



ANNUAL REPORT 2018-19

Aaramyak

Nourishing Nature to Secure Our Future

NURTURING 10,000

CHILDREN AS FUTURE
GUARDIANS OF NATURE
BY TRAININGS ON NATURE
CONSERVATION AND ECOLOGY

3 BATCHES OF FORESTERS

OF ASSAM AND NAGALAND

TRAINED

FOR CONSERVATION

OF HOOLOCK GIBBONS

ORIENTATION FOR

70

FRESHLY RECRUITED
JUDICIAL OFFICERS
OF NORTH EAST INDIA
IN POBITORA WLS

WILDLIFE DOCUMENTARY

LEGENDS OF HOLLONGAPAR

RECEIVED NATIONAL
AND INTERNATIONAL
ACCOLADES

INSTALLATION AND MONITORING

7 WEATHER STATIONS

AT DIFFERENT ELEVATIONAL ZONES
ACROSS DIBANG RIVER BASIN,
ARUNACHAL PRADESH

RHINO GOES TO SCHOOL

CONDUCTED IN
40 SCHOOLS

AROUND KAZIRANGA NP,
ORANG NP, POBITORA WLS
AND GUWAHATI CITY

ESTABLISHED

THE
FIRST
PHOTOGRAPHIC
EVIDENCE
OF TIGER
IN THE FIRST ADDITION
TO MANAS NATIONAL PARK

SUCCESSFULLY RELEASED

6 CAPTIVE-BRED PYGMY HOGS

IN THE BORNADI
WILDLIFE
SANCTUARY

TIGER PRESENCE

IN BUXA TIGER
RESERVE, WEST BENGAL
WAS CONFIRMED
THROUGH PUGMARK AND
FECAL DNA ANALYSIS

Aaranyak's MISSION

Our mission is to foster conservation of biodiversity in Northeast India through research, environmental education, capacity building and advocacy for legal and policy reform to usher a new era of ecological security.

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Aaranyak is a registered society working towards nature conservation in North East India, since 1989. Our strength lies in applied research in biological and social fields and our thrust area of work is the North Eastern India and Eastern Himalayas.

Aaranyak is steered ahead by young professionals dedicated and committed to the cause of conservation. Aaranyak is recognized as a Scientific and Industrial Research Organization (SIRO) by the Government of India.

Know more about us at

www.aaranyak.org you can also follow us on Facebook and Twitter

Aaranyak Society Registration No -
3096 of 1989-90

Donations made to Aaranyak in India carry tax exemption under section 80G of the Income Tax Act 1961. Registration under the Foreign Contribution Regulation Act 1976 entitles Aaranyak to receive foreign contribution to work in the field of biodiversity research and conservation.

The logo for Aaranyak features the word "Aaranyak" in a large, flowing, green serif font. A horizontal green line starts from the bottom left of the letter "A" and sweeps upwards and to the right, ending under the letter "k".

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FROM THE DESK OF SECRETARY GENERAL & CEO

Aaranyak has completed its 30th year of existence on 9th September 2019 from a small beginning in 1989. Beginning with a humble intention of creating neighbourhood environmental awareness in 1989, Aaranyak has emerged as a leading science-based nature conservation organisation during its journey of 30 years with its footprints now spread across about 10 states in India.

Beginning its institutional journey through recruitment of only four staffs in 2002, Aaranyak as on date has provided employment to about 110 staffs working in different parts of eastern Himalayas, building their skills to address diverse conservation challenges that the region has been facing. All these progresses made so far have been possible because of support, encouragement we have received in past three decades from our supporters, well-wishers besides the commitment and dedication exhibited by the Team Aaranyak.

In these 30 years, Aaranyak has completed over 400 projects in different parts of India and also in South and South East Asia. Periodic assessment of our research and conservation activities, reshaping the upcoming research conservation planning to shape future roadmaps are on-going practices of Aaranyak. Researchers and conservationists working with Aaranyak have made the organisation proud by securing national and international recognitions for their challenging conservation work done through Aaranyak. One of the significant contributions that Aaranyak has rendered in past three decades is building the capacity of a select group of enthusiastic youth of North East India to shoulder responsibilities of doing field based research and conservation work as part of its sustained human resource development efforts. Aaranyak over the years has attracted many budding, dedicated workers to work with it thereby making Team Aaranyak unique, strong and effective in addressing some of the growing conservation challenges.

Securing potable water and pure oxygen to breadth are the ultimate dream of Aaranyak while contributing towards conservation of wildlife and human well-being. If forests, wetlands and other habitat are not conserved, getting potable water and pure oxygen to breadth would be very challenging in eastern Himalayas. As such, I request people of the region to actively engage in conservation of natural resource base, specially the water and air so that we can continue to live in a clean and green environment and also enable other lifeforms to thrive as they play an important part in maintaining ecological balance.

We solicit continued support of our well-wishers, supporters to carry forward our efforts to ensure earth's ability to support the need of human beings and other lifeforms is not compromised beyond its capacity to restore the damages caused by our actions, reactions or inactions!

A handwritten signature in black ink, appearing to read 'Bibhab Kumar Talukdar'.

(Dr. Bibhab Kumar Talukdar)

ACKNOWLEDGEMENTS

GOVERNMENT DEPARTMENTS

Department of Environment & Forest, Government of Assam;
 Department of Environment & Forest, Government of Arunachal Pradesh;
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ORGANIZATIONS/INSTITUTES

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DONORS

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Science and Engineering Research Board (SERB);
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 West Bengal Forest Department;
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BACKGROUND

Aaranyak's nature conservation efforts can be traced back to 1989, when a passionate group of young environment enthusiasts, gave shape to a green concept and named it 'Aaranyak'. Deeply motivated towards protecting the rich bio-diversity of the region. Aaranyak, which was based in Guwahati, Assam, embarked on an unrelenting voyage that so far has overcome uncountable barriers. Over a quarter century of work has brought major changes in the nature conservation field of North East India.

Aaranyak's beginning was humble, but the mission was as strong as it is today and the vision vibrant with dreams of ushering in a new era of environmental consciousness among the masses. Unearthing new findings on North East region's incredibly rich flora and fauna was the first step towards building such much needed awareness among the common people of the region. Aaranyak then and now believes that effective conservation of wildlife and ecology is conceivable only through co-operation from the masses.

Aaranyak's initial goal was to generate mass awareness on the wildlife heritage of Assam and the critical need for its conservation. The turning point came in 1989, when Aaranyak filed a Public Interest Litigation in the Gauhati High Court, challenging the decision of the Assam Government to lease out fisheries inside the Dibru-Saikhowa National Park in Assam. The Dibru-Saikhowa NP is one of the potential conservation sites of critically endangered White-winged Wood Duck, the 'State Bird of Assam', and also Aaranyak's symbol encrypted in our logo. The battle was akin to David versus Goliath, and David won! The court ruled in favour of Aaranyak and the Government had to withdraw the destructive lease permits, giving a fresh breath of life to the wildlife and habitats of Dibru-Saikhowa. Steadily progressing, Aaranyak soon became involved in bird-watching that brought together young students from all across Assam and created an emerging group of avid birders. Meanwhile, Aaranyak extended its activities to key conservation aspects, which soon became the major work areas of the organization. At present, the primary thrust areas of Aaranyak are:

- To conduct quality research on biodiversity, water resources, hydrology, climate, sustainable development, natural disasters and environmental impact assessment in North East India, *viz.* floods, erosion, revival of traditional water harvesting systems, water shed management, climate variability, deforestation and climate change, rainfall-runoff modeling, application of remote sensing and GIS in environmental research and Wildlife Genetics Research.
- To create awareness among the people about the need for biodiversity conservation through environmental education and capacity building.
- To curtail and eliminate wildlife trade in the region

- To explore and access the legal and judiciary provisions for protection of biodiversity
- To complement and support Government agencies working for protection of the rich biodiversity of the region
- To assist the fringe communities of protected areas to diversify their livelihood options and minimize dependence on forest resources
- To foster scientific applied research in the field of biodiversity and environment that would provide new avenues for sustainable livelihood generation.

Through 30 years of hard work and commitment, Aaranyak has carved a niche for itself, in the field of biodiversity conservation, not just in India, but also globally. It has established itself as a prominent figure in the global network of institutions involved in nature conservation.

Aaranyak is a closely knit team of environmental scientists, researchers, community workers, educators and environmental legal specialists. With great focus on facilitation team spirit, Aaranyak provides space for each individual to emerge as resilient leaders.

Aaranyak's foundation of research and development is augmented by untiring fieldwork by our team members. The team is on a combined mission to contribute towards protection of nature by providing key inputs to biodiversity management based on quality research on ecosystems, environmental education, capacity building, legal and policy research.

Aaranyak at present has 14 Divisions which form the core of our conservation strategy. Together, these blend science and technology resources with involvement of stakeholders to rediscover the traditional peaceful co-existence of man and wildlife in North East India.

Aaranyak's efforts towards bridging the gap between research and adaptive management of wildlife and forests have won us many accolades from around the globe. In 2011, Aaranyak received the prestigious RBS 'Earth Guardian Award 2011' conferred by the Royal Bank of Scotland. Aaranyak was bestowed with the 2012 Indira Gandhi Paryavaran Purashkar, by the Ministry of Environment, Forests and Climate Change, Govt. of India. Government of Assam also conferred the "Institutional Award in the field of Science and

Technology" to Aaranyak on 27th February 2017.

Aaranyak has been building a network of symbiotic alliances with frontline institutions and universities to consolidate research and conservation activities. The formidable pool of database on various ecological aspects of North East India that has been created by Aaranyak is openly available to experts and nature enthusiasts but more importantly also to the common people. Ensuring ecological security across North East India is Aaranyak's goal, and therefore we are keen to encourage and establish a chain of committed to sustaining multiple conservation initiatives, address diverse ecological issues, sustainable development and climate change.

