

Project Title	Elephant and crop management for coexistence through modified lookout points (tongi), and conservation education in the fringe villages of Kaziranga National Park, northeast India	
Report Type	<b>Interim</b>	
Interim Report Submission Date:	30 June 2022	
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Project Start Date:	01 Jan 2022	
Project End Date:	25 Dec 2022	

## 2. The conservation needs this project addressed and summarize the progress and results.

Kaziranga National Park (KNP) is located in Assam, a state in the northeastern region of India, and refers to a vast forest area spreading across five districts: Golaghat, Nagaon, Karbi-Anglong, Biswanath Chariyali and Sonitpur. It is a 'World Heritage Site' with two-thirds of the world's one horned rhinoceroses and hosts a very highly dense tiger population.

KNP is part of Kaziranga Karbi Anglong Elephant Reserve (KKER) with an area of 3270 sq km with population of 1940 elephants and connected to two other important Elephant Reserve such as Dhansiri-Lungding (Assam) and Intanki ER(Nagaland) combined covering an area of 942 sq km with 305 elephants. KNP is core are of KKER and act as source population of elephants in the landscape. Human Elephant conflict (HEC) is a major obstacle for community living around Kaziranga National Park (KNP) and frequent depredation of crops causes considerable hardship for the community. The Corbett Foundation (TCF) always puts emphasis on making community as an equal partner in all mitigation and conservation initiatives.

The International Elephant Foundation (IEF) has extended its support to community members living of the fringe of KNP to construct 65 "*Tongis*" (improvised look out points for crop guarding) for protection of crops and deter crop raiding elephants in an invasive way to reduce HEC in the project site and improve the financial condition of community and as well made the community members more interested in conservation and protection of wild elephants.

In the first six months of the project, the project team has managed to construct 27 "*Tongis*" in midst of prevailing second wave of the pandemic situation caused by COVID-19. The team organized eleven meeting with the community members of four fringe villages namely Methoni, Kuthori, Dumjan and Rangalu. Through these meetings, the team finalized the numbers of *Tongis* required in these villages and possible locations of these *Tongis*. During these meetings farmers were encouraged to discuss alternative crops that elephants did not prefer. Mustard cultivation was identified as an alternative crop. 14 families have been convinced to try out mustard when the right season for mustard cultivation approaches. Conservation Education meetings were held in seven villages. A call for articles has been sent to develop an edited e-volume on human-elephant conflict in the Indian subcontinent. India's famous naturalist and former Dean of the Wildlife Institute of India, Dr AJT Johnsingh, has agreed to be an Editor for the same along with Dr Naveen Pandey. The work on developing IEC materials is in progress.

The team has also procured essentials materials for construction materials for 35 *Tongis* from reliable vendor. The team had also procured 80 powerful torchlights to protect their crops from elephants. Construction of these 27 *Tongis* equipped with torchlight has helped the beneficiaries immensely during protection of rice saplings in the nurseries from elephants and other herbivores. Three meetings were organized for capacity building of frontline staff and community members.

**3. Summarize the goals and objectives. For each objective, describe the specific actions taken to achieve it.**

This IEF project is a field-based implementation of community managed HEC mitigation initiative. The goals and objectives of the project are mentioned below:

*Goal:* Elephant and crop management for coexistence in the fringe villages of Kaziranga National Park, northeast India

*Project Objective 1:*

Help build local community's adaptive capacities to coexist harmoniously with elephants

Changes: No Change

*Project Objective 2:*

Enhance awareness levels and capacities in key local stakeholders to support improved mitigation of ongoing HEC in the project area

Changes: No Change

Objective	Specific actions taken
<p>Help build local community's adaptive capacities to coexist harmoniously with elephants</p>	<ol style="list-style-type: none"> <li>1. A survey of elephant movement and gaps in mitigation measures conducted in seven villages so far.</li> <li>2. 11 focused discussions were organized with the community on developing localized deterrents and understanding the current status in regard to conflict.</li> <li>3. 27 lookout points have been built for which the project supplies the galvanized iron steel sheets and the community contributes bamboos and labor.</li> <li>4. Equipped each lookout point with a rechargeable and powerful torchlight that helps avoid close contact with elephants and reduce the likelihood of use of any sharp object to deter elephants</li> <li>5. Two sites have been identified where farmers want to try an alternative crop</li> <li>6. 14 affected families have shown interest to cultivate mustard at appropriate season</li> </ol>
<p>Enhance awareness levels and capacities in key local stakeholders to support improved mitigation of ongoing HEC in the project area</p>	<ol style="list-style-type: none"> <li>1. Conducted Conservation Education for Elephants in 7 villages adjoining Kaziranga.</li> <li>2. Three meetings were conducted for capacity building of at least 8 frontline staff and 16 community members through focused group meetings and field visits</li> <li>3. Development of two Information Education Communication (IEC) materials is in progress</li> <li>4. Call sent for articles on human-elephant conflict and elephant behavior for developing an edited e-volume for awareness generation</li> </ol>

**4. Describe any activities that differ from the original proposal and explain the reason for the change.**

None

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

Presently, all these 27 tongis are being used for protection of rice sapling nursery to protect the rice saplings from elephants and other herbivores. All the beneficiaries informed the team that, installation of these tongis and powerful torches were instrumental in the protection of rice sapling nursery from elephants and other herbivore. All these tongis would be realigned as soon as the rice saplings get planted in the fields. During rice cultivation, at initial stage elephant raids are more common in nursery sites and less attack on the fields. Later, elephant raids become more intense as soon as milking stage of rice sets in. Thus, at early stage, protection of sapling nursery is much vital for rice production.

