

Annual Report 2022-2023

## **WE FOCUS**:

- RESEARCH & DEVELOPMENT
  - **REDUCE CARBON FOOTPRINT** 
    - **RURAL TRANSFORMATION** 
      - **EMERGENCY SUPPORT** 
        - CONSERVATION

## SARISHA WILDLIFE AND ECOLOGY SOCIETY



2022-23 Sarisha Wildlife And Ecology Society (WNE - India)

WNE - India is registered under Section 80G of the Income Tax Act, 1961; Section 12-A (a) of the income Tax Act, 1961; West Bengal Society Registration Act 1961;

THIS REPORT IS FOR CIRCULATION ONLY

# CONTENT

ADMINISTRATIVE	1 - 5
1. Loud & Clear (Organization's Desk):	1 - 2
2. Mission, Vision & UNDP's SDGs Impacted:	3
3. Our Team:	4
4. Our Collaborators:	5
PROJECTS:	6 - 31
1. Gentle Giants:	7 - 13
2. Bana Bandhu:	14 - 18
3. Sarpa Sathi:	19 - 25
4. Emergency Disaster Management (EDM):	26 - 27
5. Stop Illegal Trade (SIT):	28 - 31
6. Key Activities:	32 - 35

# LOUD AND CLEAR

In the ninth year of the organization, we can proudly say, Sarisha Wildlife and Ecology Society (WNE) has established there vision and mission statement LOUD & CLEAR to the World. We care about Wildlife, We care about Human, We care about **Co-Existence**. Co-existence is not just a concept that can be successfully implemented into the human mind like that. It is a gradual process which can only become successful with regular practical experience. Otherwise it will be textbookish word which it is still true for most of the people around the world.

This year we focused more on human animal interaction cases that included Conflicts, Hunting, Poaching, Adopting, Evolving, Procuring, Supporting, Educating and Awaring.

The case of **conflict** has been tackled in the long term projects like Gentle Giants and Sarpa Sathi, where we have tried to reduce the conflict between human and elephant by various capacity building measures and promoting alternative agricultural works in the conflict prone areas, so that the case of elephant raids decrease at the vulnerable areas. Our project Sarpa Sathi directly dealt with reducing the human snake conflicts. Here we intervened whenever a snake entered into the human settlement.

The cases of **hunting** has addressed under the project SIT where we are working to reduce the hunting of the wildlife. We have observed that without the involvement of the local people it is impossible for an outsider to organize this work, There are two types of hunting cases. One is during the Festival of tribal (mainly Santhal Tribe) people, called 'Akhand Sikar' (in Hindi) also known as 'Sendra' (in Santhali) where the tribal people gather in the selected forest for hunting and they hunt down whatever animal they found. On this particular day, these tribal people come and join at a particular forest location for hunting. In the Santhali Culture, the oldest hunting festival occurs in Ajodhya Hills, Purulia. On the night of Budha Purnima, the santhali people enter the forests of Ajodhya Hills and hunt the wildlife. Name of this particular festival is 'Bahisaki Kunami Ajodhiya Sendra'. We try to mitigate this issue by spreading awareness on the wildlife among the local people, involving the well known hunters into the forest coservation works, involving local Joint Forest Management Committee and enforcing laws. This work has been done from the year 2017 and urrently our regular work is giving very positive response as this year no case of hunting of wildlife has been recorded from Purulia and Bankura districts. Another issue is regular basis hunting of wildlife for bushmeat. This kind of hunting is much more threatning than the previous one and we are currently addressing this problem. So far, we have created small village level teams where we are regularly monitoring the issue and whenever we get any news of hunting for bushmeat we intervene by enforcing laws with the help of the forest department.

**Poaching** is a cult for the sake of wildlife as this activity is creating a constant imbalance at the ecosystem. This year we have created 6 anti-poaching unit at Ajodhya Hills to handle the poaching issue strictly in the area. We have successfully resuced one pangolin from poaching in Ajodhya Hills which is a huge success within the first year's run of this program. Apart from rescuing the pangolin, we also rescued three Indian Flapshell Turtle, one Indian One-Eyed Turtle from local markets. All of them were there to be sold for meat. To reduce poaching we also organize regular basis anti snare walks inside the forest areas and have successfully removed 53 snares and 18 traps which were placed inside the dense forest of Ajodhya Hills. We have also organized raids with the forest and police departments at the day of Nag Panchami and saved 91 snakes from snake charmers. The poaching exists becauses there is no such proper source of income for the forest dwellers. This helps the traders and linkmen to deceive the poor villagers into this crime. In most cases the amount recieved by this local hunters is only the tip of the iceberg, the actual profit is for the traders and linkmen. We are trying our best to detach these hunters from them. We are planning to involve them in wildlife works where their knowledge can be used for the survival of the species.

Adopting is another key activity which is helping us a lot to make the people feel about the importance of co-existence. Under the project Bana Bandhu we promote various medicinal plants (such as Chamomile, Mentha, Lemon Grass and Chia Seed) which are actually wild plants but after many refinement, these have currently become cultivable, organically, in the low fertile lands. The local forest adjacent people are adopting themselves in this new crop pattern and its harvesting. Climate change has directly impacted our agricultural sector and new adaptation at this sector have become mandatory now. We do not promote inorganic farming and also do not overlook the supply-demand chain of the food crops. We are also adopting in between these two and setting a target to our activity.

Apart from the adaptation of human beings at the agricultural sector, we also be a part to observe and study the adoptation of rural wildlife at this changing world. Some significant and noticeable adaptation of Golden Jackal in the rural Bengal is being observed and noted in the Dantan area of Paschim Midnapore. Another adoptation has been observed in the wildlife around the changing environment is road crossing pattern. Plenty of roadkill incidents are happening in every district, almost every day. How much the ecosystem is damaged due to roadkill is still unknown. So our team is working at this topic recently.

**Evolving** is the only key to sucess in this changing world and this is what we are also focusing at our projects like Gentle Giants, Bana Bandhu, Sarpa Sathi and so on....! As per the requirment of the project we evolve the project acitivity. For example we are currently focusing on alternative crop management to handle the issue of elephant raids. At the project Sarpa Sathi we are evolving into digital documentation. This helps us to get the exact rescue location of the snakes. In Bana Bandhu, the introduction of value addition to each crop is generating more revenue. Moreover the GIS Mapping, DGPS Surveys are also done by us during the project work which fetches more detailed data of the work. The data we have now are much more accurate and will help us more at our future planning along with work quality analysis.

**Procuring** the forest product has always brought positive outcome to the project Bana Bandhu as it helped elevating the economical condition of the local forest adjacent villagers. Moreover their procurements has been properly valued and they got more income by selling them. The control in the forest procurement has also helped us to understand the forest quality.

**Supporting** the marginalized, tribal people is always necessary to build confidence at the concept of Co-Existence. We have distributed clothes to 500 beneficiaries. Also organized two free medical camps with the support of the local forest department, for the tribal villagers.

**Educating** the youth about the environment is very important. This creates the backbone of the society. This is the only way to fight against our deadliest enemy, the **Climate Change**. Only the educated youth can change the situation by doing their part in the ecosystem without exploiting it. This is why we organize regular basis environmental educational courses for the college students, where we educate them on nature conservation works. We also influence them for doing researches, instead of educating themselves with just the textbookish knowledge.

Awaring the youth and the mass are the only key to success. Since only an aware population can save the nature by living with the wildlife side by side, in harmony. Under each program we organize awareness programs for the school and college students as well as for the villagers. Throughout the year, we have organized more than 200 awareness campaigns.

In Conclusion, I can say Loud and Clear, we are currently on our track and in the upcoming year we shall be more focused on the same.

#### SHWETADRI BHANDARI

FOUNDER, PRESIDENT WNE - INDIA

## MISSION:

- Biodiveristy monitoring and conservation
- Understanding the animal behavior through long term research works
- Creating alternative economy for the forest dwellers through natural resource management
- Restore the habitat for the wildlife and conservation of natural resources
- Preservation of the indigenous knowledge
- Reducing the human wildlife conflict
- Promote research works on wildlife and nature, indigenous knowledge, ethnology, economics and tribal welfare studies.
- Reduce carbon footprints and promote eco-friendly items.