AARANYAK'S EXECUTIVE COMMITTEE



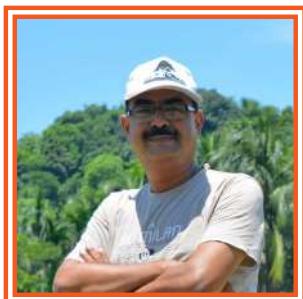
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Bibhuti Prasad Lahkar,
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Udayan Borthakur,
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Organizing Secretary



Koushik Boruah,
Executive Member



Alolika Sinha,
Executive Member



Ashok Dey,
Executive Member



Jayanta Kr. Sarma,
Executive Member

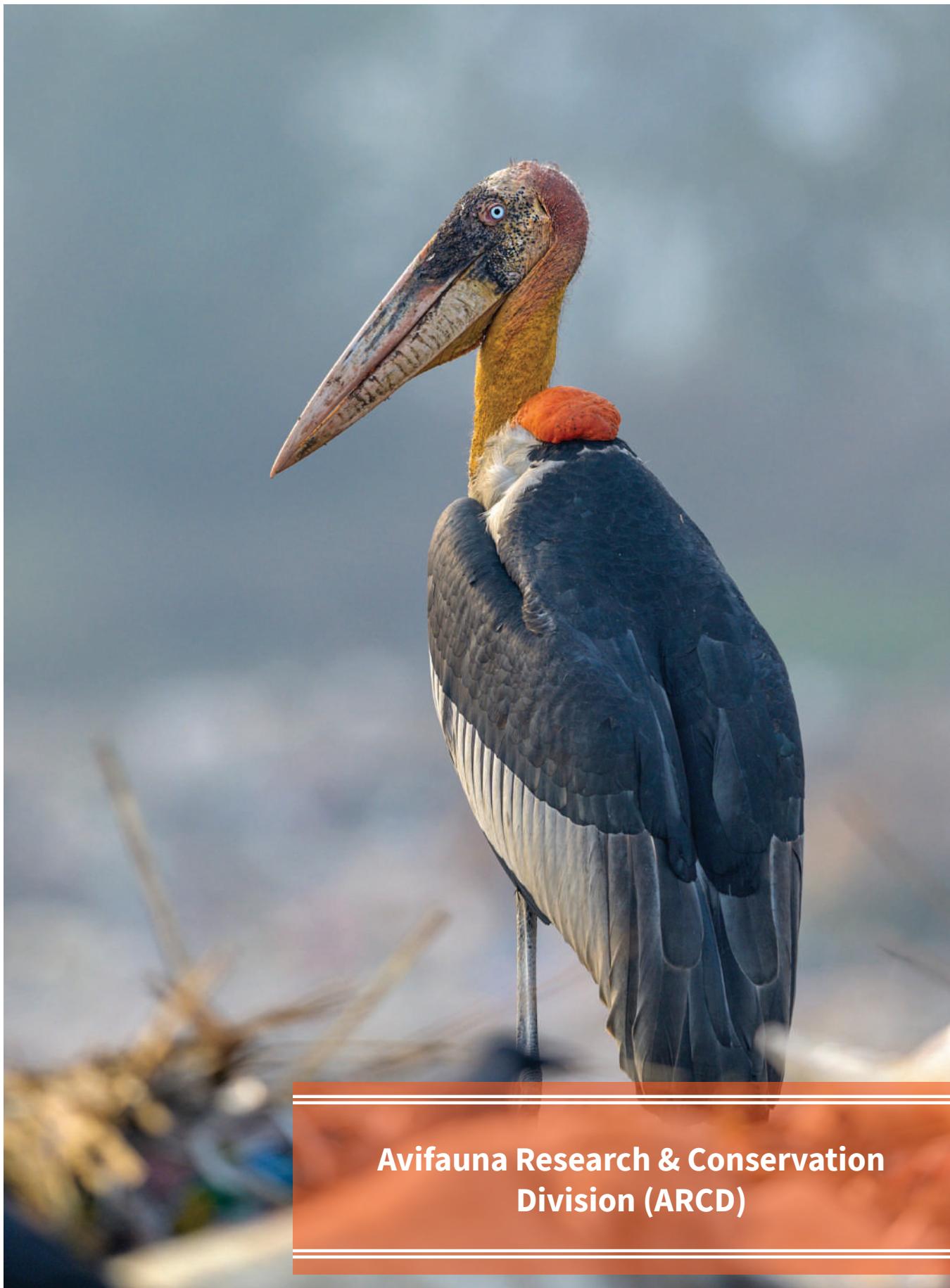


Photo - Udayan Borthakur

**Avifauna Research & Conservation
Division (ARCD)**

Greater Adjutant Stork Project (GASP)

INTRODUCTION

Brahmaputra valley of Assam is considered the last stronghold for endangered Greater Adjutant Stork (locally known as Hargila). Currently 80% of its global population could be found only in few breeding colonies in Assam. Less than 1200 birds exist across the world while Kamrup District of Assam has the largest breeding ground. Concerned over the rapid decline in the population globally, Aaranyak initiated a unique community-based conservation project in 2009 to protect the population of this stork species. The project team has been dedicatedly working in Kamrup District of Assam, with great success given the steady rise in number of nests and Greater Adjutants population.

MAJOR ACHIEVEMENTS

- In February 2018, a Greater Adjutant Stork chick was bred for the first time on a man-made raised bamboo platform and that provided a prospective solution to diminishing Greater Adjutant nesting habitat.
- Establishment of an all-women 'Hargila Army' which has been upgraded to a cooperative unit. These women have now become the guardians of this bird.

- 400 women from Hargila families from the project sites have received livelihood benefits.
- The project is nurturing 10,000 children as future guardians of nature by trainings on nature conservation and ecology.
- Restoration of Dadara-Pachariya-Singimari as the largest breeding colony of Greater Adjutants in the world.
- Inducing a sense of ownership among the nesting tree

owners and communities through a relentless awareness campaign.

- Study of breeding behaviour and success by constructing and accessing an 80-feet tall bamboo platform every year.
- The project was invited by Canada Broadcasting Canada and RED FM, Vancouver Canada to share their experience to the rest of the world.



In a Community dance program merging with hargila

Photo - Gerrit Vyn Vyn



Inauguration ceremony of WiNN India 2019

Photo - Aaranyak



Photo - Aaranyak

Purnima Devi Barman delivering her speech at WiNN India 2019, 4th Annual Global Women in Nature Network on January 28-31, 2019 at Hotel Radisson Blu, Guwahati, India

AWARD / RECOGNITION

- Dr Purnima Devi Barman who heads the project, was conferred the fourth Yamin Hazarika Women of Substance Award-2018
- Dr Barman was honoured with "Prag Prerana Award 2018" by Prag News, a satellite television channel from Assam.
- Dr Barman was awarded Human Excellence Award 2019 on 23rd November, 2018 by Sathay Sai baba Trust. It was conferred by Vice President of India
- Dr Barman was awarded Outlook speak out award 2019 of Outlook magazine, that was conferred by Indian Human Resource Minister, Smriti Irani.

STRATEGIC ACTIONS

- During Durga Puja festival of October, 2018, several competitions were held among the women of Dadara village which included snacks-making and Mehendi contests.
- During Diwali celebrated on November 3, 2018, a special cooking training programme was organised for Hargila Army members by kitchen queen Tanishillnam. This was part of entrepreneurial skill development initiative for these women.
- Aaranyak and Women in Nature Network (WiNN) in collaboration with Kamrup District Police, Assam Forest Department and Kamrup District Administration successfully hosted the 4th annual global event of WiNN in Guwahati from 28th to 31st January, 2019. Governor of Assam, Professor Jagdish Mukhi inaugurated the event. Women members of Hargila Army attended the WiNN event in Guwahati.
- On International Women's Day on March 8, 2019, a new loom was provided to Dipali Das, an active member of Hargila Army, as part of women empowerment efforts. The day was also celebrated by all members of the Hargila Army.
- Regular training programmes and environment education classes were held for local women to enrich their livelihood, enhance their capacity.
- Involving government stakeholders of local district

and police administrations in enforcement of wildlife laws in an effective way.

- Taking the Greater Adjutant awareness and conservation module to local schools.
- Rescue and rehabilitation of chicks that fall from nests by forming a youth group as rescue volunteers.
- Study of egg shells to know their status in relation to breeding success.

SUMMARY OF IMPACT

One of the most successful steps has been creation of the women group with 200 members as Hargila Army (Protector of nesting trees) to sustain this effort. The project team reached out to school children of the area who played an important role in motivating and educating their parents to protect the nesting trees. The local Police and District administrations as well as the Assam State Zoo authority became a partner in this effort. They provided the much-needed help in rescue and rehabilitation of the species.

The number of Greater Adjutant nests in Assam have increased from 28 (2007) to 200 in 2018-19. An artificial breeding platform was also tried in 2017 for the first time and a pair of birds successfully nested at the platform, incubated and hatched in 2018.



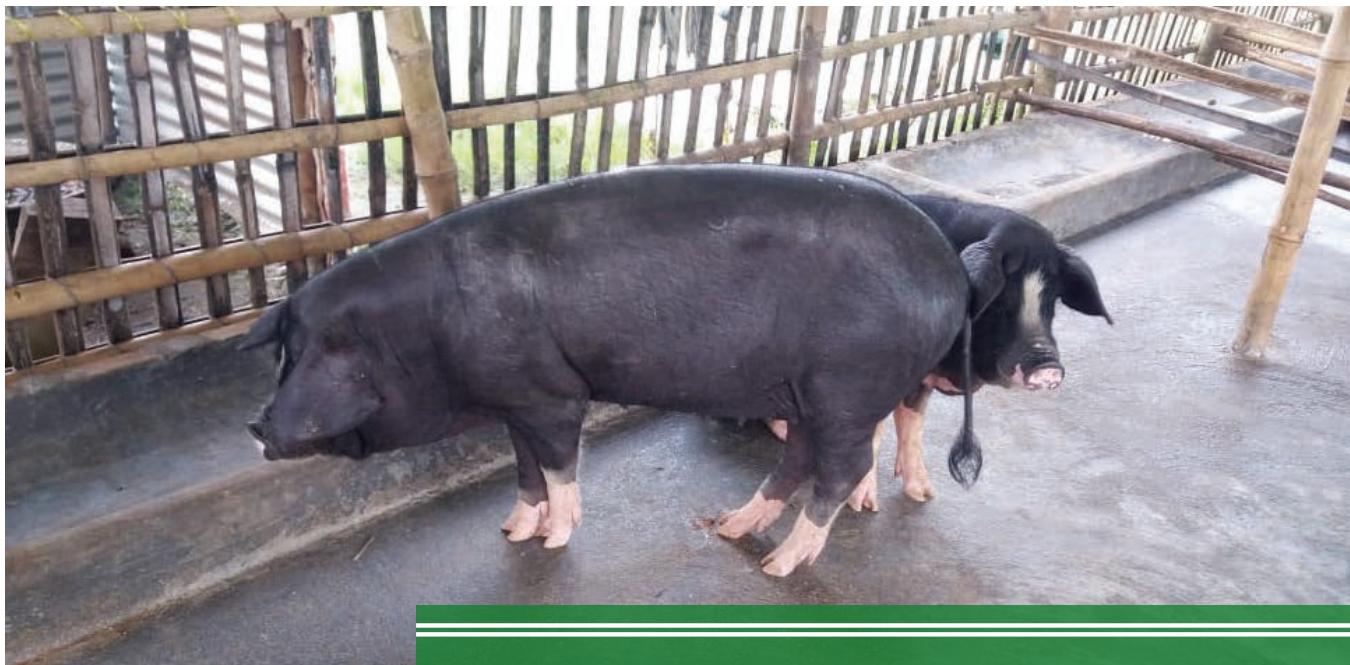
Dr. Purnima Devi receiving Nari Shakti award from
Honourable President of India

