-) \$241

The \$241 deficit was covered by consultancy services and other fund-raising programme.

15. Submit at least five high resolution digital images (350kb or over) representative of the Project as separate individual files for each 6 month and final report. Do not send the same photos for multiple reports. If possible, please include at least one photo with an elephant in the frame that demonstrates your project activities.

Image 01_ The elephant herd is crossing state highway

Image 02_ Elephant death by electrocution in Midnapore Forest Division

Image 03_ Accidental death of elephant in Jharkhand-West Bengal border area by speeding train

Image 04_ Injured elephant under treatment of West Bengal Forest Department

Image 05_ Wildlife conservation excellence award received by Samya Basu

Image 06_ The media interview of Samya Basu on Human-Elephant Interaction

16. Submit at least one video clip least 2 minutes in length for each 6 month and final report. Do not send the same video for multiple reports. The video can cover anything you think IEF and/or the general public might find interesting as long as it relates to the project funded by IEF and includes the following:

- Introduce yourself and the title of your project
- State the purpose of the project
- Please very briefly acknowledge the International Elephant Foundation.
- Must have either audio or subtitles
- If the audio is not in English or if it is difficult to understand or to hear, you must provide a written transcript in English.
- Do not add music to your video.
- Please try to include footage of elephants when possible

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Please remember that the general public and donors are fascinated by the work you do and your knowledge of and experience with elephants. They want to learn about the projects that help elephants and see how their donation is being used. You can explain the goals, objectives and significant outcomes of your project, or take us through a day in the life of a patrol or your interactions with community members, or tell us why your project has greater implications for elephant conservation.

Use your imagination to tell us your very special conservation story.

The video file is attached with the report (email).

17. Do you intend to publish and/or present your findings at a conference or symposia? Please provide us information about the journal/conference/symposia and a timeframe. Please send a copy of all future publications that result from this study.

Yes. I will definitely share the project findings through publication in leading journals and interactive audio-visual presentation in conference, seminar etc. once the project is completed. We have already presented the present work in 'University Grants Commission, Government of India' sponsored seminar for Zoology students of different college in West Bengal. We have also presented the observation and findings to different policy making government bodies like West Bengal Forest Department etc.

The observation and finding will be shortly published in 'Indian Forester' journal.

18. Has your project received any media coverage? If so, provide copies of the articles, videos, etc complete with web links if the coverage was online.

- 1) The ANI channels
- 2) News18 Bangla
- 3) Times of India
- 4) AAJKAAL
- 5) Kolkata TV
- 6) Millenium Post
- 7) Dainik Jagaran

Expert visits S Bengal to take stock of man-jumbo conflict

Sujay Khanra

West Midnapore: With 15 human deaths in Jhargram and eight in West Midnapore so far this year due to elephant attacks, foresters have a tough job at hand to check man-elephant conflict. More so, because the Supreme Court recently banned the use of 'hulla parties' to drive away elephants.

A forest department official said that this year, too, 125 elephants from Jharkhand's Dalma have come to West Midnapore. Of them, 90 have been located in Odisha, while 35 are in Nayagram.

Recently, Samya Basu, a biologist with Asian Elephant Conservation Foundation, visited the area to interact with villagers and make them aware about the need to protect elephants' corridors and the apex court order.

Basu and his team members visited the forest of Araberi and collected footprints of elephants from there. Besides, they also took stock of the damages being



This year, 125 elephants from Jharkhand have come to West Midnapore

done by the jumbos in the local villages. "We made the villagers understand that the forest department is just following Supreme Court order as far as use of hulla parties is concerned," said Basu.

Basu's efforts were supported by Rufford Foundation, International Elephant Foundation and People's Trust For Endangered Species among others.

Divisional forest officer, Rabindranath Saha, said that many villagers in the region have shifted to potato cultivation from paddy. "Still, the jumbos raid villagers' homes in search of paddy," he added.

Recently, CM Mamata Banerjee had instructed the foresters to take all steps to check human casualties due to man-elephant conflict.

19. Please list all websites, blogs, social media accounts, etc associated with the project, its investigators, and organizations (this includes Facebook, Twitter, Instagram, etc)

Facebook: www.facebook.com/aecfindia
Twitter: <https://twitter.com/elefriendsamya>
Instagram: <https://www.instagram.com/samyabasu>
YouTube: <https://youtu.be/l8JJr7YJcmY>
<https://youtu.be/AvLQ-76SgbY>
<https://youtu.be/uKj4ksuJ8dg>
<https://youtu.be/D70bWlYZgww>

(We have not uploaded the videos to YouTube for a long time, as we found that the videos were downloaded by the viewers and after edit the same videos were uploaded with their 'credit'. Now, all these videos are saved in our storage devices and used during AV awareness programme).

Securing elephant corridors through Human-Elephant Coexistence, South West Bengal, India.