## **VISION:**

We envision a planet where human and wildlife can co-exist. A planet where the forest can grow along with the developmental works. A planet where the forest dwellers do not undergo through brutal economical crisis, where they can proudly say, we are the backbone of this Planet, as we are ensuring the forest for others and we are self sustained with natural resource management.

## UNDP'S SDG IMPACTED:



## **GOVERNING BODY:**



**Shwetadri Bhandari** Founder, President



**Ranit Mondal** Vice President



**Ayan Maity** Secretary



Sucheta Ganguly Assistant Secretary



**Kaustav Shee** Treasurer



**Riya Acharya** Public Relationship (Membership)



Shilpa Das Data Analyst Governing Body Member





**Omveer Dhawal** Zoologist Rajasthan



**Dr. Reshmi Chatterjee** Paleo-Botanist West Bengal



**Mohammed Umar** Wildlife Rescuer Karnataka



Anindya Sengupta Agriculture Expert West Bengal



**Omkar Mohan Hande** Wildlife Biologist Maharashtra



**Achintya Soren** Wildlife Field Expert West Bengal



**Quazi Wasim Raja** Public Relationship West Bengal



**Dr. Puja Ray** Biologist West Bengal

## **OUR COLLABORATORS:**









Adam Mickiewicz University Poznań









mp forest department











## CHHATATAR CHALANTIKA











## LONG TERM PROJECTS

### **GENTLE GIANTS:** An initiative to reduce human elephant conflict in East India

"This year the project focuses to work on the particular research aspect of the Asian Elephant's behaviour study, corridor use and conflict assessment. From this year a provision has been allocated at the project which will provide financial support to the families who become victims of elephant attacks and raids at the project area."

- Sucheta Ganguly Gentle Giants Project Coordinator

#### AN INITIATIVE TO REDUCE HUMAN ELEPHANT CONFLICT IN EAST INDIA

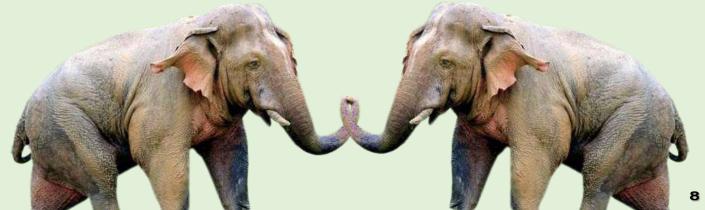
## **PROJECT CO-ORDINATOR'S DESK:**

Back in 12th August, 2018, WNE - India, launched a 15 year long project entitled, "Securing the Gentle Giants of East India". Later it was abbreviated/popularly known as 'Gentle Giants'. The goal of this project was to ensure the sustainibility of the existing corridors of elephants in East India (Andaman & Nicobar Islands, Bihar, Jharkhand, Orrisa and West Bengal) through implementing various management & conservation activities. The goal of this project was to rebuild the corridor of elephants in East India and reduce human elephant conflict at the same.

We have started our project from the state West Bengal. We began the project to identify the current condition of elephants at its previously noted corridors. Our focus was on the movement pattern, movement frequency, movement analysis, species behavior and human elephant conflicts. After having a concrete field level data along with previous study reports and forest departmental data, we started to implement our conservation strategies along with elephant management planning in the study area.

We have done a detailed ground level work at the Ajodhya Hills of Purulia District in West Bengal on the elephants and as per our proposed planning, the local forest department did the elephant management planning in the area. We have done elephant management planning inside the forest along with 10 year elephant conservation planning in the entire division back in the year 2019-20. Later we are regularly keeping updates on the effects of our planned works. As per the result we get, we do the necessary updates to our planning. The entire work is done with the support of the forest department. Apart from Purulia, we also work in the Bankura district to manage the movement of the elephants in the entire district. Precisely we prepared a conservation along with management planning for the elephants to reduce the human-elephant conflict in the entire Bankura District for the upcoming project Barjora North Coal Mine of the governmental agency WBSEDCL. The mines are under Monte Carlo Mining Company. Under this project 338.74 Ha land are proposed for diversion. Moreover a key elephant habitat will be gone if this project occurs. We have created a detailed elephant mangement planning if this habitat is gone. Last year (2021-22) we also proposed the Forest Department to declare Ajodhya Hills as Elephant Reserve as it can hold up to 35 elephant individuals. The movement of elephant is also monitored in Jhargram, Paschim Midnapore district of West Bengal, Dhamtiri district of Chattisgarh, Ramgarh, Ranchi and Seraikela Kharsawan district of Jharkhand Division.

Apart from this monitoring, management and conservation planning work, we also focused on the capacity building in the conflict areas and promoting alternative crops to reduce the conflict from the last financial year. We have successfully installed 15 Machans at 15 forest adjacent villages for monitoring the elephant raid and reduce the conflict. We also organize more than 20 training courses for the local villagers on elephant management planning to reduce human elephant conflicts. Apart from this, we are also studying the elephant movement parttern along with elephant behavior to understand more about the species and its conflict with humans. This year we continued our work in more details and intervene whenever it is possible to reduce the conflict.



#### An initiative to reduce human elephant conflict in East India

#### INITIATIVES TAKEN THIS YEAR:

#### A. Conflict Management:

Our team focused intensely in the conflict management issues in the Purulia, Bankura and Paschim Midnapore district of West Bengal this year. The work mainly includes, reducing the elephant raids in the agricultural fields.

For this we have done these following activities,

- 1. Promoting Alternative Crop Management
  - 2. Village Level Networking
  - 3. Elephant Movement Monitoring
- 4. Emergency Support during Elephant Raids

#### 1. Promoting Alternative Crop Management

We have promoted alternative crop cultivation in the conflict prone areas of the Purulia district. This year we have successfully involve 65 beneficiaries to change their crop cultivation pattern from paddy and other food crops to mentha, lemon grass and chamomile cultivation. All of these turned out to be a great elephant repellent (as per research publications in Nepal). We have experimentally implemented the same in Purulia district of West Bengal to reduce the elephant conflict in the conflict prone areas.

As per our work we receive great success in reducing the elephant conflict. Though the research work on Mentha Cultivation is still ongoing, the outcome from Chamomile Cultivation is very much promising, as no chamomile crop fields were raided by elephants, though in case of the lemon grass plantation, there were two instances where elepants crossed the field during their natural migration from Pitidhiri Forest to Teliabhasa Forest but evidence of lemon grass eating or damaging (apart from movement) has not been found. A total of 48 bigha or 16 acre area of land in Purulia district was cultivated under this activity. As per the beneficiaries' point of view their income increased from this as there is no case of crop damage by the elephants or any other animals such as Wild Boars or Barking Deer or Indian Hare or Indian Porcupine.

As per the survey done after the cultivation and post harvest measures taken on chamomiles and lemon grass, it is found that out of the 65 beneficiaries, 43 beneficiaries' income increased from this activity, 14 beneficiaries' income is same as before and 8 beneficiaries' income decreased.



Plantation of Chamomile in the Field of Teliabhasa Village

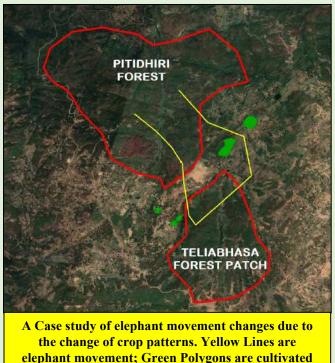


Planting of Chamomile in the Field of Kusumtikri Village of Ajodhya Hills



Chamomile at Nursery Bed in Teliabhasa

#### An initiative to reduce human elephant conflict in East India



lands and Red Polygons are two forest patch.

#### A. Case Study on Alternative Crop Management:

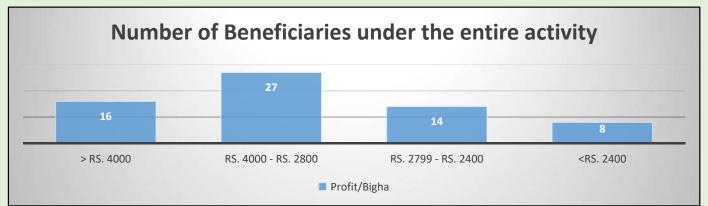
We have cultivated Chamomile at a total of 12 bigha land in three villages (Teliabhasa, Kusumtikri and Bandhdih) inside the Ajodhya Hill of Purulia. These lands are in between two forest patches where elephants used to stay. One is Pitidhiri Forest and the other is Teliabhasa Forest. We did this cultivation work at a completely research based way, where the most raided lands were chosen. This selection has been made as per the forest departmental and village level questionnaire survey. The remaining lands were cultivated with traditional crops i.e. Paddy (in few low lands), Potatoes, Tomatoes and Mustards. The owners of our selected lands used to cultivate paddy and potatoes during this time. We have planted the chamomile in the month of late November. 2022 in the area and harvested the crop by the third week of March, 2023.