ROAD AHEAD

- Organising trainings for women empowerment with Hargila Army and expansion of the activities.
- Hargila Learning Center to be sustained.
- Trainings of enriching livelihood, community capacity building to be continued.
- More awareness programmes will be conducted.
- Local women will be supported by providing handlooms, yarns as well skill enhancement training on weaving of textile featuring stork motifs.

CONTACT

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Conservation & Livelihood Division (CLD)



Photo - Aaranyak

INTRODUCTION

In view of increasing anthropogenic pressure on the forest areas, provision of livelihood for forest fringe communities is considered highly significant for conservation of forest resources. Facilitating livelihood options is the prime objective with which Conservation and Livelihood Division at Aaranyak has been set up. This has been later supplemented with education wing also, to intensify conservation livelihood related education among the target groups.

The villagers residing in the southern boundary of the Manas National Park are highly dependent on the national park for their sustenance. Provision of alternative livelihood options can reduce the dependency of the fringe communities on Manas National Park, thereby help conserving this significant



Photo - Aaranyak

Polydome based rain water harvesting system installed at 2 No. Chourang Village, Panbari

wildlife habitat that is a part of Eastern Himalayan Biodiversity Hotspot. Hence, through CLD, Aaranyak has been working in Manas Landscape since 2009 and Kaziranga Landscape since 2014 to reroute the livelihoods of the fringe communities towards sustainable alternatives, which are not dependent on resources of these two National Parks.

MAJOR ACHIEVEMENTS

- As high as 81.13% households (HH) out of 758 HH, have taken up livestock rearing as alternative livelihood, while 12.53% have considered a combination of homestead gardening and livestock rearing.
- Various products like naturally farmed honey, turmeric powder has been packaged, marketed and sold under the brand name 'MANAH' by the SHGs established under CLD.
- Establishment of one bio gas plant at one beneficiary HH on pilot basis.
- Three homestays have been started to promote community eco-tourism in Bhuyanpara Range and 36 students from IIFM have stayed as the first batch of eco-learners in the area.
- Construction of Common Facility Centre (CFC) and Raw Material Bank (RMB) has been completed. This



Photo - Aaranyak

Vegetable sapling Nursery at Dongpar Village, under Bhuyanpara Cluster



Photo - Aaranyak

Cultivation of tomatoes by our beneficiary Ghega Narzary in his farm land, Kushratary Village, Bhuyanpara.

CFC and RMB will support 260 economically backward artisans from nine fringe villages of Manas National Park in getting secured livelihood options . These facilities will support upgrading and honing the skills of these traditional artisans besides providing raw materials and other support for their economic uplift.

- Distribution of 88 looms to Joint Liability Groups formed by different artisans from the area.
- 20 different training programmes on weaving, cutting, tailoring have been organised.
- 20 households from five villages under Buraphahar Range of Kaziranga National Park were supported through goat rearing in 2018. A few selected households among them could earn average Rs 40000 per household from goat rearing in the year 2019.



Photo - Aaranyak

Construction cum maintenance(CCM) training programme on biogas

STRATEGIC ACTIONS

Livelihood for Conservation

Livelihood intervention has been designed based on participatory exercise with the fringe area community as per the framework of access restriction under Indian legal provision for protected areas. The incorporated activities have

parity with local ecological setting and cultural systems and based on their own interest (through a willingness survey using willingness matrix). Beneficiaries have also been selected based on the socio-economic categories like Women Headed HH, Marginal Farmer, Agriculture Landless Farmer, Daily Wage Earning HH. Key activities selected for support

have included traditional livelihood activities along with new ventures, with inclusion of modern, scientific and market-based outlook wherever necessary.

It also focuses on empowering people on alternative livelihood based on assets and traditional skills available with them and making an effort to change the outlook of people about conservation, which can contribute towards reduction of dependency on NTFP from the forest for livelihood.

Further, the impact of interventions has been assessed through pre and post intervention survey of annual income to identify strengths and weaknesses for future strategy building. (Baseline survey 2015, Post – programme assessment September, 2018).

SUMMARY OF IMPACT

Out of 1400 households supported, baseline annual income level (INR 30000-35000 recorded at 2015) has increased in 30% HH to INR 55000-60000, to INR 50000-55000 in 65%HH and 45000-50000 in 5% HH.

A gradual shift in livelihood from forest dependency has been observed in the project sites. Several women SHGs have started functioning based on their traditional skill of handloom and have been showing good progress. We have also observed a positive change in the behaviour of the students who were bird hunters , following the exposure visits and counselling sessions conducted for them.



Changing scenario of annual income in INR
(Baseline information was of 2015 and present information is of January, 2019 based on 54% of sample data out of 1400 HH)

ROAD AHEAD

- Intensifying the conservation livelihood and educational activities for households who are still dependent on forest products.
- Initiation of new ventures for homestead based natural farming as measures of livelihood generation for villages under Panbari Range of MNP.
- Awareness and education programme for students from the landscape.

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Elephant Research & Conservation Division (ERCD)



Photo - Udayan Borthakur

INTRODUCTION

The northeast India together with North Bengal support one of the largest populations of Asian elephants in the country. But with the loss of habitat at an alarming rate, the elephants come in frequent contact with human beings often resulting in conflict that has put elephant conservation at stake. In 2002, the ERCD of Aaranyak began working in these landscapes. The efforts broadly include the study of population ecology and addressing the issue of human-elephant conflict by supporting the local communities. Currently, the division works across the state of Assam and North Bengal.



Dung count method for Elephant Population estimation at Dehing Patkai Elephant Reserve, Digboi

grassland habitat in Manas National Park. This is one of the prime habitat that support pygmy hog, Bengal florican, hog deer, hispid hare and elephants.

- Experiments were conducted to identify elephant deterrent plants to help mitigate HEC.

STRATEGIC ACTIONS

Population Estimation

Information on the current status of the elephant population in the landscape is scanty. Hence, we study the elephant population in different areas of the landscape to derive an estimate of its population abundance. We have estimated elephant population abundance in North Bengal, Manas and Dehing-Patkai landscapes. ERCD has also conducted an occupancy survey in the riverine areas of Jorhat, Sivasagar and Dibrugarh districts of Assam to understand the distribution pattern of elephants in this landscape. These surveys provided baseline estimates, which is fundamental for implementing any conservation strategy.

Monitoring of HEC

The ERCD has been continuously monitoring the incidents of human-elephant conflict such as crop & property damage, both human and elephant deaths in various landscapes to understand the underlying pattern. Based on this information, ERCD has reached out to competent authorities and communities to resolve HEC.

Photo - Aaranyak



Explanation of Dung count method to Digboi college students

Photo - Aaranyak

Experiments on Identifying Elephant Deterrent Cash Crops

Assam's Golaghat district is one of the areas that records high incidence of HEC. Experiments were conducted in the district to identify the elephant deterrent plants which can also be planted as alternative cash crops to benefit the local communities. As such, three cash crops were identified which, if cultivated, can yield monetary benefits to the communities affected by HEC.

Action Based Conservation Initiative

An action-based initiative was undertaken in Manas to restore the grassland habitat that supports many threatened grasslands obligates. Patches of prime grassland were restored in two ranges of the national park by controlling the spread of invasive plants and plantation of native grass species.

A survey is being undertaken along the NH-37 to identify the hotspots of animal crossing to facilitate the development of 'animal-friendly' linear infrastructure in the landscape.

The elephant deaths due to electrocution is on rise in the state. In fact, it accounts for the cases of highest elephant deaths in the last few years. A survey was undertaken to address the issue as well as to ascertain the causes. Dialogues are held between ERCD and the APDCL to mitigate the issue.

SUMMARY OF IMPACT

In Assam, the ERCD has been in the forefront in generating baseline information on elephant population status, resolving HEC with site-specific measures and through action-oriented conservation measures. The information generated is shared with the competent authorities/ persons for elephant conservation

in the region. The alternative cash crops which are elephant deterrents, will directly benefit the communities which experience crop-raiding by elephants. The development of "animal friendly" pathways will curb animal mortality while crossing the highway.



Photo - Aaranyak

Dung count method for Elephant Population estimation at Dehing Patkai Elephant Reserve, Digboi.



Photo - Aaranyak

People perception survey on corridors and Conservation of Elephants

ROAD AHEAD

- Mitigating human-elephant conflict by adopting multi-dimensional approaches.
- Undertaking research activities to generate information on elephant movement pattern, habitat-use and conflict pattern.

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Environment Education & Capacity Building Division (EECBD)



Photo - Kirti Chavan

INTRODUCTION

Environment education (EE) is a dynamic and progressive exercise which enables people to explore environment issues, solve problems and take action to improve environment through developing essential skills and capacity.

