



HATI BONDHU
(Friends of the Elephants)
Baghorghati, Chapanala, Nagaon District
Assam 782135, India

www.hatibondhu.in

HATI BONDHU – REPORT ON ITS ACTIVITIES FOR 2019 – 2020

A Report on the activities of “Hati Bondhu, Assam” for the year April 2018 till 31st July, 2020, particularly with respect of Paddy, Napier and Broom grass plantations for elephants and its effect in changing the behavior of elephants towards humans and in mitigating Human-Elephant conflicts during the period of ripening of paddy in the villages.

1. Objectives: 2018–21: an overview.

Hati Bondhu, Assam, is broadening itself as a **fraternity of people** to help the wild elephants who are in severe distress for various reasons, by creating Elephant Heaven Habitat Areas (EHHAs). The following objectives were undertaken for the year 2018-20.

- i. Preparation of maps of elephant corridors, foraging areas, to better understanding and, subsequently for better management of the human-elephant conflict.
- ii. Raising of sagging high powered electric lines in their migration passages, involving community participation, which has accounted for nearly 34 cases of elephant deaths, between 2015 to 2018.
- iii. Improving the quality **of the shrinking elephant habitats** in areas of our activity.
- iv. Improving the immediate ‘food security’ for the wild elephants by planting a) fast-growing Napier grass, ‘Jharu’ (Broom Grass), ‘Tora’ (Galangal) and other suitable species and rice in strategic areas as a short term measure b) indigenous trees, ideal for elephants, as a long term measure and c) **other suitable species and rice in strategic locations**, to mitigate the human-elephant conflict at the time of ripening of paddy.
- v. To mitigate the human-elephant conflict, particularly during ripening and harvesting of paddy.
- vi. To create awareness on the issues of elephants, especially amongst school children.

- vii. Adequate land has been Purchased for setting up a permanent office at Baghorghati, opposite the Suwang Reserve Forest near Chapanala, along with a training centre for community-based sustainable projects, workshops for sensitizing communities, etc. and a wildlife rescue centre for rescued and injured wildlife in the area of operation.
- viii. Identification of a suitable area for an **Elephant Rehabilitation Centre**, to provide a haven for retired elephants of the forest department, orphaned elephant calves from the wild, neglected domestic elephants.

II. **Area of the present activity of Hati Bondhu, Assam.**

The area of present activity is from Bagser Reserve Forest contiguous to and South West of Kaziranga National Park up to Kondoli along the foothills of the Karbi Hills. The total length of the activity area will be about 70km.