During the tenure of the cultivation of this crop there were seven elephant movements from these two patches. Three movement were noticed from Teliabhasa to Pitidhiri Forest and four visa-versa. In each case, we have noted that all the elephant raids occured in the paddy and potato cultivated lands, while no chamomile crop field raid were seen. Even no movement of elephants, wild boars, hare or any other animals have been found throughout the cultivation time of Chamomile. This found to be a very promising outcome from the experiment. We can plan to execute the same in more conflict zones to reduce the conflict of elephants.

#### **B.** Economic Statistics of this Activity:

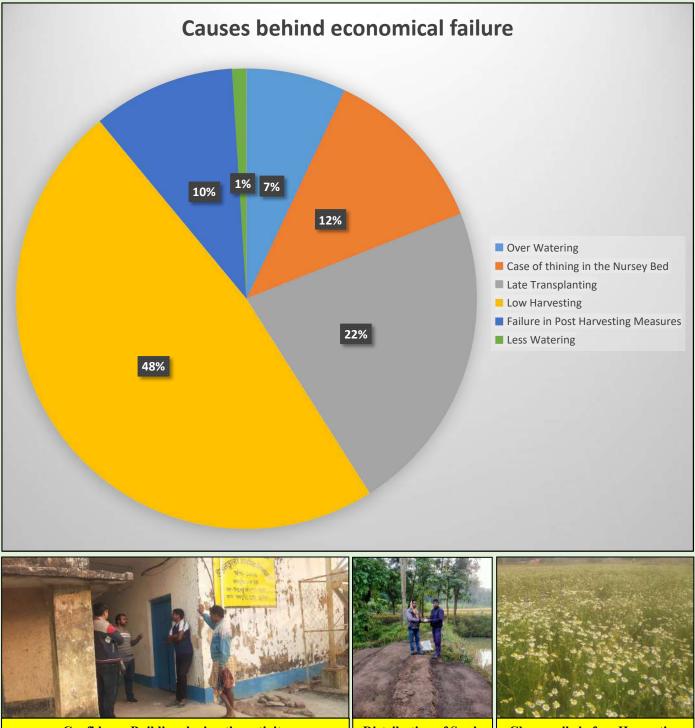
Before the beginning of this activity we have found that the villagers do get a profit of Rs. 2500/- to Rs. 3500/- from paddy cultivation, Rs. 2000/- to Rs. 3000/- from tomatoes. From potatoes it is more or less Rs. 3000/- and from mustards the profit is less than Rs. 2000/- from 1 Bigha land. So, as a whole we take Rs. 2500/- is the average profit from 1 Bigha for the villagers. Taking this amount as the base profit from cultivation during the winter season by a beneficiary from 1 Bigha.

Under this activity a total of 65 beneficiaries are involved and as per the post activity reports, 43 beneficiaries income increased from this activity, whereas 14 beneficiaries income is same as before and 8 beneficiaries income decreased.



#### An initiative to reduce human elephant conflict in East India

We have analyzed the reason behind this mixed outcome from this activities. As per our survey report, we have found, in each of the 22 cases where beneficiaries profit decreased or remained same as previous from this crop cultivation, is completely because of bad and wrong crop management. In many cases over watering, late transplantation from nursery bed and very low harvesting are the reason behind the issue. Below one can find a graphical representation of the case study which points out low harvesting is the major reason behind this failure follwed by, post harvesting works, late transplanting and so on.



**Confidence Building during the activity** 

**Distribution of Seeds** 

Chamomile before Harvesting

#### **GENTLE GIANTS:** An initiative to reduce human elephant conflict in East India

#### 2. Village Level Networking

Monitoring the elephants is not an easy task in the hilly landscape. Their movements are very much tricky and often it is very hard to understand their next move. We focus on creating village level networking in the working areas, so that it is easy to monitor the elephants as well as transfer any kind of news on the elephant movement or conflict. This will also help us to get the villagers views and ideas on reducing the human elephant conflicts in the area. This year we have organized a total of 57 village level meetings in 98 villages for confidence build ups. This year no new villages were added to this list. During this confidence build up work we have organized multiple awareness camps along with forest departmental staffs on elephant management planning.



Organizing village level meeting in the Bhuighora village inside the Ajodhya Hills, Purulia.

#### 3. Elephant Movement Monitoring:

We have a well trained and properly equipped team in each areas (conflict prone areas) who regularly monitors the elephant movement and share the regular location of the elephants with the local forest departmental staffs. This helps the forest department to prepare themselves from handling the human elephant conflicts.

We have created WhatsApp groups where the information can be shared more easily and this information are more quick and easily transferred to the necessary administration with photographic proofs. Our regular elephant momvement monitoring is playing a key role in our conservation planning and management as this provided key elephant behavior inside the forest and during conflicts.



Setting Camera Traps inside the Forest areas of Ajodhya Hills for nocturnal wildlife movement inside the forest

#### An initiative to reduce human elephant conflict in East India



1 Year Old Elephant Cub died in Barjora, Bankura District of West Bengal

Apart from this, we also get elephant death and human death reports that helped us alot in conflict analysis in these areas. We have documented the case of 2 elephant deaths in Bankura District of West Bengal, one of which was an year old Baby Elephant. On the other hand we have documented 7 human deaths in Southern West Bengal and Chattisgarh due to elephant attack.

As per our survey, our regular vigilance and information sharing with the forest department has saved at least 2 Crores of crop damage cases in the area of work and saved more than 5 death case in West Bengal.

During one marriage ceremony in Punia Sasan village of Ajodhya Hills in West Bengal. one rougue elephant entered and created massive chaos which was very tactically handled by our team and after the arrival of the forest departmental elephant management team, a joint organized activity guided the rogue elephant into the dense forest of Gobaria at Ajodhya Hills. Due to our team's promt action no casuality happened that day.

#### 4. Emergency Support:

Each year many people die due to elephant attacks. There are governmental supports for the the families of the deceased or injuried individual from such incidents. Even conpensation for crop destructions are also available. But there are some cases where victimised people do not get this support.

1. The villagers live very far from the forest department, so they do not file a complain for the cases.

2. Lack of evidence to identify proofs and land porcha and other proofs

3. Location of the incident are sometimes confusing, which creates delay in the process.

4. Due to lack of departmental staffs, the entire process becomes time consuming, which create genuine problem for the forest dwellers.

We intervene in these cases and try to solve this as soon as possible. Our local team members keep a good and positive interaction with the forest departmental staffs and the villagers so that the work process do not delay. Moreover we also provide some emergency support to such family members whose cases get delayed after all of our efforts.



Our local team provide financial support to the victim's family in Bhoighora Village of Ajodhya Hills, Purulia, West Bengal

## WHY WE LAUNCHED THIS PROJECT?

The villages closer to forest fringes are very much dependant on the forest even to this date for their day to day living and resources. As a result hectares and hectares of forest patches are being cleared off just in order to fetch and collect woods and leaves. These woods not only serve as the firewood for the household but a considerable portion are being sold at nearby markets in exchange for a meager sum. Added to this, forest encroachment is also very much prevalent in especially the non-protected forest outskirts. We have executed an survey in the forest adjacent villages focused on the economical condition of the villagers. As per the outcome of the survey, we observed that there is no such proper livelihood for the villagers. Temporarily, agriculture and daily labour is the only livelihood for the villagers and their avarage yearly income of more than 70% of the villagers are less than 75,000/-. So, it is very easy for the wildlife traders to deceive the villagers and involve them in wildlife poaching. Thus a thought process began at the organization where we planned out to execute measures that in course of time will gradually reduce the immense anthropogenic pressure befalling upon the green coveres of the forest in India and at the same time will make the forest fringe villages become self sustaining, without being dependent upon the forest and its resources. This initiative lead us to inculcate among the forest adjacent villagers to carryout more organized traditional farming, value addition to the harvested products, carrying out non-traditional cultivation of aromatic and medicinal herbs and proper selling of the final harvested product at a handsome rate at the potential markets, forest procurement of native fruits and seeds and similar works, which do not have negative impact upon the forest.