EECBD's vision is for a sustainable region where people are ecologically literate, skilled, responsible and pragmatic, and environment are secured. Currently the division has been emphasizing on activities on ecosystem services focusing water, air and soil for human well-being; engaging community for wildlife conservation and environment; capacity building of strategic stakeholders; develop effective EE resource materials etc.

MAJOR ACHIEVEMENTS

- Successfully conducted a three week-long International Applied Environmental Education Course 2019 (IAECC 2019).



Dr. Dipul Kalita, Scientist from NEIST is interacting with the participants on Climate Change adaptation and its mitigation



International Applied Environmental Education Course 2019

Photo - MTCP, Aaranyak

- Published two books on conservation of Royal Bengal tiger (*Panthera tigris*) in Bodo and Assamese languages.
- Successfully conducted six orientation workshops, four capacity building trainings and 16 awareness programmes in different districts.
- Capacitated 48 teachers. More than five thousand people have been directly reached with effective conservation messages.



Photo - Jayanta Kumar Pathak

STRATEGIC ACTIONS

The EECBD has conducted various activities such as workshops, training course, public outreach and awareness activities in different priority locations in Assam. The division has also supervised various works of interns who had came from different academic institutions. Some salient activities of the reporting period are mentioned below.

- Human elephant coexistence:** Elephants are an inseparable part of Indian culture. However, survival of this pachyderm is under serious threat across its ranges.. Human-elephant conflict is increasing day by day. In such a circumstance, coexistence of humans and elephants is the only way out! EECBD has been working with the fringe community of Amchang Wildlife Sanctuary



Photo - EECBD, Aaranyak

A moment of public outreach on human elephant coexistence at fringe of Amchang Wildlife Sanctuary

and Deepor Beel Wildlife Sanctuary in this aspect. So far, seven community engagement programmes have been conducted. .

- Through '**Trees are our Friends**' initiative we are trying to plant and nurture trees. Three such plantation programmes and monitoring were carried out where more than 80% saplings survived
- **IAECC 2019:** The three-week long international course was attended by 20 participants from India, Nepal, Myanmar and Indonesia. The course emphasised on methods and process of developing environment education packages for eco-educators and conservationists working in various fields. During the course, the participants got the opportunity to interact with many eminent instructors and experts.. As part of the course work, three of the participants



Photo - Jayanta Kumar Pathak

A moment of public outreach on human elephant coexistence at fringe of Deepor Beel Wildlife Sanctuary

were awarded with 500 USD each for their grant proposal. The course was organised for the first time in North East India with the joint effort of EECBD and Manas Tiger Conservation Programme (MTCP) of Aaranyak in association with Environment Education and Conservation Global (EECG), USA and Satpuda Foundation (India).

- **Orientation on climate change (CC):** Five orientation workshops were organized in five districts to sensitize Panchayati Raj Insinuation / VCDC members and village community leaders about the adverse impacts of climate change on human and natural systems as well as on CC adaptation and its mitigations.



Photo - Jayanta Kumar Pathak

Participants of International Applied Environmental Education Course 2019 during field work

SUMMARY OF IMPACT

- Participants of IAEEC 2019 have been conducting various EE activities in their respective area using new tools and techniques. Besides, a network has been established among the eco-educators and organisations within Southeast Asia.
- Over 80% saplings planted in the reporting period under “Trees are our friends” initiative have survived.
- Observed various self-motivated initiatives among the participants of CC orientation workshops such as holding meeting on CC adaption and mitigations, conservation of wetland in their respective localities.

ROAD AHEAD

- To make IEC material available on wildlife and environment in regional languages.
- To generate 100 Conservation Educators within five years from NE region.
- Establish two resources schools by 2023.
- Reach out to 5000 students each year to develop a deeper understanding of impacts of current practices on ecosystem services and encourage a shift towards conservation friendly behaviour.

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Gangetic Dolphin Research & Conservation Division (GDRCD)



Photo - Abdul Wakid

INTRODUCTION

Gangetic Dolphin Research and Conservation Division (GDRCD) was established in 2005 with an aim to undertake long-term conservation activities on the Gangetic dolphins of the Brahmaputra river system in association with all concerned stakeholders. With a dedicated survey boat, manpower, equipment and community support, GDRCD is one of the best recognized Dolphin conservation programmes in India. Besides working on the Ganges River Dolphin of Brahmaputra river system, GDRCD also worked on other dolphin species, mainly the Irrawaddy Dolphin and Indo-Pacific Humpback Dolphins of the Indian Sundarbans of West Bengal.

MAJOR ACHIEVEMENTS

GDRCD-Aaranyak collaborated with the Wildlife Institute of India (Dehradun) for the project 'Development of Conservation Action Plan for River Dolphins' for 2016-21. Under this project and within the reported period, GDRCD received following achievements:

- Recorded increasing population trend of Gangetic dolphins in Brahmaputra river system in 2018 in comparison to previous survey conducted in 2012.
- Understanding of habitat utilisation and activity pattern of Gangetic dolphins in protected versus non-protected river stretches of the Brahmaputra.

- Understanding the abundance and distribution of associated aquatic species in dolphin habitat.
- Conducted community-based dolphin conservation activities in 40 priority sites across Assam.
- Development of a Mobile App for enhancing Citizen Science in dolphin conservation.

STRATEGIC ACTIONS

In collaboration with Wildlife Institute of India, GDRCD conducted following activities:

- Data analysis of Feb-Mar, 2018 survey resulted into the occurrence of total 962 dolphins in Brahmaputra river system including 877 dolphins in Brahmaputra River, 37



Cpod deployment in dolphin habitat

Photo - Abdul Wakid



Photo - Hiyashri Sarma

School programme for dolphin conservation

- dolphins in Kulsu River and 48 dolphins in Subansiri River.
- Comparative ecological studies were conducted in between undisturbed (Brahmaputra river stretch in 6th addition of Kaziranga National Park) and disturbed dolphin habitat (Brahmaputra river stretch in between Goalpara to Dhubri) to understand the abundance, distribution, habitat use pattern of dolphins in between these two river stretches.
- Associated river fauna (fish and plankton) studies were conducted in the same river stretches to understand their occurrence in between the disturbed and undisturbed sites.

- Eighteen fishermen awareness campaigns were conducted as an attempt to develop sustainable development of fishery resources in and around dolphin habitat in Assam in collaboration with the 13 District Fishery Development Offices of State Fishery Department of Government of Assam. Total 717 fishermen and 19 fishery officials participated in this awareness campaign.
- Total 20 community awareness programmes on dolphin conservation were conducted in the river-side villages, where 2418 people participated of which 40% were students.

SUMMARY OF IMPACT

- Increasing of population abundance from 635 dolphins (in 2012) to 877 dolphins (in 2018) is a significant impact of long term conservation efforts of GDRCD, which started in 2005.
- Conducting detail ecological studies in selected river stretches of Brahmaputra in collaboration with Wildlife Institute of India with modern scientific equipment and trained researchers is resulting in increasing the understanding of habitat ecology of Brahmaputra dolphins.
- Completing total 38 education programmes among the river



Photo - Manoj Das

Fishery awareness programme

side communities including the fishermen and students led to significant increase in awareness among these targeted communities.

ROAD AHEAD

- Continue detail ecological studies on dolphins of Brahmaputra.
- Continue community-based dolphin and river ecosystem conservation works.

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**Geo-Spatial Technology &
Application Division (GTAD)**

INTRODUCTION

Geo-Spatial Technology and Application Division (GTAD) was inducted as a separate division of Aaranyak in 2004. The division uses Landsat satellite imageries, Sentinel data, Indian Remote Sensing data as well as field survey datasets to generate spatial and non-spatial database and analysis in land use and land cover change, assessment of forest and urban landscape, human wildlife conflict and corridor studies, river catchment studies includes river bank migration, sand casting areas, flood vulnerability mapping, participatory GIS, eco-sensitive zone of protected areas mapping etc. The division provides technical assistance and training to protected area managers and frontline staff on GPS-based mapping and GPS handling for patrolling and animal census besides supporting preparation of maps of protected areas. The division regularly organises short training courses for students, researchers, NGO workers, professionals from various disciplines and in-service government officials.

MAJOR ACHIEVEMENTS

- Imparted hands-on GPS training and held outreach activities to approximately 600 individuals from forest departments of Assam and Nagaland, students from various colleges and universities and researchers of other organisations.
- Prepared a detailed layout plan map and tourist route

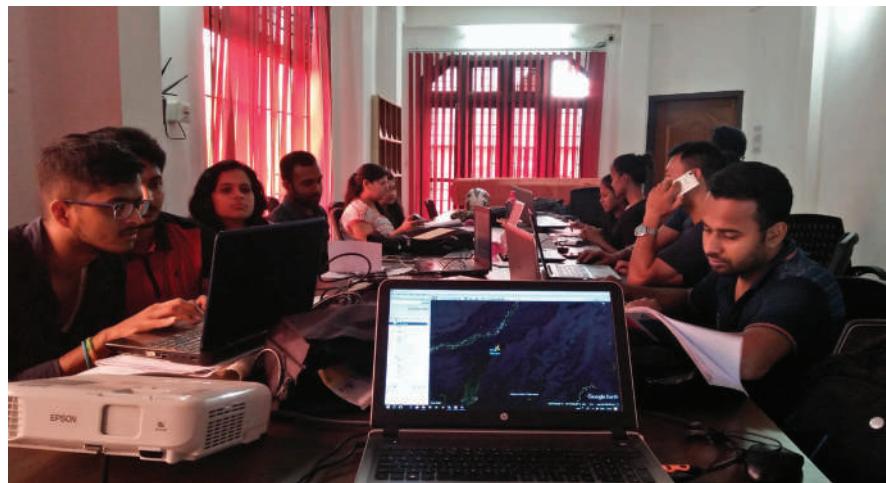


Photo - Aaranyak

4th Semester students of the department of Environment Biology & Wildlife Sciences at Cotton University doing practical in Conference hall, Research office, Aaranyak

map of Assam State Zoo cum Botanical Garden and handed over the same to the office of Divisional Forest Officer, Assam State Zoo.