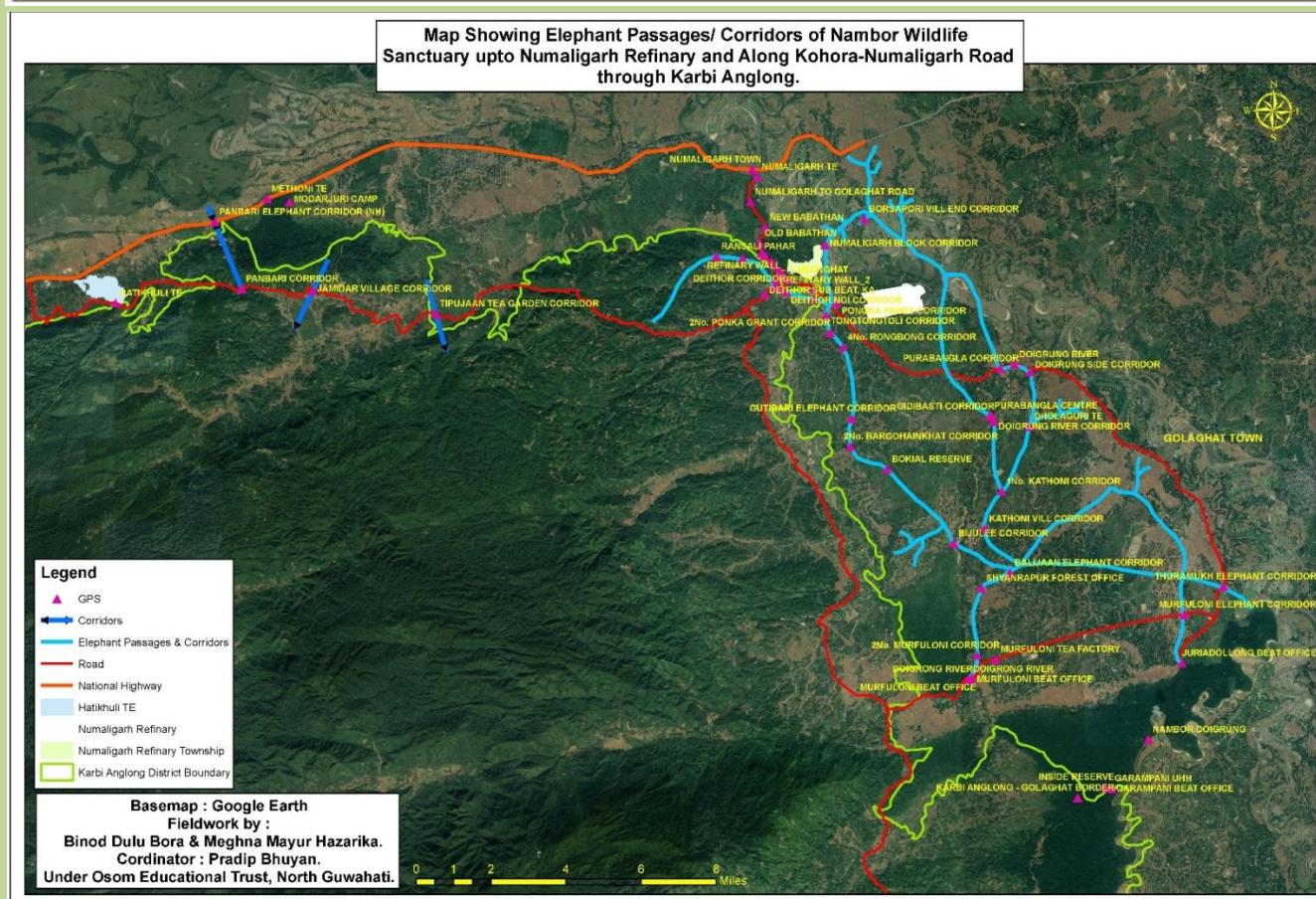
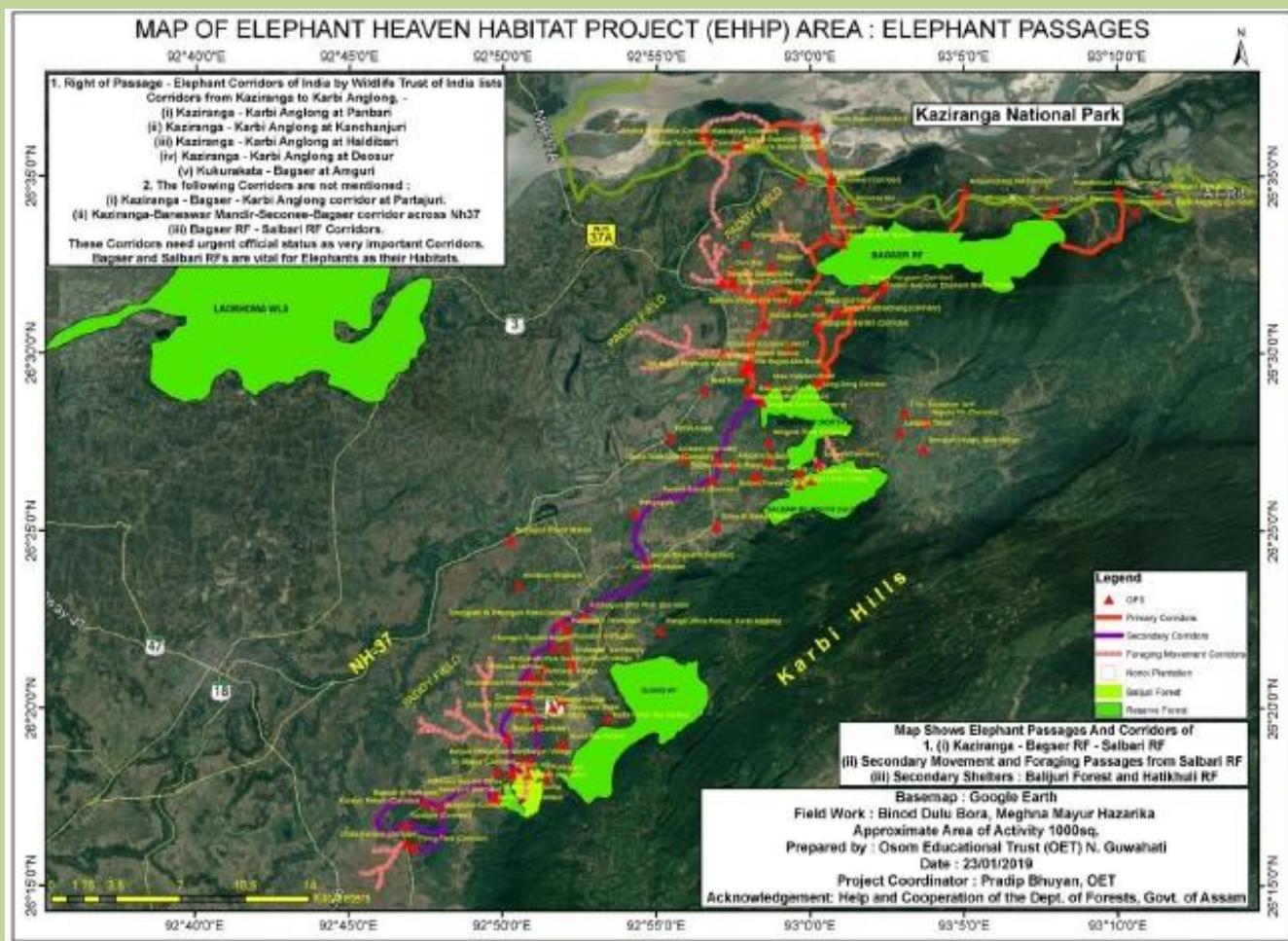
Area of activity will be extended each year to embrace other degraded habitats and conflict zones.