Dried Chamomile Ready for Shiping from Ajodhya Hills

Collection of Kusum Seeds from nearby forest of Teliabhasa Village

3 month old Melia Dubia Sapling

## NOTABLE ACHIEVEMENTS OF BANA BANDHU TILL 31<sup>st</sup> March, 2022 :

- Construction of Teliabhasa Botanical Research Center in Teliabhasa village
- Prepare water body at the Teliabhasa village nearby area for the support of agriculture of 20 families.
- First successful germination of Malabar Neem (*Melia Dubia*) and plantation of the same at 10 Ha area in collaboration with the forest department.
- Successful gernimation and distribution of more than 300,000 native saplings throughout India.
- Increase the income of a total of 82 families.
- First successful germination and marketing of the Chamomile in West Bengal.
- Organized the forest procurement so that the villagers can get fair price of the products.

### **BANA BANDHU:**

AN INITIATIVE TO SAVE FOREST BY SUSTAINABLE DEVELOPMENT OF BACKWARD, TRIBAL, MARGINALIZED FOREST ADJACENT VILLAGERS

### **INITIATIVES TAKEN THIS YEAR:** A. TELIABHASA BOTANIC RESEARCH CENTRE:



Collection of Kusum Seeds from nearby forest of Teliabhasa Village

Teliabhasa Botanic Research Centre (TBRC) works as the heart of this entire project for this financial year as all the research related works have been experimented inside the centre or its adjacent lands.

At the very begining of this financial year we have excavated one medium sized water body just beside our Facility. This water body helped us with water support at the facility.

Preliminary excavation work has been done with JCB and later with manual labours. During the water body preparation a total of 28 labours has been involved in this work for two days.





Labours are working to complete our pond excavation



The Completion of the pond excavation under TBRC

#### BENEFITS WE RECEIVE FROM THIS EXCAVATION:

- ✓ Provide us water for watering the saplings inside the nursery.
- ✓ Help the villagers to fetch water for their daily work (though we make sure no contamination of inorganic compounds into the pond water)
- ✓ Help in irrigation at the nearby lands during the winter season.
- ✓ Fish cultivation (Fishery) done with native species inside the pond.

#### MAJOR ACHIEVEMENTS:

- ✓ Successful germination of more than 50,000 Kusum (Schleichera oleosa) saplings in our TBRC facility. This is a very challenging work as this particular tree species is becoming rare to rarer due to massive destruction due to Lac cultivation in the entire region. Moreover the plantation of this particular tree is not noticible here as it is a very slow growing tree and do not have much timber value, thus the interest of plantation of this particular trees is very less.
- ✓ We have successfully germinated and harvested German Chamomile (*Matricaria chamomilla*) for the first time in Ajodhya Hills. This is the first ever cultivation of this species. After the cultivation work we did all the necessary post-production works and helprd the farmers in selling this in the market rate.
- ✓ We have successfully germinated and started the cultivation of mentha (Peppermint) in Ajodhya Hills of West Bengal.
- ✓ We have a small scale collaboration with the Aricha Organics for this financial year to promote aromatic and medicinal plants at Ajodhya Hills. They supported us with their ideas, experience and marketing.
- ✓ We got quality natural seed support from the company One Prakirit for the entire year.



TBRC after renovation during the winter season



Production Manager and Marketing Manager of Aricha Organics visited TBRC facility



Preparation of bed for Chamomile cultivation in TBRC



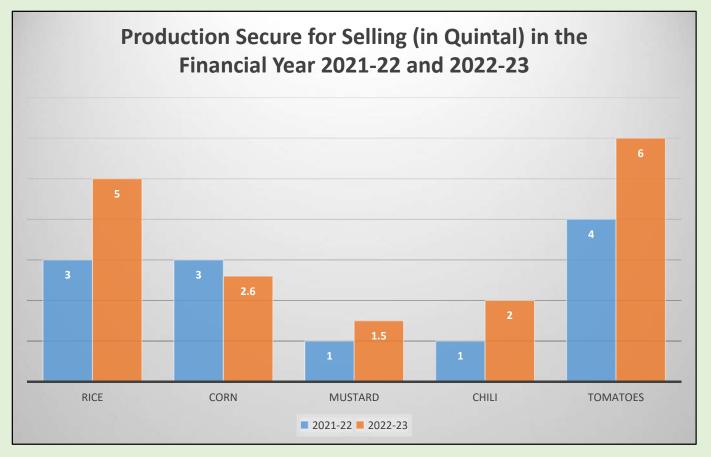
Confidence build up among the villagers of Ajodhya Hills over Aromatic and Medicinal Crop Cultivation

#### **B. ECOLOGICAL FARMING:**

Ecological Farming is one of our key activity under the project Bana Bandhu. The basic concept of this Ecological Farming is to make it sure the complete elimination of the use of inorganic fertilizer, pesticides, fungicides etc. from the agricultural field as well as from the nearby water bodies which are primarily used for watering at the agricultural fields. Our aim is to reduce the use of fertilizer in the forest fringe areas as the massive use of fertilizers in the forest adjacent areas acutally disturb the forest ecosystem directly which is very alarming. If we do not handle this now, this will gradually damage the soil, water and eventually the entire forest.

In this year we have facilitated the farmers of Purulia to carryout tradition farming of corn, mustard and tomato apart from the conventional paddy culture. The entire cultivation has been done strictly by following the organic and traditional methods. The traditional method of farming is also another issue that this particular activity is looking into. This year we have succussfully involved 21 families which is more than double of from the last year.

We have successfully cultivated Rice, Corn, Chillies and Mustard this year and secure the selling of entire excess production. One can see the details in the following graph:



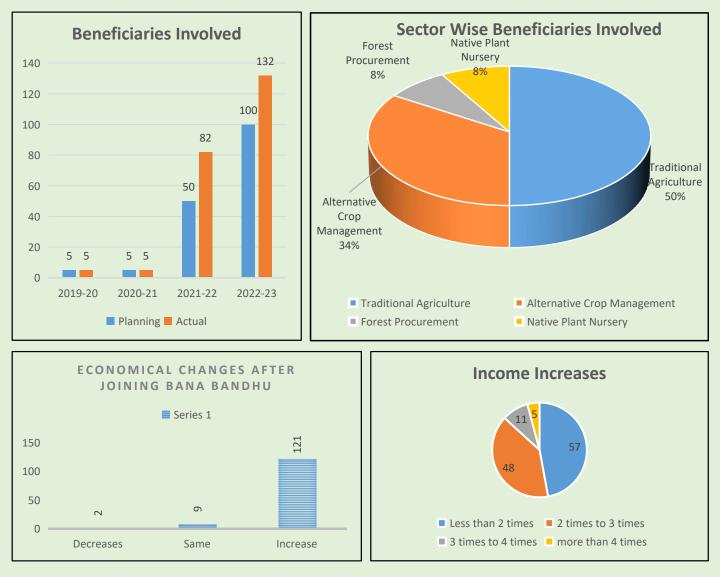
From the graph one can observe only the procurement of corn reduces but all other crop procurements increased. The reason behind the reduction of corn procurement is the decrease of cultivation of corn at the project area in the last decade.

We are going to take multiple awareness campaigns in the areas to increase the corn cultivation in the area to maintain the food crop production in area.

#### C. FOREST PROCUREMENT:

There are various types of dependency of villagers on the forest lands. The major known dependency is cattle grazing inside the forest land. But apart from that, there is another way of dependency of the villagers on the forest, that is the Forest Procurement. Each forest provides variety of unique items which have good medicinal values along with having good market value. That is why we also focus on involving the forest dwellers in this activities under the project Bana Bandhu.

Last year we have a large list of procured items but this year we have restricted our procurement list and focus more on the value addition of the procured items. For example, we collect Amla, Haritaki and Bahara in the last two years. Last year we have sold all the procured raw materials, but this year we have collected less than half of the previous year's amount and make value addition to them. This value added products (such as Triphala, Tamarine Paste etc.) helped in B2B marketing which in turn provided more profit to the beneficiaries.