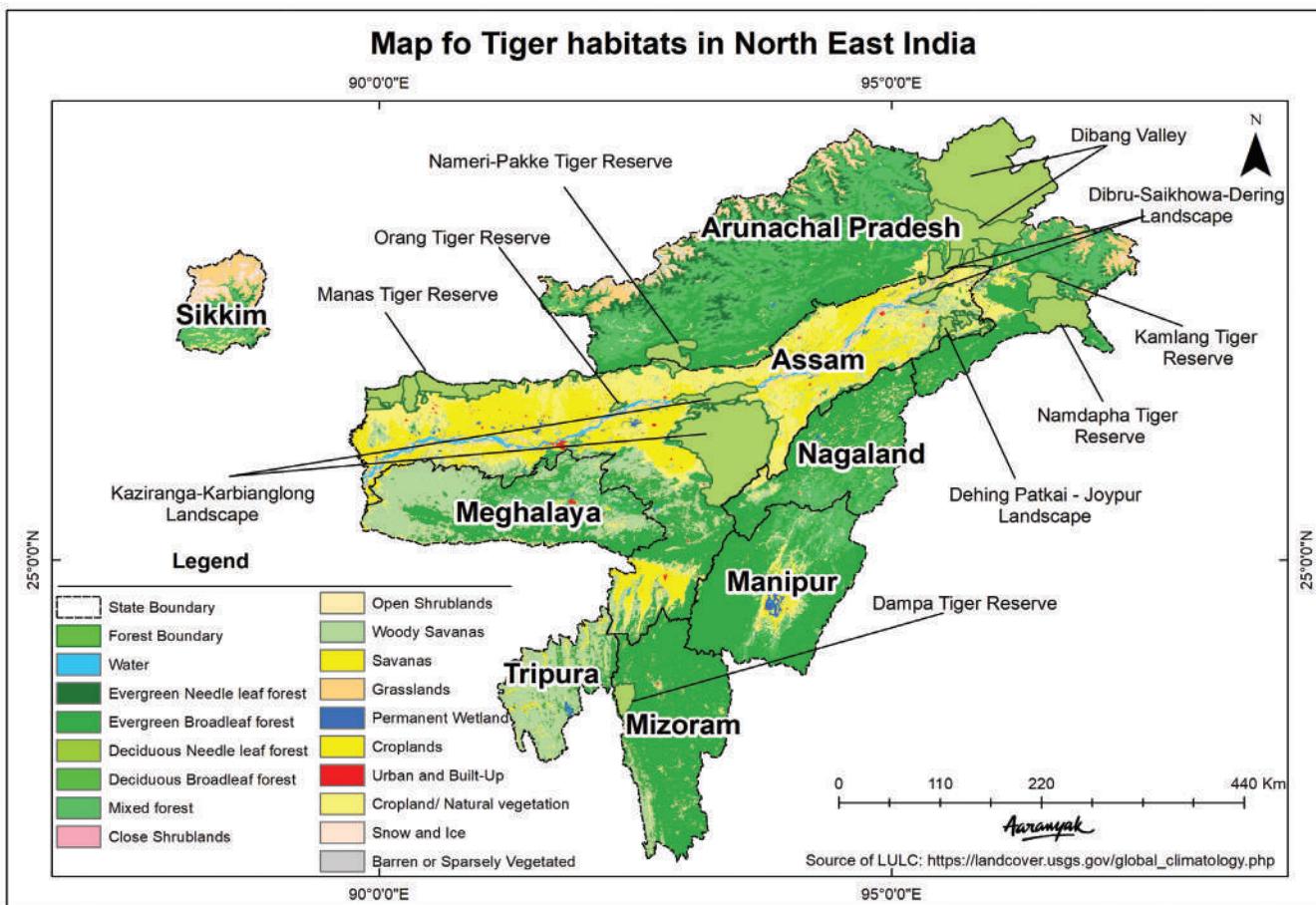
- Supported Assam Forest Department by preparing land use/ land cover map of Amchang Wildlife Sanctuary in 2019, provided elephant census map of Manas National Park to office of the Field Director of Manas National Park, Primate Estimation maps of Hollongapar Gibbon WLS and shared with the park authority.

Service officers and trainee Forest Range officers during 2017-2019 course at Central Academy of State Forest Service, Burnihat, Assam.

- The staff of the GTAD worked as guest faculty for 4th Semester students in the Department of Environment Biology & Wildlife Sciences at Cotton University, Guwahati and took RS/GIS/GPS classes on theory and practical.
- The staff of GTAD Aaranyak worked as guest faculty for 2nd Semester students in the Department of Ecology, Environment and Sustainable Development at Tata Institute of Social Sciences, Guwahati campus and took RS/GIS/GPS classes on theory and practical.
- Land use and land cover analysis of North Bengal landscape using high resolution open source satellite imageries with a resolution of 10m for 2019 for Wildlife Genetics Division.

STRATEGIC ACTIONS

- Organised two short training courses on Remote Sensing (RS), GIS and GPS. The first one was held in July, 2018 and the second in January, 2019. Altogether 23 participants from all over Northeast India benefitted by attending these courses.
- Imparted RS/GIS/GPS classes to trainee State Forest



Map of Tiger habitats in North East India

- Carried out intensive fieldwork for ground verification, GPS-based data collection and preparation of maps of the North Bengal landscape for the Wildlife Genetics Division and Elephant Conservation Division of Aaranyak.
- Generated RS, GIS and GPS based thematic maps for different divisions and projects of Aaranyak. These maps include maps of Manas National Park showing grassland habitat, base map of Kohora River Basin, broad forest type map of Karbi Anglong, circuitscape modelling for tiger connectivity corridor in Eastern Assam, threat assessment of Dibru-



GIS day celebration in Don Bosco University, Azara

Photo - Aaranyak

Saikhowa National Park (DSNP), Landuse and landcover change analysis of DSNP-Dering WLS landscape, base map of Amchang WLS, conflict and occurrence of elephant in Brahmaputra riverine landscape in

Upper Assam, conflict and occurrence of elephant, gaur, tiger and leopard in North Bengal landscape and Deepar Beel larger catchment area of Assam and Meghalaya change analysis.

SUMMARY OF IMPACT

The Central Zoo Authority has approved the detail layout map of Assam Zoo cum botanical garden prepared by GTAD, Aaranyak for Assam State Zoo authority, Government of Assam. Moreover, all the enclosures will be constructed in locations as depicted in the map.

- Aaranyak conducted classes on RS/GIS/GPS for trainee State Forest Service officers and trainee Forest Range officers during 2017-2019 course. The trainee officers were from different states of India like West Bengal, Chhattisgarh and Madhya Pradesh.
- Maps provided to various divisions and projects of Aaranyak are being used for a number of purposes such as research, conservation, resource planning and decision making related to project management.

ROAD AHEAD

- To publish a pocket-sized GPS manual in Assamese and English language with guidelines on basic handling for different models of GPS in English language, targeting mainly forest frontline staff, college students and researchers.
- To conduct customised workshops and training on open source GIS especially QGIS and Google Earth Pro software for the students of educational institutions, civil



Photo - Aaranyak

Trainee Forest Range Officers of Central Academy of State Forest Service doing GIS practical in their lab



Photo - Aaranyak

Trainee Forest Range Officers at Central Academy of State Forest Service, Burnihat

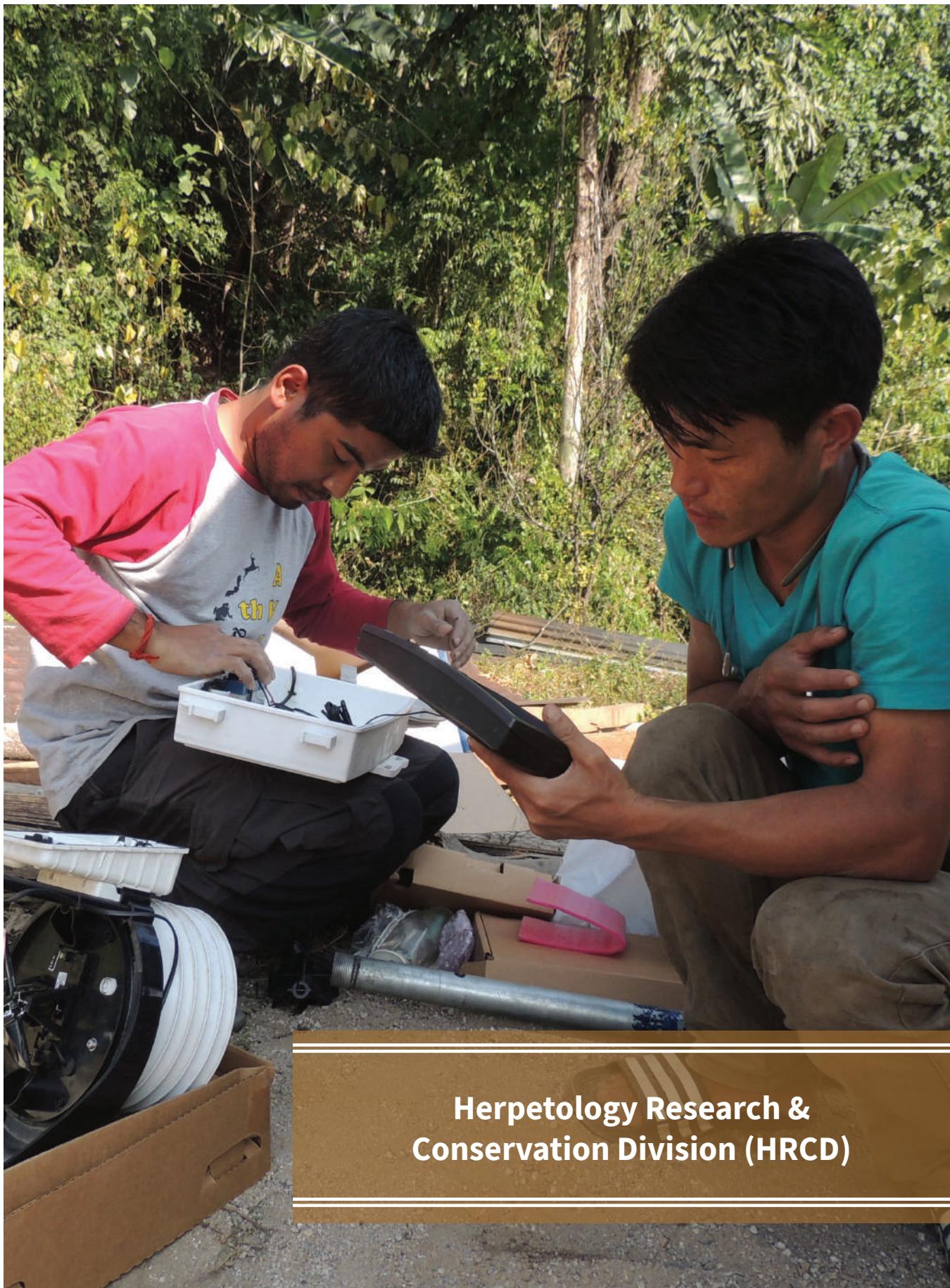
society workers and officials of forest department at district level in the state of Assam.