III. **Field Report from April 2019– July 2020: a comprehensive report.**

- i. A comprehensive study was undertaken to study the elephant migration passages, foraging areas and based on the data, and a detailed map was created by Binod Dulu Bora, Field Director & Meghna Mayur Hazarika, Field Project officer, Hati Bondhu, under the guidance of Pradip Kumar Bhuyan, Founder President of Hati Bondhu movement.

Areas covered:

- a) Bagser (located southwest of Kaziranga NP to Kondoli (foothills of Karbi Anglong hills) showing important elephant corridors, foraging corridors etc.
- b) Panbari range of Kaziranga NP to Garampani Beat House covering the Numaligarh areas.
- c) A Plantation map covering the locations of plantation areas of Napier, paddy etc.



- ii. Low Sagging Transmission lines were responsible for several electrocution deaths of elephants in Assam. In our activity field, surveys identified the ‘Red Zones’ and Dulu Bora & Meghna M Hazarika of Hati Bondhu fraternity and volunteers from Hati Bondhu along with community members raised 288 of these sagging lines on elephant corridors using simple bamboo poles. There has been no electrocution record from November 2018 till July 2020 in the area of Hati Bondhu activity.



iii. Habitat Improvement Programme:

The fast-shrinking forest habitats, much of which is in decline, can be attributed to expanding agricultural land use and demand for wood and bamboo which has led to a severe loss of forest cover, resulting in colossal food insecurity for the elephants. With depleting food reserves, it is imminent that herds of elephant stray in populated areas causing human-elephant conflict.