### D. STATISTICAL ANALYSIS:

## WHY WE LAUNCHED THIS PROJECT ?

Snakes play a very important role in our ecosystem, not only inside the forest area but also in the areas around us i.e., around the human settlements. Keeping the snake population density in control is a key to have a sustainable ecosystem around us. It controls the rodent population naturally. As per the official data each year more than 50,000-80,000 human die due to snakebites in India and if we go off the record, this number will easily cross 150,000. Apart from this conflict figures, there are some more key factors that must be taken care of. Firstly, there are a plenty of superstitious beliefs on snakes in various parts of India which creates false information on them among the people of rural India. Secondly, there is no proper areawise record of snake diversity. So, the distribution of many lesser known snake species are very skeptic, even many species are not properly recorded. Moreover, there is no analyzed data on human snake conflict pattern, till today. Taking all of these in mind, we have launched the project Sarpa Sathi whose objectives are to work on this said issues.



Some Activities from Previous year throughout India

## RUN OF SARPA SATHI TILL LAST YEAR:

On 16th July, 2019, we have launched the project Sarpa Sathi, from Sundarbans area of South 24 Parganas, West Bengal. The aim of the project is to reduce human snake conflict in the non forest areas along with spreading awareness on snakebite initiatives and snake related superstitious beliefs. Apart from this we also focus on proper documentation of snakes from around the country.

We began the work in the state of West Bengal. Within a very short time span, this project spread to Odisha and Karnataka. Afterwards the work also spread to Rajasthan and Maharashtra. We have a very good support from various local NGOs and individuals who are willingly joined and collaborated at this project.

During the COVID 19 lockdown and its subsequent time period, the project was slowed down due to lack of communication and funding. In fact we were unable to continue our Sarpa Sathi Program in the state of Maharashtra, but as the lockdown eased and people got back to their normal daily routine, we once again started our activities under this project.

During our work from the year 2019-2020 to 2021-22, we have successfully rescued 3857 snakes from human settlement and relocated them to the safety of their habitat nearby. We have organized more than 150 awareness programs in various villages to spread awareness on snakes and snakebite initiatives. More than 300 school awareness programs took place during this tenure. 3 snake handling training was organized by us for the forest departmental staffs, especially focusing on the individual's safety measures and skill enhancing on snake handling. We have published 7 research papers under this project Sarpa Sathi.

## FINDINGS FROM THE PROJECT SO FAR:

As a result of our previous work, we have observed and recorded many things over the year. Here is a details of findings from the project till last year.

In the remote areas, such as the Sundarbans and Purulia of West Bengal, Jawai area of Rajasthan, Anukul area of Odisha, there are many superstitious beliefs on snakes and out of that beliefs often the villagers goes to an ojha/tantric/gunin at the occurrence of snake bite instead of consulting a doctor. In a village (Tardaha) we have found a school going student of 7th standard was bitten by a unknown snake; his mother took him to one of the locally infamous ojha for treatment. The ojha prepare a drink for the boy and forced him to drink it which was actually a mixture of 150 ml mustard oil, 10 gm of red chili powder and little amount of extract made from a root of an unknown herb. Within two hours of consuming this fuming drink, the boy passed away. During his last minutes struggle to live, the boy's father came rushing to a nearby hospital where the young soul was declared dead on arrival. At the post-mortem reports it was pointed out that the boy died due to internal organ damage which was caused due to drinking that fuming juice and as per the doctor's observation and witness reports, the snake bite mark was confirmed from the non-venomous rat snake. There are many more cases like this in every state where we are functioning.

Another major issue we have found is the lack of awareness on snakes. As per our survey works (Peoples' Perception Study) done at various villages (37) on snake awareness, we have found nearly 70% of the people in the rural areas have no basic idea on snakes and snake bite cases. Even in many cases, the educated even the graduated persons have very limited knowledge on snake ecology. Noticeably, more than 90% of people beliefs on Ornate Flying Snake is deadly venomous and many more. Even in some cases, school teachers in the greater Sundarbans region, has failed to pass a test done by us to study if they have basic knowledge on snake ecology.

We have rescued more than 3500 snakes during our project tenure and out of them 40% are venomous. So, our effort definitely decreases the rate of human snake conflict at the project areas. We have detained 1 tantric, 3 ojhas and 1 gunin who are openly practicing various cults on snake and snake bite cases. We have successfully desolated the gang of these tantric, ojha and gunins in the Kulpi Block of South 24 Parganas, West Bengal.We have strictly handled the snake charmer issues in Purulia District of West Bengal with the help of the forest department and local police department. We have published 7 research articles on snake and snake diversity during the project tenure.

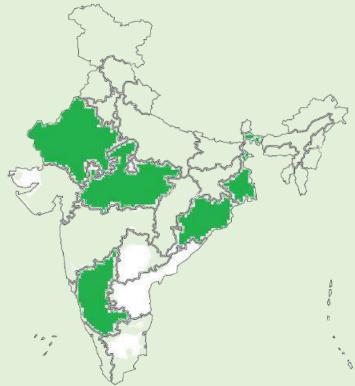


Some Activities from Previous year throughout India

## WORKS OF THIS YEAR:

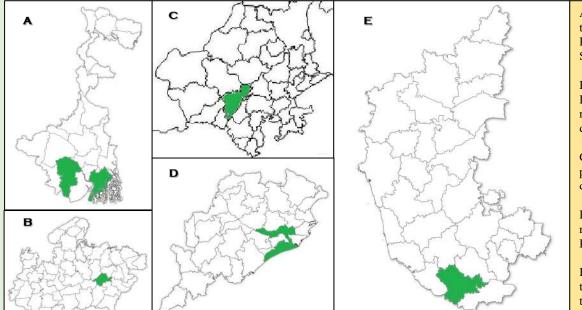
## Theme of this Year: Conflict Reduction

### **STATES WE COVERS:**



Area of Work: Rajasthan, Madhya Pradesh, Odisha, Karnataka, West Bengal

## DISTRICTS WE COVERS (STATE WISE):



A: In West Bengal State, this project is ongoing in Paschim Midnapore and South 24 Parganas district.

B. In Madhya Pradesh District this project is running in Jabalpur district.

C. In Rajasthan State this project is ongoing in Pali district.

D. In Odisha, this project running in Cuttuck and Puri district.

E. In Karnataka district, this project is running in the Mysurur district.

### **INITIATIVES TAKEN THIS YEAR:**

#### A. RESCUE AND REHABILITATION:

Each year, during our project we can only rescue at most 55% of the total call we receive from the people. This year our goal is to attend at least 80% of our rescue calls throughout the country. So that the case of conflict reduce, which is the basic agenda of this project.

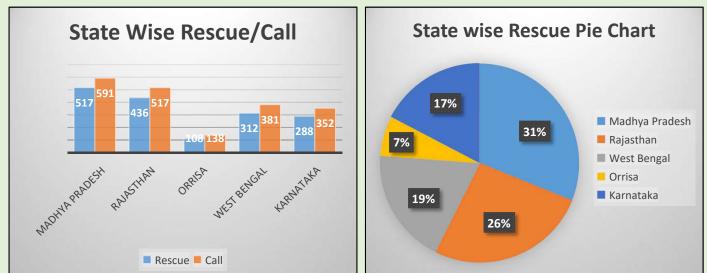
This year we have successfully attend 82.77% of our rescue calls throughout the country and out of which in slightly more than 96% cases we have successfully rescued the snake.

State-wise we have best rescue call attending in Madya Pradesh with 87.49%, followed by Rajasthan, West Bengal, Karnataka and Odisha with 84.34%, 82.1%, 81.8% and 78.1% respectively.

A total of 1661 snake was rescued this year out of 1979 rescue calls.