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

During the first six months of the project, the project team has successfully constructed 27 tongis. The team had involved a total of 135 families from four villages in this project. It is estimated that, at least 600 people from these 135 families are associated with the project so far.

The team had been informed about many failed attempted by elephants to raid the saplings in the nursery sites by the beneficiaries. So far, 5 failed attempts by elephant herds (average herd size 9) and 8 failed attempts by lone bulls (the villagers could identify involvement of one Tusker 7 times). Other than elephants, the beneficiaries also reported attempts of crop raiding by Hog deer, Wild pigs and even One-horned rhinoceros. To deter the crop raiding elephants, no sharp objects or fire balls had been used by the beneficiaries, use of powerful beam of the torchlights were instrumental in early detection of the elephants. No injury was reported to the elephants.

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

None

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

The crop guarding through use of tongi and powerful torchlight had already proved to be successful model. The support from IEF would surely increase the viability of the model in the landscape. Till date, all the tongi beneficiary supported by IEF have informed that, through use of the tongis and torches and rotational crop guarding has resulted nearly zero damaged to the rice sapling nursery by elephants and other herbivores. The short-term goal is to reduce HEC in conflict prone areas with support from the community. The long-term goal is to promote the model at landscape level and enhance the conservation of initiative of wild Asian

elephants. The project has initiated deliberation on promoting alternative crops like mustard that are not raided by elephants.

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

The immediate “next step” is to complete the installation of the remaining 38 tongis at the earliest and complete the other activities such as sensitizing programs, monitoring and evaluation, perception survey etc. after completion of one or two crop cycles in the study site. The other future aim is to replicate this IEF project in other HEC conflict zones of Assam and promote this IEF project as a most cost effective, non-invasive community managed HEC mitigation strategy.

**10. Provide at least one human interest story.**

Methoni Tea Estate is one of the hundreds of teagardens established by the British in colonial India. Working as workers in tea gardens is all that the tribes have done so far or four or five generations. In the recent decades, there has been lot of migration to cities from tea gardens. During the pandemic, a lot of workers returned from cities and took up agriculture on land they had taken on lease. Motivated by other farming communities, they took up paddy cultivation. Raiding elephants turned to be a shock and disappointment for the youth. They would have helplessly plunged in debt and loss if TCF was not supported by the IEF to help such youth by providing lookout points, torch and training to humanely protect their paddy saplings. They could have taken up some inhumane and injurious ways to deter elephants. With our lookout points placed next to their saplings, their faith in hard work has been restored.

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

Not applicable at this stage. During later half of the project students from partner colleges will be involved in monitoring and assessment.

**12. Include an itemized financial report of IEF funds spent as a separate page of the report.**

Included at the end of this report

**13. Submit at least five high resolution digital images**

Attached with the email

**14. Submit at least one video clip least 2 minutes in length**

Added, shared via wetransfer

**15. Do you intend to publish and/or present your findings at a conference or symposia?**

Yes. It will be planned towards the end of the project. We were successful to get published in JEMA last year.

**16. 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.**

Not yet. We will get it in coming months.

**17. Please list all websites, blogs, social media accounts, etc associated with the project, its**

investigators, and organizations (this includes Facebook, Twitter, Instagram, etc)  
<https://www.facebook.com/225163006905/posts/pfbid05t3ZdRa4tXNjoq7HjNSKmWycsFZPJ3B2nph2Mdv9ekyRZWY17um6TSvri4XL4uiol/>

**Itemized financial report of IEF funds spent**

SI No.	Particulars/ Heads	Amount INR	Amount USD
1	Conservation Education for Elephant- IEF	17655.00	235
2	Goods Carriage Charges- Tongi- IEF	7300.00	97
3	Mobilization Meeting- Tongi- IEF	12618.00	168
4	Monitoring & Surveillance- Tongi- IEF	9277.00	124
5	Raw Materials- Tongi IEF	227849.00	3038
	<b>Total</b>	<b>274699.00</b>	<b>3662</b>

Fund received as first installment = 4992

Funds spent by the end off Jun2022= 3662 USD

Balance = 1330 USD

We request for the second installment of funds so that we can proceed with the remaining work. The invoice for rest of the amount is attached to the email.

Thanks a lot, International Elephant Foundation!

**Interim Project Report submitted by**

Dr Naveen Pandey

Deputy Director and Veterinary Advisor

The Corbett Foundation, Kaziranga

Dated 30<sup>th</sup> June 2022