Napier Plantation – A new concept

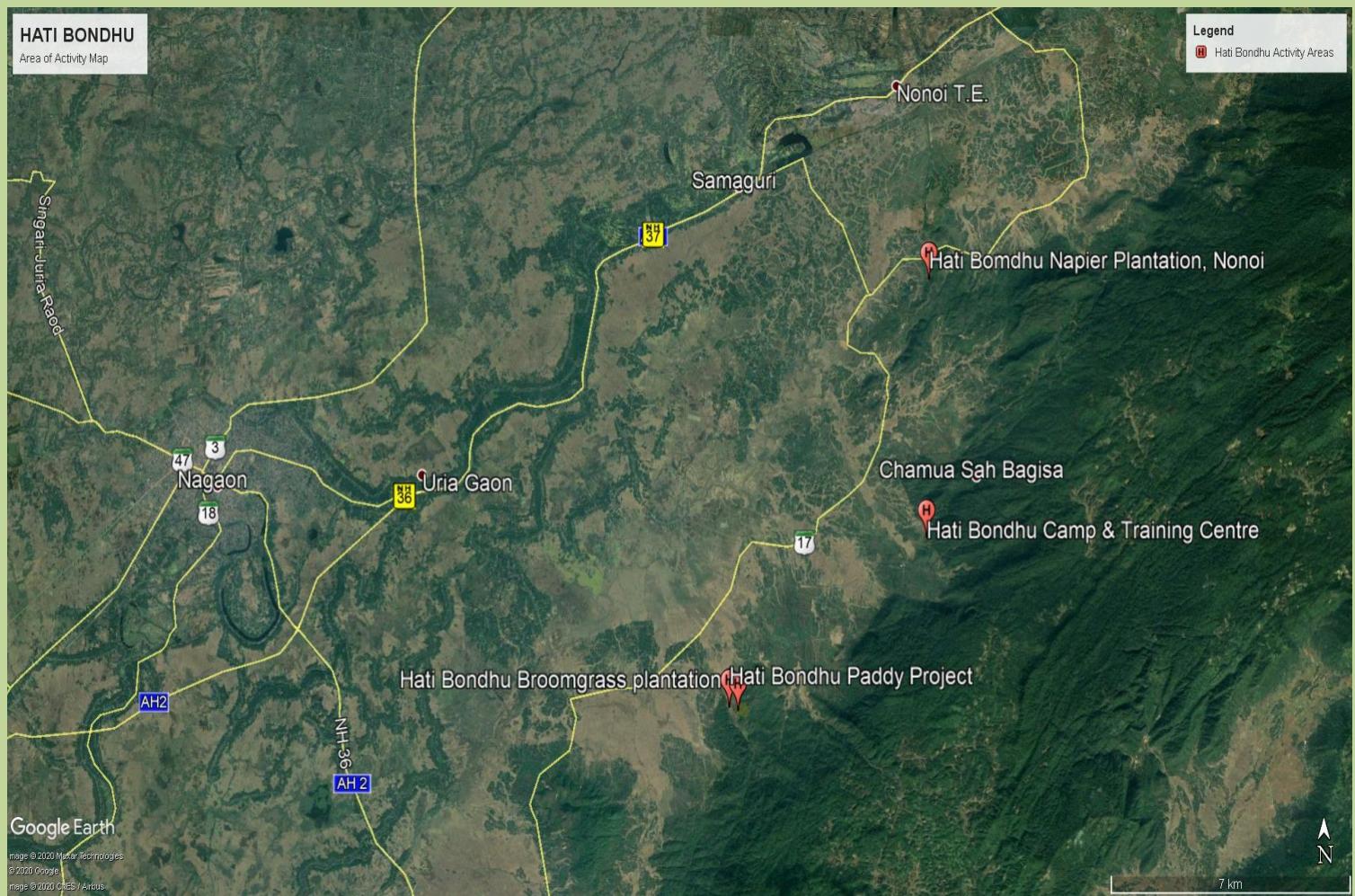
In the context of urgent need of food supplement, we, at Hati Bondhu, decided to plant Napier grass as an emergency measure to boost food supplement of the elephants. Napier grass, generally used for cattle, grows very fast, - planted in May will become 10' high by August.

A debate that Napier is not the natural food source for the elephants may arise. But the reality is that elephant habitats have shrunk drastically and the quality of the habitats has deteriorated. In Karbi Hills, bamboo, which is one of the primary food sources of the wild elephants, has been destroyed by the agents of the Nagaon Paper Mill, resulting in depletion of a significant component of elephant food in its forest habitat. Although the paper mill was shut down, it will take 4-5 years to regenerate. Hence the introduction of Napier Grass, as an immediate food supplement, was rational.

Continuing with our efforts to plant Napier, we became aware that natural species, like Jharu (Broom grass), grows in the hill slopes, and Kako Bamboo along with Galanga (Tora) in the low-lying areas, would also be excellent natural food supplements for elephants.

Jharu (Broon Grass) is a natural grass of the Karbi Hill and other areas of Assam. It is a favourite food of elephants. Planting of Jharu, and Kako Bamboo exclusively for elephant will be a significant step forwards toward plantation of natural resources for elephants. With the permission of from the priest of the Gufa Mandir near Nanoi garden and along with community participation, phase 1 of the plantation began in April 2019 of Napier grass, over 15000 banana saplings, Kako Bamboo, Elephant Apple, jack Fruit in approximately 30 acres of land.

Napier grass within three months, abetted by the monsoons, grew to a height of over 10 feet. Also, the elephants came regularly to eat the Napier. It was observed that the elephants did not uproot, but ate the plant a little above the base, thereby allowing quick regeneration of the grass, creating a perennial source of food for the elephants. The hardy grass will also provide more Napier clumps for further expansion of the plantation area in the coming year.