Snake Rescued from Mysore, Karnataka

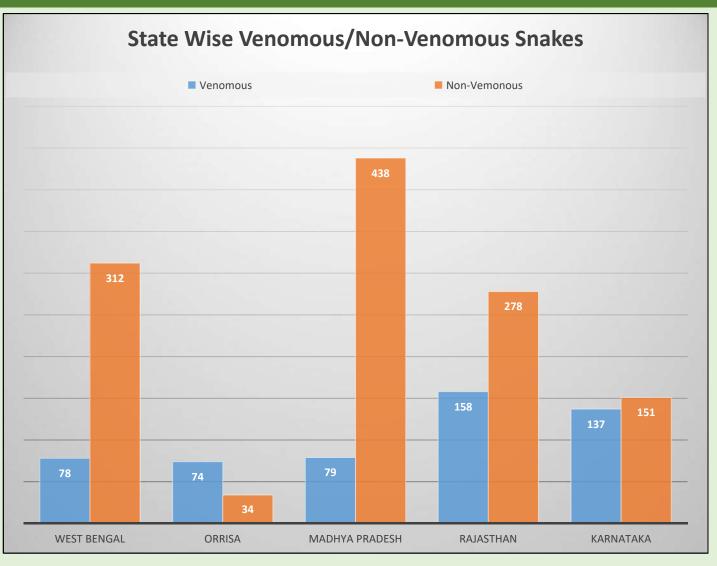




Snake diet documentation in Karnataka



**Snake Rescued from Madhya Pradesh** 



#### **B. PEOPLES' PERCEPTION STUDY:**



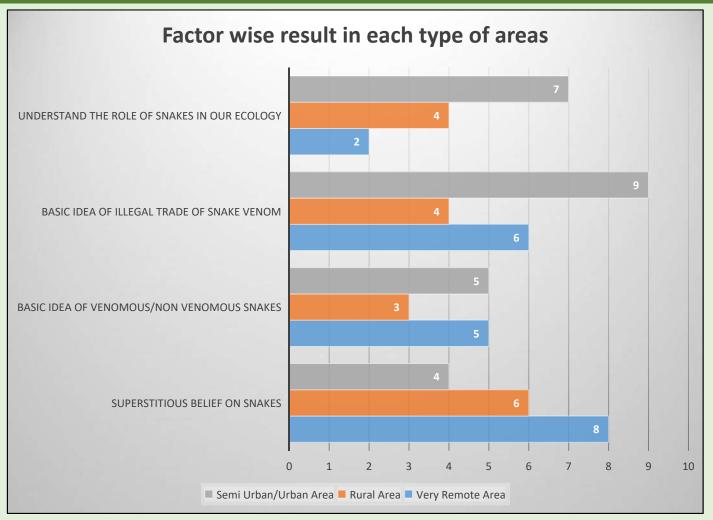
Snake Bite survey ongoing in Sundarban Region

We have organize peoples' perception study in some villages of the state of West Bengal. The main objective of this activity is to understand what the people think of snakes.

This survey has been organized in a scientific way, where we have chosen a total of 15 villages from South 24 Pargana and Paschim Midnapur districts. 5 villages is adjacent to town/city, 5 village is from modarate rural areas and 5 village from extremely remote areas.

During our study the main aim was to understand these following things, 1) What the villagers think about snakes? 2) There basic idea and knowledge on

venomous & non venomous snakes 3) Superstitious belief on snakes 4) Human snake conflict scenario in the area. This survey gave us a very good knowledge and idea of the current scenario of human snake conflict in the study area. This study gave us more detailed idea of what we can do to handle the issue at our future upcoming planning to mitigate the problem.



As per our study, in three types of areas the basic idea of venomous and non venomous snakes is not very good. But when we go for the the illegal trading of snake venom and other parts of snakes the basic idea of the people who lived in the remote areas are much better than those in rural areas.

#### **C. AWARENESS PROGRAMS:**

We have organized more than 50 awareness programs in schools and villages to spread awareness on the snake ecology and snake bite initiatives.

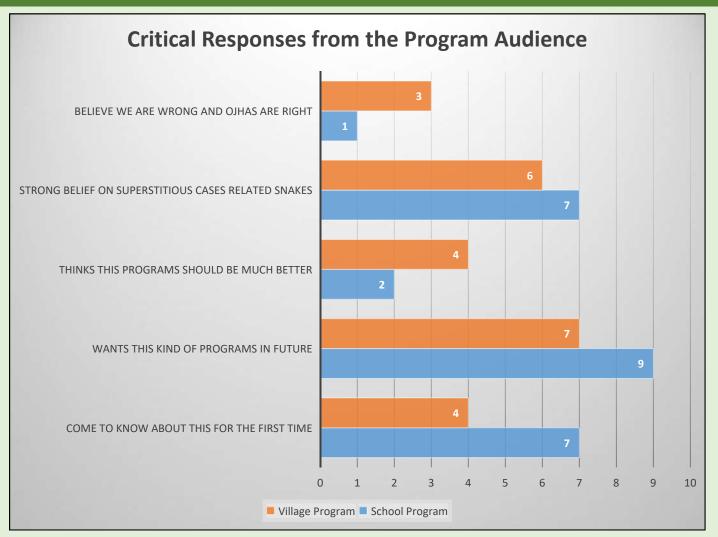
At our awareness programs we totally focus on interaction methods with the audience to understand the ground reality of the human-snake conflict management. Apart from that our programs also bring us key information on Illegal Snake Trade activities along with many unscientific superstitious activities executed by local Tantric, Ojhas or Gunins.

We try to involve the children, sportingly, in spreading this awareness as these youngsters are the backbone of the society. Educating them on snakes, will create mass awareness.



Snake Awareness Program in Dantan, West Bengal

We do keep proper statistics of our awarness programs and take feedbacks from the attendees of such programs. We found in each critical responses, school level responses are much higher than village level.



#### D. RESEARCH & DEVELOPMENT:

Since this year is focused in reducing conflicts, the team mainly deals with the snake rescues and snake releases along with awareness programs on snakes. So, the research programs are not focused this year. Yet, we have published two research article at this financial year under this project Sarpa Sathi.

There is no such written document on the snake diversity of Mysuru district of Karnataka. During our run of Sarpa Sathi in the Mysuru district for the last three years, we collected a lot of data regarding snake diversity of Mysuru. As per our data we have published first ever documentation of snake diversity from the Mysuru district of Karnataka.

From Rajasthan, we found a albino trinket snake which is also first ever documentation from Rajasthan State. This article is also published at a research journal.

Apart from these two publications this year, we have also documented many detailed data which we will prepare for publication in the upcoming year.



Albino Trinket found from Pali district, Rajasthan

## EDM: EMERGENCY DISASTER MANAGEMENT

## AN OVERVIEW OF EDM:

Each year various disasters hit the normal life of human beings in the form of Flood, Cyclone, Drought and many other types. During this time a sudden support/help is always needed by the victims. The concept of this project EDM i.e. Emergency Disaster Management begins to provide supports to the victims. We began this project during the year 2020 when Cyclone Amphan hit Sundarbans. We provided support to the people of Sundarbans in three phases. Later in 2021, when Cyclone Yaas hit Purba Midnapore, we also provided the same support to the victims of both Sundarban and Purba Midnapore.

## **TYPES OF SUPPORT INCLUDES IN EDM:**

- ➢ Wildlife Rescue, Treatment and Release
- Veternary Support in the remote areas
- Medical Camps for human
- Drinking Water Supply
- Cloth distribution
- Sanitary Napkin distribution

- ➢ Tarpaulin distribution
- Rationing distribution
- Community Kitchen
- Dry Food support
- Environmental Disaster Analysis
- Small scale initial support for ecomical sustainability



Various activities under the EDM project done over the years in India

## EDM: EMERGENCY DISASTER MANAGEMENT

### **INITIATIVES TAKEN THIS YEAR:**

#### SUPPORT GIVEN IN THE DROUGHT HIT PURULIA DISTRICT:

This year, a modarate drought hit the western parts of the district of Purulia in the state of West Bengal. A significant decrease of almost all types of cultivation have been observed in that area. So, naturally the income of the local tribal, marginalized people drops significently. Under our project EDM we helped the

That is why we have distributed clothes to the children and young people of Ajodhya Hills and Barabazar areas. We have distributed clothes to 500 beneficiaries. Apart from that we have organized two free medical camps with the support from the local forest department for the tribal villagers.



Various activity done under the Project EDM throughout the Year

## WHAT IS 'SIT':

Previously we have worked in reducing the illegal hunting of wildlife in various parts of West Bengal during the ritualistic hunting festival of tribal people of India. As a part of our work we have a very successful record in doing so at a very short timespan. But as we work in this issue, we kept digging more on this till we found that the problem is much more sensitive, complex and crucial and we have very limited knowledge on this. We understand this ritualistic hunting (Tribal Hunting Festival) is just a tip of the iceberg. There is a very well organized process of hunting, poaching and illegal trading of wildlife already ongoing for almost more than a decade or two.