- To apply remote sensing and GIS models in various fields of geographical and wildlife research such as animal connectivity, flood vulnerability and risk, species distribution, site suitability, habitat suitability modelling.

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Herpetology Research & Conservation Division (HRCD)

INTRODUCTION

The Division was established in 1997, and has been working to strengthen the herpetofauna research and conservation work in the NE India region. It has established strong research and conservation network among the stakeholders within India and abroad. Since the beginning, it has been contributing towards inventory, taxonomy, ecology and conservation research, ranging from Brahmaputra floodplains to the alpine forests of the Himalayas and northeast Indian hills.

The prime objectives of the division are to assess herpetological diversity and monitor them in this biodiversity hotspot, assess ecosystem health, examine the vulnerability of herpetofauna species due to the anthropogenic influence on habitat and maintain a strong research and conservation network across countries. The division strives to understand and resolve taxonomic problems associated with herpetofauna, using integrated taxonomic approaches and create awareness about the importance of herpetofauna in the environment and the need for their conservation.

MAJOR ACHIEVEMENTS

- Seasonal monitoring of occurrence of amphibian species across elevational zones in Dibang River Basin, a Himalayan river basin. This study was the first of its kind using amphibians as a model.
- It also focusses on establishing a baseline for



Photo - Aaranyak

Field activities during weather monitoring and amphibian in the Dibang River Basin, Arunachal Pradesh.

long term weather change impacts in the Himalayas.

- Installed seven weather stations at different elevational zones across Dibang River Basin in Arunachal Pradesh and their continuous monitoring.
- Published an annotated checklist of the amphibians of Dibang River Basin, Arunachal Pradesh with scientific information and photographic evidence.
- Conducted two sessions of field data collection during May 2018 to February 2019 across the Dibang River Basin.
- Observed oscillation in the monthly average temperature (1–1.5°C) through weather station installed across the Dibang River Basin.



Photo - Aaranyak

Weather station (Vantage Pro with universal shelter) installed at Anini, 1600m als.



Photo - Aaranyak

Field activities during weather monitoring and amphibian in the Dibang River Basin, Arunachal Pradesh.

STRATEGIC ACTIONS

- Identification of 735 distribution locations of 43 species to create predictive distribution model of each species across the Dibang River Basin.
- Derived predicted distribution model of selected stream-dwelling amphibians across the elevational zones in the Dibang River Basin.
- Continued to contribute to Amphibian taxonomy and understanding their phylogeography in Northeast Hills-Eastern Himalayas-Indo-China region.

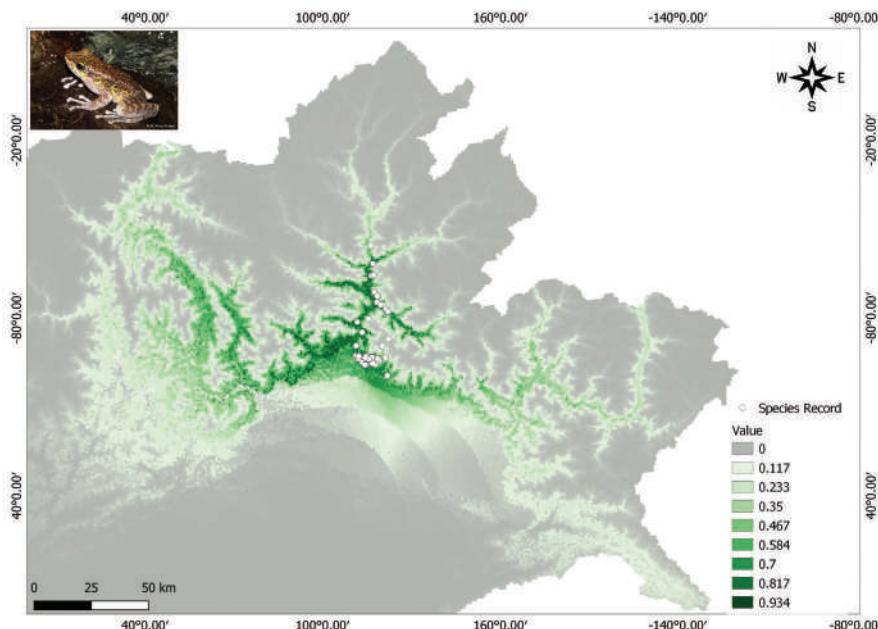


Photo - Aaranyak

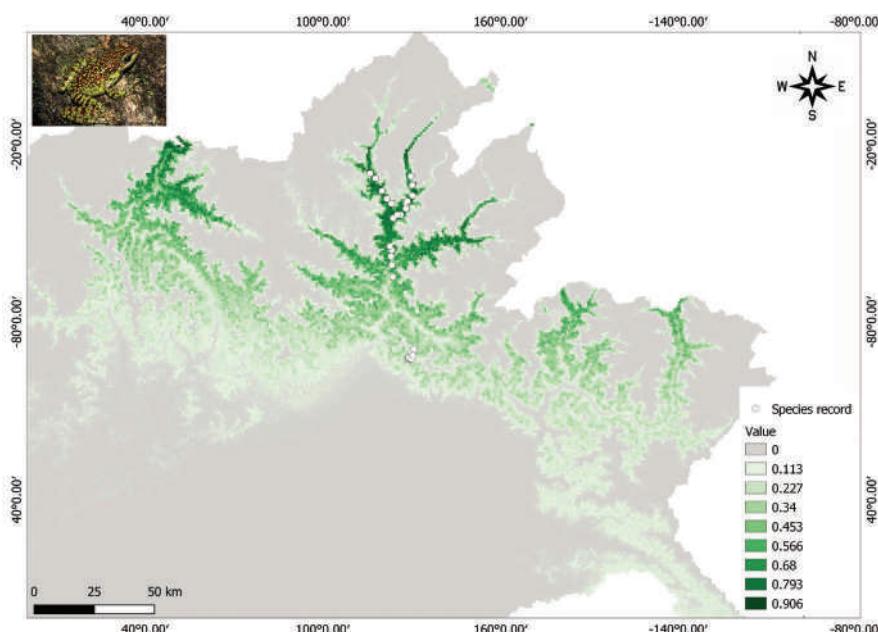
Field activities during weather monitoring and amphibian in the Dibang River Basin, Arunachal Pradesh.

SUMMARY OF IMPACT

- Contributed to the IUCN Red List assessment of tortoises and freshwater turtles (2019) based on information gathered through regional study carried by the division during 2006-2008.
- Published information on amphibian distribution from our study will help in amphibian assessment in India and also across the Indo-Chinese Himalayan region.



Predicted distribution of *Amolops marmoratus* from the study area (white filled circles represent species occurrence during 2017-2019).



Predicted distribution of *Amolops viridimaculatus* from the study area (white filled circles represent species occurrence during 2017-2019).

ROAD AHEAD

- Continue gathering data on the distribution of amphibian species from the Dibang River Basin and other areas of northeast India.
- Investigate the role of weather on the distribution pattern of amphibian species in the Himalayan River Basin.
- Continue addressing taxonomic problems of amphibians and reptiles in the region using an integrated taxonomic approach.



Photo - Aaranyak

Rhacophorus suffry
(Least Concern LC) a rare report after
its original description from Assam
(Bordoloi *et al.*, 2007)

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Legal & Advocacy Division (LAD)



Photo - Bibhab Kumar Talukdar



Photo - LAD, Aaranyak

INTRODUCTION

Aaranyak's concern over rising trend of wildlife crimes and thriving illegal trade in wildlife parts in the Northeast India led to setting up of the LAD. This division is focused on facilitating efficient enforcement of provisions of Wildlife (Protection) Act, 1972 so as to increase conviction rate and ensure handing out of stringent punishment. Under the aegis of this division, legal workshops for enforcement agencies and judicial officials to increase conviction rate for wildlife offences are conducted.

The LAD engages itself in advocacy with various target groups including government agencies to facilitate policy reform to strengthen conservation and protection of wildlife and its habitat.

MAJOR ACHIEVEMENTS

- A legal workshop held for police officials in Biswanath District.
- Orientation for 70 judicial officer recruits of Northeast India in Pabitora WLS.
- A legal seminar was organised on Wildlife Crime and the Laws with Gauhati High Court Bar Association in Gauhati High Court for judicial and law enforcement officials.
- Distributed raincoats, shoes and torchlights to the members of 42 Village Defence Parties (VDPs) in Biswanath District.
- One K9 unit and two motor cycles were gifted to Golaghat Police to augment vigil against wildlife crime.



Photo - LAD, Aaranyak

Acting Chief Justice of Gauhati High Court Mr. A. K. Goswami inaugurates the Seminar at Gauhati High Court

- 70 torchlights were provided to members of 23 VDPs from Koliabor Revenue Circle.

AWARDS/RECOGNITIONS

- Mr. Anil Kumar Das and Mr. Goura Baidya of K9 Sniffer Dog unit received a citation from The David Shepherd Wildlife Foundation 'Nominated Conservation Champion' for 2018 for their outstanding contribution in shaping Aaranyak's K9 sniffer dog units.