HATI BONDHU ACTIVITY AREA MAP, NAGAON DISTRICT, ASSAM



NAPIER & BANANA PLANTATION AT NONOI - 2019



IV. PADDY PLANTATION INITIATIVE: A COMMUNITY EFFORT

Human-Elephant conflict is increasing, and the magnitude of the conflict is also growing each year, especially during the harvesting period of rice. Both people and elephants suffer, sometimes fatally, during these conflicts.

Hati Bondhu decided to plant paddy – rice in one of its migration routes at Hatikhuli area. It took 18 meetings to convince the villagers of RongHong village to allow plantation of paddy for the elephants in their land, intending to keep the herds concentrated in this area and to enable the villagers downstream to harvest their paddy, a cycle of 3 weeks, from ripening to harvesting.

The villagers of RongHong village, a predominantly Karbi village, very generously gave 200 bighas (68 acres) of their paddy land for ‘Sali’ rice cultivation for the elephants. This unique gesture is probably the first record of a community giving land for cultivation for the elephants.



The matriarchs or “Ai” (Mothers) of RongHong village joined the Hati Bondhu volunteers during the paddy planting in July 2019.

It was observed during the mapping of the migration of elephants in 2018 and from previous records, that by mid-October, elephant herds arrive at Salbari Reserve Forest (North and South). Over 400 elephants congregate each year and an estimated half of the herd remain in and around Salbari RF while the remaining herd moves towards Hatikhuli Reserve Forest.

This year (2019), it was further observed that instinctively, the lure of the rice being planted for the elephants in Hatikhuli, the entire herd moved to Hatikhuli and Nonoi area, while about 15 to 20 elephants only stayed back at Salbari RF.

The herds stayed in and around the Napier plantation at Nonoi, not entering the paddy cultivation area till the rice had ripened in late October. Hati Bondhu Field Project Co-ordinators, Dulu Bora and Meghna Hazarika, removed the fencing and lamps to enable the herds to eat on 30th October 2019. The entire Hati Bondhu volunteers spent each night during this crucial period in “Tongis” (Treehouses) during the night, monitoring the elephant activities.

An area of 10 bighas (3 acres) was opened for the elephants to feed every night for the next 18 days. By 18th of November 2019, the entire rice plantations were eaten, often by herds of about 350 plus. 10 bighas of rice certainly may not be sufficient for a big elephant herd for eating in one night, but the herd have shown great restraint.



The movement of elephants was restricted for 20 days, which enabled the entire downstream villages to harvest their entire crop without any conflict with the elephants. The rice and Napier plantations benefited the village communities of **Sukanjuri, Borbari, Jolah, Bamuni, Kholiamari, Pambosti, Bhoraguri, Padumoni, Samsoki, Bordoi, Balijuri, Kothalguri, Nanoi, Mutiapahar, Rubberbagan** directly.

As the elephant herds moved from Salbari to Hatikhuli, the paddy fields to the North and East of Salbari RF indirectly benefited, namely **Dariguzi, Chekonee, Gohaingaon, Hatbagan, Doloni, Balibat, and Nizaripath.**

It is estimated that over 30,000 bighas (10,000 acres) of community agricultural fields benefitted from the rice and Napier plantations, the winter of 2019 resulted in setting high standards of Human-Elephant co-existence.

V. Activities of Hati- Bondhu Assam in 2020 till 31st July 2020

Hati Bondhu Assam has planted the following till 31st July 2020

- i. One lakh Broom Grass
- ii. One lakh Napier Grass

The process of planting rice in 200 bighas (70 acres) of land near RongHong village began on 16th July 2020. The Broom grass and Napier grass is being planted next to the paddy field in barren hills as additional food security in an area of about 250 bighas.