The global reports on the illegal hunting, poaching and trafficking of wild animals and plants are known to all but how much well organized are these networks in the state of West Bengal is not much known to many. This year we cracked the information that a very organized trading of Pangolin happens from Purulia. We have also identify some illegal traders who are organizing this. Let us discuss this under the acitivities of this project.

### ACTIVITIES: A. STOP RITUALISTIC HUNTING:

We have organized various activities in the entire Jangalmahal (Purulia, Bankura, Paschim Midnapore, Purba Midnapore and Jhargram) area to hadle the issue. This year we have planned and executed the program at a collaborative manner with the Forest Departmental, Police Departmental and Railway Departmental staffs. Even a successful coordination with all the DFOs and other forest departmental staffs was planfully organized. As a result we have very successful outcome this year. In every areas, the tribal hunters were very tactically handled and stopped from hunting of wildlife. In Ajodhya Hills, Purulia (which was the prime location of hunting) is very successfully defended with no hunting. Apart from this, in Purba Midnapore no hunting occured. In Paschim Midnapore, Jhargram and Bankura some incidents did occur but yet the number of killing of the animals were far less than previous. Our organization tactically involved tribal people at this work and our team (consisting of tribal youngsters) directly talked with the hunters and tried to convince them and if the presuation failed, they provided us informations of that team which helped us to cease their weapons as they entered the forest. Let us discuss the activities we took to make this effort successful,



Hunter entering the forest during ritualistic hunting



Detaining four hunter with multiple traps and snares.

#### 1. Constant Awareness Campaign:

Regular basis awareness campaigns organized in the villages for two months before the day of hunting. This helps us a lot to grow mass awareness among the villagers so that they understand the role of wild animals among us and the legal aspacts if they violate the Wildlife Protection Act, 1972.



Hunter entering the forest during ritualistic hunting

#### 3. Naka Checking at the entry points:

We have successfully involved the local administration in resisting the outside hunters from entering the forest areas. As per our collaborative meeting, local Police Administration put Naka Check Points at the forest entry points. This helped a lot to reduce the entry of the local hunters in the forest areas.



Naka Checking point at PPSP with Forest Department

#### 5. Multi Departmental Coordination:

We have build a good communication with all the governmental departments and successfully involved them at this program. Their active participation directly helped us in handling the issue of hunting massively by taking necessary steps during the hunting festivals.

#### 2. Involvement of Key Tribal Influencers:

In the tribal community, the influence of the local tribal leaders and village head is very important and they can handle mass movement. So we have involved the local tribal leaders in this by convincing them about the importanace of this program.



Hunter entering the forest during ritualistic hunting

#### 4. Petrolling:

We have been involved in thorough petroling at the forest adjacent roads and suspected villages during day and night on the day of hunting festival. This petrolling was a joint initiative of Us, Forest Department, Police Department and local administration. This petrolling created panic among the hunters and many of them refused to hunt.



Petroling during the day of hunting festival in Purulia

#### 6. Inter-Departmental Coordination:

We have build inter forest departmental coordination team so that we can get an idea on the number of hunters (outsider) and can be ready to handle them, dilute their size and manage the entire issue of hunting. Moreover they refrained the hunters from hunting of wildlife.

#### 7. Identifing the local hunters/trackers:

With the support of our local tribal team we have identified the good and experienced local hunter groups and trackers and later engaged them in various departmental programs after discussing with the DFO. This helped us to eliminate the threat of hunting, directrly and indirectly (as some people helped outsiders to track animals). This activity massively helped us in handling the outside hunters.



Hunter entering the forest during ritualistic hunting

#### 8. Ceasation of Illegal Weapons:

In case of any violation of the Wildlife Protection Act, 1972, Police Arms Act 1959 and arms rule 1962 and Indian Forest Act 1927, we have played a key role in providing information to the forest department and administrative departments of illegal weapon handling by the tribal people. As per our information many weapons were ceased.



Hunter entering the forest during ritualistic hunting

#### B. RAID ON NAG PANCHAMI:

On the day of Nag Panchami, we have organized a raid in Jabalpur District of Madhya Pradesh to detain all those who are showing the snakes illegally to the local people and asked for money. This raid was done by the local Police Department, Forest Department and our collaborative organization JAWS. During that raid our joint task force detained 26 snake charmers and rescued 91 snakes. Out of these 91 snakes, 75 were Spectacled Cobra, 15 Rat Snakes and 1 Bronzeback.

This raid was organized for 48 hours and took place at various colonies around Jabalpur. Many rescued snakes were in very serious condition due to dehydration, so we did all the necessary treatment with the support of forest departmental veternary doctors. All the healthy snakes were released in the nearby habitat and unhealthy snakes were shifted to the forest departmental facility.

This raid created a huge impact on the people who were involved in this kind of cheap publicity and revenue generation. We are hoping this activity shall reduce this activity in the area.



Various activities during the Raid in Jabalpur on the day of Nag Panchami

#### C. REGULAR ANTI-SNARE WALK INSIDE THE FOREST:

In the forest area of Purulia we have organized regular anti-snare walk with the local forest departmental staffs throughout the year. During the walk we have found more than 100 snares and 18 traps. All of those snares and traps are seized by the forest department.

We have found various types of installation of snares inside the forest, most of the snares and traps are placed for Wild Boar and Barking Deers. Apart from these two types, the hunters placed the snares and traps for Indian Pangolin, Indian Porcupine, Indian Hare, Bengal Monitor Lizard etc.



Pangolin during selling from West Bengal

#### E. EDUCATING THE YOUTH:

We have organized more than 30 school level awareness camps to spread awareness on the Illegal Trading of Wild Animals. At our awareness camps we focused on these following things to aware the youth,

- 1. How does the market works?
- 2. Why are these animals important to our Ecosystem?
- 3. What are the uses of these animals?
- 4. Who are the potential buyers?
- 5. What is the role of the Youths?



**Confidence Build up in Ajodhya Hills** 



Disengaging snares from the forest of Ajodhya Hills

#### D. ENFORCING LAW:

We do focus on enforcing the law as a part of the activity of this project. This year we have organized one proper raid to stop a pangolin from poaching. With the support from the local villagers and forest departmental staffs we have successfully saved the pangolin from getting hunted down for illegal trading.

Apart from that we also saved 3 turtles from poaching. Out of them, 1 was the rare one-eyed turtle



Organizing awareness Campaign in Sundarbans

#### **E. BUILDING NETWORK:**

It is very important for us to build more networks. This networking will help us to flourish our work. We focus on the Purulia and Bankura districts at the begining to build our network for getting information regarding the poaching or illegal trading and proper support during raids.

For confidence build up among the forest adjacent villagers, we focus on providing economical support through Bana Bandhu Project.

#### Phenotypic Plasticity in Common Evening Brown Butterfly



This is a collaborative research activity with Adam Mickiewicz University, Poland and IISER Trivandrum, Kerala. The aim of this project is to observe and note certain significant changes that may occur in the morphology, physiology and behaviour of the Common Evening Brown (*Melanitis leda*) when subjected to different environmental conditions and also note if these changes are altering the species' genetic makeup varying on the changing environmental condition of Asian, African and European countries.

Apart from involving in field works in the state of Sikkim and West Bengal in India, we are also one of the key collaborator for preparing and supplying most the field equipments with our unique innovative approaches which helps in the field in various ways.

#### Addressing Ritual Hunting and Conservation of Pangolin



Hunting Festival is one of the most celebrated events among the Santhali people of Ajodhya Hills in Purulia, West Bengal. But sometimes in the name of an age-old tradition and ritual, this very practice has claimed lives of many endemic wildlife of the region, ultimately making their population in the wild either vulnerable or endangered. One such example is the Indian Pangolin, whose population once in the wild can be compared to rodents, but now only a handful lives at the Gajaburu sector of Purulia. Thorough years of working in the conservation initiative for the wildlife of this region we have been able to address and expose news of a decade old hunting and poaching of pangolins to the Forest Department and have identified key routes and linkmen involved at this illegal trading racket. The project was jointly support under the RAP initiative of Wildlife Trust of India, Fondation Segré and Purulia Division Forest Department.





#### Prepare Indian Pangolin Conservation Planning

Prepare Sloth Bear Conservation Planning



We have prepared a 10 year long conservation plan for the Indian Pangolins of Purulia, for the Purulia Division Forest Department. Unhindered hunting practice among the tribal community and poaching threats have make the once thriving population of pangolins vulnerable. So this conservation plan aims to identify those threats and mitigate them at its very core and gradually restore a viable population this scaly ant-eaters in the wild.