STRATEGIC ACTIONS

- K-9 sniffer Dog squad is being used to support anti-poaching operations in Kaziranga National Park and Pabitora Wildlife Sanctuary during 2018-19. The special abilities of the dog squad have been established while tracking and apprehending criminals in and around Kaziranga National Parks and Pabitora Wildlife Sanctuary. The squad of dogs has been trained to track and detect wildlife parts such as rhino horns, tiger and leopard skin and bones, bear bile, ivory and others including weapons.
- Legal workshop with district police officers and forest officials of Guwahati Wildlife Division have been conducted which has further enhanced the detection of wildlife crimes in those districts.
- Aaranyak could set up efficient professional ties with the police officials of Assam to share key information on



K9 Dog unit receives a new 4WD Maruti Gypsy from NABU-Germany

Photo - Bibhab Kumar Talukdar

wildlife crime and also in identification of any seized wildlife parts from the culprits by police officials. Our legal experts often provided legal tips to enforcement officials whenever asked for, to frame the wildlife cases to ensure conviction.

- Periodic interactions with VDPs in association with Police officials in parts of Assam where this division provided field gears. These have been instrumental in improving networking and vigil.

SUMMARY OF IMPACT

- The legal workshops organised for forest, police and judicial officers in Assam on wildlife crimes and provisions under Wildlife (Protection) Act, 1972 have been instrumental in increasing their interest and



Seminar on 'Wildlife Crime and The Laws' organised by the Gauhati High Court Bar Association and Aaranyak

Photo - LAD, Aaranyak

- speeding up framing of wildlife crime cases and speedy disposal of such cases of late. Further, a network of police officials has been set up.
- The demand of our K9 sniffer dog services has increased among forest and police officials as our dogs and handlers are trained by

trainers of international repute.

- Our advocacy with Golaghat, Morigaon, Darrang, Biswanath District Police has triggered active partnership in supporting rhino protection.



ROAD AHEAD

- Plan for Organising legal workshops for police officials, paramilitary forces, law students, judicial officers in different hitherto uncovered districts of Assam.
- K9 sniffer Dog unit shall be expanded to reach out to more wildlife protection areas prone to hunting.
- The division shall make efforts to build a next-generation of lawyers to enhance conviction on wildlife crime.

Photo - LAD, Aaranyak

SG and CEO of Aaranyak, Dr. Bibhab Kumar Talukdar hands over two new bikes to Additional SP of Golaghat District at a function held at Kohora Police Guest House.



Photo - Manas Kr. Bhattachariya

District level police workshop held at Biswanath Chariali to sensitise police officials of the Biswanath district on checking wildlife crime

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Media Production & Communications Division (MPCD)



Photo - Munmita Boruah

INTRODUCTION

To undertake multimedia tool-based documentation, production and publication on pertinent issues of biodiversity and the environment in Northeast India, Aaranyak has launched a new Division named Media Production and Communication Division (MPCD), starting from January 2018 onwards. MPCD works in tandem with the other Divisions of Aaranyak as well as other Government and Non-government organizations for effective use of multimedia tools for mass communication, to promote biodiversity conservation and environment protection in the region. The major areas of functioning of MPCD research based media production and publications on pertinent issues of biodiversity conservation and environment protection, public relations and communications activities of Aaranyak, manpower and in-house facility development for media productions and establish relevant collaborations with organizations and individuals and work jointly towards the use of multimedia tools for mass communication.

MAJOR ACHIEVEMENTS

- Initiation of a programme for promotion of environmental journalism through training, capacity building and platform development in Assam.
- Wildlife documentary “Legends of Hollongapar” produced by Aaranyak and Assam State Biodiversity Board was screened in International



Photo - MPCD, Aaranyak

The MPCD team during field visit at Amchang Wildlife Sanctuary

Nature Film Festival Gödöllő, Hungary and South Asian Short Film Festival, Kolkata. The same is accepted for screening in Wildlife Conservation Film Festival, New York, NY, USA in October 2019.

- Production of short educational films such as - “Nature as Educator”, “Beat Plastic Pollution” etc.
- Initiation of publication of a new quarterly newsletter ‘Naturole’ from January 2019 onwards.
- Development of a new website for Aaranyak.

STRATEGIC ACTIONS

- Production of wildlife documentary on Hollongapar Gibbon Wildlife Sanctuary, titled “Legends of Hollongapar” jointly with Assam State Biodiversity Board.
- Development of a coffee table book titled “Legends of Hollongapar” with support from Assam State Biodiversity Board.
- Development and approval of a project on capacity building and platform development for promoting environmental journalism in Assam with support from Internews’ Earth Journalism Network.
- Pre-production work and script development of two major documentaries to be produced by Aaranyak.
- Video documentation work related to documentary production at several sites of Northeast India including



Photo - Munmita Boruah

Udayan Borthakur delivered his talk before the screening of documentary film “Legends of Hollongapar” at Science Festival, Tezpur University

Assam, Arunachal Pradesh and Nagaland.

- Organizing an advanced wildlife photography workshop in Pobitora Wildlife Sanctuary in January 2019.
- Public relation and communication activities of Aaranyak, such as website development and maintenance of official website, maintenance of Aaranyak social media through various platforms, press communications on Aaranyak activities, publication of periodicals such as Aaranyak annual report 2017-18, “Biolink” – biannual newsletter, monthly e-newsletter and quarterly newsletter “Naturole” and Aaranyak wall calendar.
- Photography and video documentation of several



Photo - MPCD, Aaranyak

The MPCD team during documentation of TSRP

organizational events and project activities of other divisions of Aaranyak.

- Development and maintenance of Aaranyak media achieve.

SUMMARY OF IMPACT

The biodiversity significance and conservation value of smaller protected areas such as Hollongapar Gibbon Wildlife



Photo - MPCD, Aaranyak

MPCD team with the participants during 'Wildlife Photography Workshop 2019' at Pobitora Wildlife Sanctuary

Sanctuary has received global attention through wildlife documentary from MPCD.

- In-house media production facility of MPCD is enabling Aaranyak to develop quality audio visual media for education and sensitization on wildlife conservation, environment protection and other associated social issues.

ROAD AHEAD

- To develop an in-house web and layout designing facility in Aaranyak.
- To continue producing films on biodiversity and environmental issues in Northeast India.
- To implement projects for promotion of environmental journalism in the region.



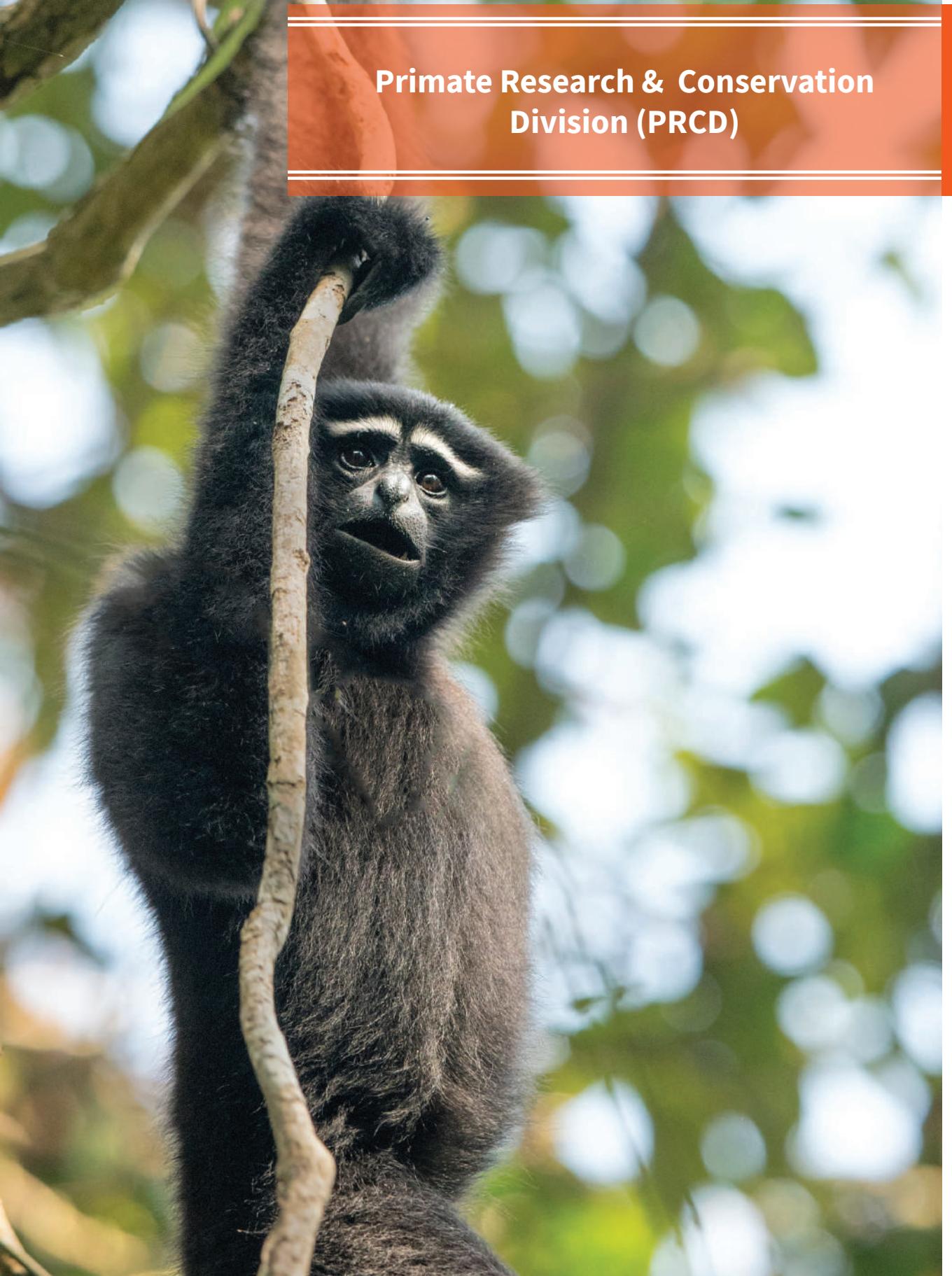
Udayan Borthakur during screening of "Legends of Hollongapar"

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Photo - MPCD, Aaranyak



**Primate Research & Conservation
Division (PRCD)**

INTRODUCTION

Aaranyak in the year 2002 launched Primate Research and Conservation Division (PRCD) aiming at spreading awareness, research, training and conservation of the non-human primates of Northeast India. Non-human primate represents one of the major components of the biodiversity of Northeast India, which has the highest primate diversity in the country with 12 species out of the total 26 species known to the country. PRCD works in collaboration with partner organisations, government agencies, academic institutions and local communities for conservation of primates in Northeast India.