**FOOD SECURITY EFFORT IN DE-FORESTED
AREAS – MAY 2020**

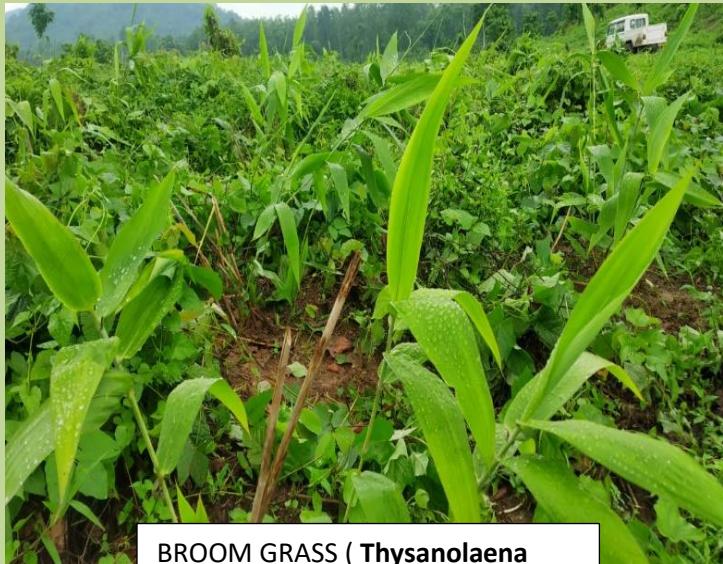


PADDY CULTIVATION WHICH BEGAN ON 16TH JULY 2020 (above pic)



BROOM GRASS / NAPIER PLANTATION – JULY 2020

Some areas of Broom grass, Napier Grass plantation of 2020 was occupied by people for cultivation of citronella and tea plantation but had to give up due to elephant presence. Hati Bondhu activities in the areas have now secured these areas from illegal encroachment.



BROOM GRASS (*Thysanolaena maxima*) – end August 2020



VII. Hati Bondhu is also conscious of the following issues and is trying to mitigate them as best as possible.

Human elephant conflict is on the rise due to expanding human populations, loss of forest habitats, and rapid conversion of forest areas for agricultural and commercial purposes. Due to increasing conflicts over space and resources between humans and elephants, cruelty towards elephants have become a common sight in the landscape. Each year, humans and elephants' lives are lost due to conflict, and this has posed a significant threat to elephant conservation



in the region. Pelting stones violently, tossing chilli bombs, and shooting air pellets at migrating herds are common forms of retaliatory practices used by local communities to keep elephants away. Such kinds of aggression only serve to exacerbate conflict between humans and elephants, rather than solving it. To increase local tolerance towards elephants, practices that instil compassion and empathy are necessary to help sensitize communities. In recognition of such malpractices, Hathi Bondhu is committed to not only help resolve human-elephant conflict through gentler approaches but also to promote peaceful co-existence between the two. To effectively mitigate conflict, Hathi Bondhu recommends using powerful white lights and loud noises to deter crop-raiding elephants or migrating herds away. The use of harmful and aggressive approaches such as gunshots, chili powder bombs, and projectiles should be prohibited.

VII. Department of Forest and District Administration, Government of Assam.

Hati Bondhu has worked in close cooperation with the Forest Department and District Administration, as well as with the Divisional Forest Officer (DFO), Beat Officer at Chapanala Forest Range office and the field staff in Nagaon, Assam,

Hati Bondhu strongly feels that all vacant forest areas should be planted with fast-growing species as an immediate measure to mitigate the lack of foraging resources and draw a long-term plan to re-introduce species favourable for the elephants.

Field visit to the Napier Grass Activity area by Mr. A.M. Singh, PCCF, Forest Dept, Mr. Rajen Choudhury, DFO, Nagaon Forest Div. and Mr. Najmul Islam Beat Officer, Chapanala Range office.



Such initiative by the Forest Department will be a big step in improving their foraging resources, which in turn will have a positive impact in reducing human-elephant conflict. Hati Bondhu is ready to offer any possible assistance in this matter.

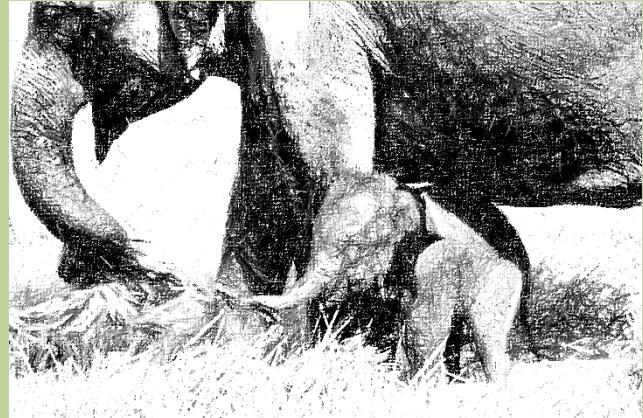


Hati Bondhu remains grateful to all the field officers of the Forest Department, and Govt. of Assam for their valuable inputs and assistance.