#### Coastal Bird Survey in Purba Midnapore, West Bengal



A regular basis seasonal and regional bird survey works are done with involving a small team consisting of avian taxonomist and avian behavioral expert to record old and new (if and when observed) avian species, conduct seasonal counting, listing endangered species, observing and noting certain behaviors like mating, nesting and parenting, identifying probable localized natural and anthropogenic threats and such. This year too such bird survey was conducted along the coastline of Purba Medinipore, West Bengal. The team had recorded 31 avian species during their study at a 10 km strechted coastal habitat.



As a collaborative venture, we papered the conservation planning of 10 year for the Sloth Bear of Purulia with the Purulia Division Forest Department. This conservation plan aims to mitigate any conflict by accessing the threats befalling upon this animal and successfully conserve a viable population of sloth bears inside the forest cover by rejuvenating the habitat quality and food sources.

> Providing Environmental education for the Youth



This year we have conducted three course works in West Bengal regarding wildlife movement monitoring inside forest area in collaboration with Forest Department of West Bengal. The participants were given first hand experience in learning and conducting various application based scientific data collection procedure like quadrate sampling, line transect method, documenting various wildlife movements all around the day and learning to execute various trapping methods for more detailed observation from field works like camera trapping, pit-fall trapping and so on.

#### **Tree Plantation Initiative**



From this year the organization started its new initiative in combating the climate change issue through this activity. Through afforestation works at Chattisgarh, Madhya Pradesh, Rajasthan and West Bengal, we aim to reduce the ill effects of global warming and contribute to the world's initiative in creating a greener and cleaner environment. More than 5000 saplings were planted throughout India.

#### Wildlife Rescue & Rehabilitation



Our rescue team functional throughout India actively intervenes whenever any case of human animal conflict arises. Each member of our team is well trained and equipped for executing their work in any time and at any situation. The team rescues wildlife whenever it enters into a human settlement and creates conflict. After rescuing the animal, our experts check its health immediately and later release it at a nearby safe and wild habitat.

#### Preparation of Butterfly Garden, in Purulia



Our expertise lepidepteran team is working for the conservation of butterflies throughout West Bengal. After the construction of Lakhra Butterfly Garden, our team is working on the construction of another butterfly in Purulia 2 Block of West Bengal. Currently the work is ongoing where we are trying to convert a barren land into a open conservatory for butterflies. Entire work is going through a proper scientific approach. We are totally involved in sustaining an ideal butterfly habitat along with implementing butterfly research works which involves its life cycle and behaviour analysis in the changing environment. Apart from this, this will also helping the local people and young generation in spreading awareness on butterfly conservation.

#### Threat Analyzing of the Wildlife of Non Forest Area



Often the wildlife in the non-forest areas are ignored in conservation initiatives. But they too are vulnerable to various anthropogenic pressure, developmental works, habitat shrinkage and fragmentation, food crisis and competition at interspecies and intra-species level. So from this year onwards we started a project to identify such nonforested zones where wildlife movement is present and analyse the various localized threats these wild animals are facing so that in future we can plan out an effective conservation plan to restore a viable wildlife population at the non-forest areas. Currently the project is at its preliminary stage and we are carrying out intensive field to identify such areas, its current wildlife status and the type of threats these wildlife is exposed to.

#### Behavior Study of Golden Jackal in Rural areas of West Bengal



From November, 2022, this project was launched to understand the behavior and ecology of the golden jackal in the rural areas of West Bengal. Over the three decades the population of Golden Jackal is declining drastically at the rural areas of West Bengal. Major reason behind is immensely rising anthropogenic pressure, habitat loss and food scarcity. Our team is conducting extensive field to study the behaviour of Golden Jackal population in the rural Bengal to understand their survival strategy at and adaptability with the changing environment and weather conditions.

#### Status Survey of Leopard Activity in Purulia District



We have conducted a year long status survey in the Ajodhya Hills of Purulia district to observe wheather any activity of leopard could be found, so that further planning on leopard monitoring and conservation can be executed. As per our conducted survey from April, 2023 to June, 2023, we have found presence of leopard in the study area. Towards the early April, 2022 an image of leopard was captured at one of our installed trap camera.

#### Documentation of Arthropod near Digha, West Bengal



Under the collaborative initiative of WNE -India, Medinipore Belda College, North Odisha University and Times Institute at Odisha a year long research was carried out back in June, 2021 along the coastline of Digha in Purba Medinipore, West Bengal. An extensive field was done with the involvement of entomologist, wildlife biologist and researchers working in the field of marine ecology and biodiversity to document the arthropods found in this coastal belt. In July, 2022 the work got published at Journal of Emerging Technologies and Innovative Research.

## Analyzing the roadkill pattern to reduce roadkill of Wildlife



We have engaged a qualified research team, to analyze the roadkill pattern of wild animals in the rural areas of Western parts of West Bengal. Currently this team is working in three particular roads to understand the roadkill pattern. This project is currently ongoing and in the upcoming year we are hoping to come with a mitigation planning to reduce the roadkill of wildlife in the non forest rural areas.

## **Notable Days Celebration**

#### EARTH DAY CELEBRATION:

On, 22nd April, we organized an awareness campaign in Ajodhya Hills of Purulia district.

#### **CELEBRATING WORLD BEE DAY:**

We have organized a seminar on 20th May, on Bee Conservation in the Kulpi Jayapriya High School.

#### CELEBRATING WORLD BIODIVERSITY DAY:

On, 22th May, we organize a biodiversity monitoring program in Jawai, Rajasthan area with 30 young students.

#### TREE PLANTATION ON ENVIRONMENTAL DAY:

On 5th June, we have organized an awareness campaign in Ajodhya Hills in collaboration of Forest Department of West Bengal.

#### **CELEBRATING OCEANS DAY:**

On 8th June, we have organized a beach clean up program in collaboration with WINGS and West Bengal Biodiversity Board.

#### **CELEBRATING GLOBAL SNAKE DAY:**

On 16th July, we have organized an awareness program in a school on snakebite initiative and superstitious believes on snakes in collaboration with West Bengal Bigan Mancha.

#### REMEMBERING JIM CORBETT:

On 25th July, we have organized a sit and draw competition in Jawai, in the remembarance of the legendary conservationist, Jim Corbett.

#### **CELEBRATING GLOBAL TIGER DAY:**

On, 29th July, we organized an school awareness program in a school in Kakdwip block of South 24 Parganas district of West Bengal.

#### WORLD ELEPHANT DAY CELEBRATION:

On, 12th August, we organized an school awareness program in a school in Purulia district of West Bengal.

#### RALLY ON THE INDEPENDENCE DAY:

On, 15th August, we organized a morning rally with the kids for the conservation of nature. This rally was organized in Contai 1 block of West Bengal.

#### SEMINAR OF VULTURE AWARENESS:

On, 5th September, we organized a seminar program on the role of vultures in our ecosystem in Jabalpur district of Madhya Pradesh.

#### SEMINAR ON WORLD HABITAT DAY:

On 3rd October, we organized an awareness program in Mysore district of Karnataka on habitat conservation.

#### DEBATE ON WORLD VEGAN DAY:

On 1st November, we organized a debate program on the importance of being vegan for human health and psychology.

#### **CELEBRATING CHEETAH DAY:**

On 4th December, we organized a seminar program in a school in Jawai, Rajasthan, on the reintroduction of Cheetah in India: its future and importance.

#### CELEBRATING WILDLIFE CONSERVATION DAY:

On 4th December, we organized an awareness program in a school in South 24 Parganas, West Bengal on the importance of wildlife conservation in the non forest areas.

#### **CELEBRATING WETLAND DAY:**

On 2nd February, we organized an awareness program in a village in Paschim Medinipur district of, West Bengal to spread awareness on the importance of wetland conservation.

#### **CELEBRATING PANGOLIN DAY:**

On 18th February, we organized an training program for the forest departmental staffs of Purulia, to understand and handle pangolin trading & pangolin hunting in Purulia and its adjacent area.

#### **CELEBRATING WILDLIFE DAY:**

On 3rd March, we organized a rally in Jawai, Rajasthan to spread awareness on Wildlife management in India.

## Notable Days Celebration (PHOTO GALLARY)