VIII. Elephant Rehabilitation Centre

Hati Bondhu has expressed its keen desire to start an Elephant Rehabilitation Centre for aged and rescued/abandoned wild calves, to be able to provide a sanctum for their refuge and to extend a helping hand of Love and compassion to these magnificent animals.



IX. FIELD OBSERVATIONS:

CHANGES IN THE BEHAVIOUR OF ELEPHANTS AND HUMANS IN HATI BONDHU AREA OF ACTIVITY.

Gajah, - elephant, a National Heritage Animal is considered as ‘Gyani’ in our old societies and also as ‘Sarabjan’, as someone who knows everything. Hati Bondhu organized a Seminar on 26th July 2019, - the theme being Human-Elephant Conflict – Love is the essence for a long-term resolution. Mike Pandey, the recipient of three Green Oscar Awards and other prestigious awards, was a participant. Environmental Lawyer from Delhi, Sanjay Upadhyay also took part in the seminar for elephants. Mike Pandey was genuinely overwhelmed at our approach to resolve human-elephant conflicts by Love.

Hati Bondhu planted Napier Grass, Banana, Kako Bamboo etc. in April May 2019 in the Nanoi plantation **as food supplements for elephants**. Also, in 2018 over 15000 bananas and other trees were planted in the fringe of Suwang RF for elephants. In 2019 Hati Bondhu planted 200 bighas of rice in July 2019 near Ronghong village FOR ELEPHANTS,- as a food supplement for elephants and not for resolution of Human-Elephant Conflict. But the spin-off from the rice and other plantations for elephants have resulted in reduced human-elephant conflicts. The Sarabjan’- all-knowing elephant knew that these plantations are planted by loving humans – Hati Bondhus for them. In 2019 they reciprocated by not entering the paddy field in 200 bighas of land till requested by Hati Bondhus in November. It may sound strange, certainly not scientific, but is true. The elephant herds after eating the rice of 200 bighas cultivated for them did not go down to eat

rice downstream. Every year Elephant herds used to go down to eat paddy in the fields, and violent confrontations used to take place, - both men and elephants were injured, and some died, - elephants and humans alike.

Also, in 2020 the elephants did not go down to eat the Boro cultivation planted in February by the villagers **for their consumption in 200 bighas land**. The elephant herds, though they were in the fringe of the cultivation itself, did not enter the paddy field. Their restraint is unbelievable. In previous years the villagers used to lose much of their crop due to elephant depredation. Elephants entered the paddy field only after the villagers have harvested their rice and came down to eat the rice straws!

Every year, the elephant herds used to enter the RongHong Village many times and used to destroyed many things, but in 2020 elephants entered the village numbers of times but did not damage anything.

Along with changes in the behavior of the elephants, **because of Love and respect were shown to them** by Hati Bondhu, the behaviour of villagers had also changed when they witnessed great restraint on the part of the elephants in their relationship with humans. People now love elephants and revere them.

X) A Study

Ms Leona M. Bhuyan has undertaken a study of the Hati Bondhu project for her Post Graduation Thesis from University Of Edinburgh, UK. The following is her comment from her study:



"Finding ways to engage and empower communities to take responsibility is, in essence, the most crucial and sustainable step forward in conservation. The contributions of Hathi Bondhu showcase the need for more collaborative approaches between officials, locals and conservationists in order to achieve successful management of human-wildlife conflict in the landscape. As part of my thesis work, I have spent months studying and observing Hathi Bondhu's operations, and I can firmly assert that this is one of the only programs in the region that has succeeded in promoting coexistence between elephants and locals in the landscape. On completion of my Masters Program, I intend on joining the Hathi Bondhu fraternity and look forward to working with them in their quest to protect and conserve the welfare of Asian elephants in Assam ".

XI) HATI BONDHU ASSAM – The people.

The Core Group 2020

PRADIP KUMAR BHUYAN – President, Hati Bondhu

An Octogenarian resident of North Guwahati, he has dedicated his life for the preservation of Nature and other Social Causes. He is a real elephant lover.



ROON BHUYAN – Vice President, Hati Bondhu

A nature lover and conservationist, Roon has been documenting Birds and Mammals of North East India for over a decade with many rare photographs to his credit. He has been a co-petitioner in legal cases for many Environmental issues concerning the North East of India. Roon Bhuyan is member of the ‘core group’ as Vice President of Hati Bondhu, Assam.



BINOD DULU BORA – Field Director (Habitat), Hati Bondhu

Dulu, as he is popularly known, has been an environmental crusader since as a young boy. Dulu has saved over 2500 species and successfully released them back to the wild. He is extremely humble, passionate and dedicated to conservation and protection of wildlife. He currently heads all field and community projects of Hati Bondhu, connecting nature and people.



MEGHNA MAYUR HAZARIKA – Project Coordinator, Hati Bondhu

MEGHNA MAYUR HAZARIKA a true Nature lover and a dedicated Field Coordinator for Hati Bondhu. Spending months during the elephant migration in the treehouse, supervising plantation work during the day and observing elephant behaviour at night.



SWARASWATI TERONPI – Community Leader & Member, Hati Bondhu

Swaraswati Teronpi, also fondly called ‘Aie’ (Mother) by the villagers of Ronghang Village. She mobilizes the womenfolk of the villages for the Hati Bondhu cause.



DHENSING HANSE – Community Leader & Member, Hati Bondhu

Dhensing Hanse, the village ‘Gaon Bura’ or Headman of Ronghang Village is a vital support for the Hati Bondhu activities in Hatikhuli area.



COMMUNITY MEMBERS



Lunche Kro



Jiten Teron



Lina Timungpi



Kahon Rongfarpi



Promud Pator



Rajib Timung

In conclusion, it may be said with total conviction that wild elephants respond amazingly if Love and respect are shown to them through selfless, positive actions for their benefit. During the short period of Hati Bondhu’s activities since 2018, the above facts are demonstrated. Simultaneously, the attitude of the villagers adjacent to the elephant habitats has also undergone a drastic change of Love and respect for elephants

NOSTALGIA - HATI BONDHU ACTIVITIES.



Motivating & Inspiring the upcoming generation – Sensitizing school children during their Field Trip towards the plight of Elephants followed by a banana plantation drive for the elephants.



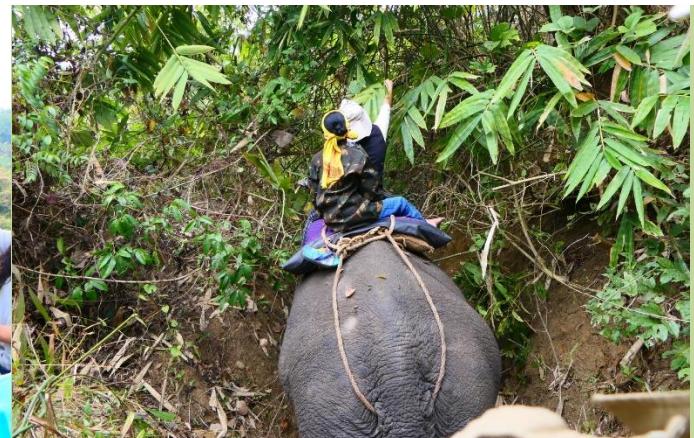
Brigitte Uttar Kornetzky, conservationist through films, film director, wildlife activist inspiring Meghna during her field visit to Hati Bondhu activity area in Hatikhuli.



Mike Pandey, Award winning Wildlife filmmaker and noted Environmentalist along with Sanjay Upadhyay, Environmental Lawyer attending the Hati Bondhu Seminar



Parbati Barua, 'Queen of the Elephants' as dubbed in a BBC documentary on her by Mark Shand in 1995), visiting the Hati Bondhu elephant activity area to help select a suitable site for the proposed Elephant Rehabilitation Centre.



Plantation of 'Tora' (Galangal) by Hati Bondhu volunteers in the low lying areas for immediate elephant food security



A daily brief for Hati Bondhu volunteers by Dulu Bora, Field Director (Habitat), Hati Bondhu, before jungle clearing for plantation of Tiger Broom Grass and Napier as an immediate elephant food security in an area of 130 acres at Hatikhuli



Prayers for a successful harvest.
Paddy plantation began on 16th July 2020 at Hatikhuli in 70 acres of land for the elephants.





HATI BONDHU watchtowers or 'Tongis' for volunteers to monitor elephant activity, specially after sunset.



Progress of paddy plantations as on 30th July 2020



Observations from the field :

Elephants cut across the paddy fields but use the more difficult 'alibaat' or human pathway in the fields as if not to damage the paddy saplings.



Hati Bondhu, Assam

An initiative of Osom
Educational Trust
North Guwahati, Assam