MAJOR ACHIEVEMENTS

- Successfully conducted week-long residential training programme for three batches of Foresters of Assam and Nagaland for conservation of hoolock gibbons at Gibbon



Dr. Dilip Chetry giving the field instruction to the trainee

Conservation Centre in Hollongapar Gibbon Wildlife Sanctuary in Jorhat district of Assam.

- Successfully conducted a week-long field course on Conservation Biology and Global Health at Gibbon Conservation Centre in Hollongapar Gibbon Wildlife Sanctuary.
- Initiation of hoolock gibbon survey in Doomdooma Forest Division, Assam, India.

STRATEGIC ACTIONS

- Conducted 7 days residential training programme for the Foresters of Nagaland and Assam in three-batch training on the conservation of hoolock gibbon at Gibbon Conservation Centre in Hollongapar Gibbon Wildlife Sanctuary, Assam. The primary goal of hoolock gibbon conservation training was to ensure long-term conservation of the species
- Organised two awareness programme on occasion of International Gibbon Day and drawing competition and slides show-cum lecture on gibbon conservation to motivate the student on conservation at the fringe school of Hollongapar Gibbon Wildlife Sanctuary and Dehing-Patkia Wildlife Sanctuary, Assam, India.
- World Environment Day was organised in the fringe school of Hollongapar Gibbon Wildlife Sanctuary along with the participants of Hoolock gibbon Conservation training programme.
- One-day hands on GPS training for the Forest staff of Doomdooma Forest Division
- Surveyed Saikhowa and Saidya Forest Ranges under Doodooma Forest Division.

Photo - Prabin Phuyan



The team of field course

SUMMARY OF IMPACT

- Fifty-seven Foresters from Nagaland and Assam, were trained on hoolock gibbon conservation at Gibbon Conservation Centre, Hollongapar Gibbon Wildlife Sanctuary, Assam, India.
- Seventeen participated and trained in the field training on Conservation Biology and Global Health at Gibbon Conservation Centre, Hollongapar Gibbon Wildlife Sanctuary, Assam, India.
- Two hundred school students were motivated on hoolock gibbon Conservation.
- Identification of threats spectrum of hoolock gibbon in Saikhowa and Saidya Forest Range under Doodooma Forest Division and found local extinction of the species from some reserve forests.



Trainee with Mr. D. P. Bhankwal, IFS, PCCF (Wildlife) & DFO, Jorhat; Ms. D. Suman and other Resource Persons after Valedictory function



Trainee with DFO and other Resource Persons after Valedictory function

Photo - Sitaram Chetry

Photo - Ranjit Saikia

Photo - Prabin Bhuyan



Photo - Sitaram Chetry

Outreach Programme

ROAD AHEAD

- To expand hoolock gibbon conservation training programme to other states of Northeast India.
- To explore trans-boundary areas of Northeast India to know the different species of primates.
- Reassessment on distribution and current status of hoolock gibbon along its distribution range.
- Genetic and parasitological studies on primates of Northeast India in collaboration with Wildlife Genetic Division of Aaranyak
- To conduct education and awareness programme on non-human primates conservation.
- Publication of book on different primates of Northeast India.



Mr. Arup Kumar Das giving GPS demonstration

Photo - Mridupaban Phukan

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Photo - Bibhab Kumar Talukdar

INTRODUCTION

The activities of this division have been in operation in Aaranyak since 1994 with the objective to contribute towards securing the future of Greater One Horned Rhino in Assam and other rhino areas in India. Our team has excelled in working in tandem with Forest Department and other stakeholders for the sake of protection on Greater one-horned rhino and their habitat.

Our team has successfully set up harmony with the key stakeholders in conservation efforts such as Assam Police, fringe villagers and Village Defence Parties from areas in and around the rhino bearing areas to garner support for rhino conservation.

MAJOR ACHIEVEMENTS

- Gifted one new Maruti 4WD Gypsy, two Mahindra 4WD Thar vehicle and one wooden machine run motor boat to Kaziranga National Park.
- Provided one wooden machine run boat, one motorbike, 20 wireless communication handsets and two base stations, field shoes to about 155 frontline forest staffs in Pabitora WLS to strengthen rhino conservation.
- Provided one new Maruti 4WD Gypsy and one Speed Boat to Orang NP
- Conducted over 40 Rhino Goes to School around Kaziranga NP, Orang NP,

Pabitora WLS and Guwahati city.

- Organised a Summer Camp for students around Kaziranga NP to increase their interest on rhinos and other wildlife.

AWARDS/RECOGNITIONS

- IUCN/SSC has designated Head of RRCD, Dr. Bibhab Kumar Talukdar as Co-Chair of Expert Advisory Board for Sumatran Rhino Husbandry in Indonesia for Sumatran Rhino Rescue Project lead by Ministry of Environment and Forestry, Republic of Indonesia.



New 4WD Maruti Gypsy gifted to Kaziranga National Park by Aaranyak and International Rhino Foundation (IRF). Deputy Director of IRF Mrs. CeCe Sieffert handed over the vehicle to DFO, Eastern Assam Wildlife Division



Photo - RRCD, Aaranyak

A summer camp was organised for school children at Bonkowal High School during July 20-26, 2018 by Aaranyak with support of the DSWF and in collaboration with EDC, Bonkowal.

STRATEGIC ACTIONS

With the objective to complement the efforts of the Forest Department to augment protection measures to facilitate conservation of one-horned rhinos, this division have remained awake to the urgent needs of rhino conservation in rhino bearing areas of Assam.

- We have provided vehicles, motorcycles, speed boats and wooden machine boats to rhino bearing areas to gear up rhino conservation measures in Kaziranga and Orang National Park, Pabitora Wildlife Sanctuary.
- Rhino Goes to School has been a key initiative from the RRCD to create a future pool of conservation workers in the vicinity of wildlife protection areas especially Kaziranga National Park, Orang NP and Pabitora WLS.



Photo - Bibhab Kumar Talukdar

A speed boat was provided to Orang National Park to enhance vigil in riverine areas of southern part of the NP.

- One-week summer camp organized around Kaziranga is aimed at building better information and knowledge base among selected students around Kaziranga NP who can act as future conservation worker to promote rhino conservation as support from local communities are essential to secure rhinos in the wild.
- A preliminary study on spread of invasive plant species in rhino bearing areas in Assam during 2018-19 has been initiated using geo-spatial tools followed by field visits with the ultimate aim of finding effective biological and non-chemical means of controlling invasive species in the rhino bearing areas.



Two new 4WD Mahindra Thar were being handed over to Director Kaziranga National Park

Photo - RRCD, Aaranyak

SUMMARY OF IMPACT

- The popularity of Rhino Goes to School could be gauged from the request we received often from various school authorities for holding the programme.
- Vehicles, motorboats, motorbikes, wireless walkie talkie sets, field shoes etc given to rhino bearing areas in Assam increases the morale of frontline forest staffs to exercise their tireless efforts to secure rhinos in the wild. Our tenacity to provide such equipment as soon as we can make better good will with user agencies to strengthen working partnership.
- Our team often interacts with Village Defense Parties around rhino bearing areas to garner their support.



Photo - RRCD, Aaranyak

Participants in a Rhino Goes to School Programme.

ROAD AHEAD

- Initiate applied research to control invasive plant species in rhino bearing areas
- Continue efforts through Rhino Goes to School and Friends of Rhinos initiatives to reach out to fringe communities to garner their support for rhino conservation.
- Explore further possibilities to support rhino conservation efforts in Assam and West Bengal.

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Tiger Research & Conservation Division (TRCD)



Photo - TRCD, Aaranyak

26°42'2", 91°7'44", 5.0m

AARANYAK

INTRODUCTION

The Tiger Research and Conservation Division (TRCD) of Aaranyak was established in 2005 with multiple objectives of pioneering scientific research and conservation of tigers, co-predators, prey animals, habitats as well as reducing fringe area people's dependence on protected areas (Pas).

The division primarily focuses on gathering long-term data on tiger ecology through scientific investigations to support agencies to develop, implement and formulate best management practices. The division has been successfully collaborated with other conservation agencies and stakeholders in NE India to address vital conservation issues related to strengthening law enforcement, assessment of connectivity of PAs and policy intervention and environment education and skill development of forest fringe communities.

MAJOR ACHIEVEMENTS

- Expanded the 'Law Enforcement Support' model initially established in Bhuyapara Range of Manas National Park to Bansbari Range of the National Park. It was started in Bhuyanpara Range in 2016 to enhance patrolling efforts.
- Conservation livelihood efforts combined with law enforcement activities in and around Manas National Park has turned into an effective 'push and pull' model in

reducing and removing dependence of fringe villagers on the park.

- 'Participatory Natural Resource Management Programme' initiated in the Kaziranga-Karbi Anglong landscape has gained momentum and received support from communities, collaborators, partners and donors.
- Successfully conducted population sampling of prey animals of tigers across the Manas Tiger Reserve for the first time. It has led to precise population estimation of prey animals and better understanding on the potential tiger density.
- Established the first photographic evidence of tiger in the First Addition to Manas National Park.
- Sustained annual study has revealed that the estimated tiger population of the Manas National Park has grown from

12 tigers (in 2011) to 52 (in 2019).

- Started a new Eco-Cultural Tourism model called 'Journey for Learning' in collaboration with Conservation and Livelihood Divisions and hosted 38 students of the Indian Institute of Forest Management, Bhopal with communities of Karbi Anglong and Manas. The community involved derived economic benefit out of the initiative by hosting the students in a first-time experience.

STRATEGIC ACTIONS

- Working with Conservation Livelihood Division of Aaranyak, the division has continued to support alternative conservation livelihoods to about 1400 families living on the fringe of Manas National Park in order to reduce their dependence on natural resources of the park.



Dr. M Firoz Ahmed, HoD, TRCD, giving field training to the participants during the Population monitoring training held in Manas National Park.

Photo - TRCD, Aaranyak

- TRCD has been extensively organising various conservation learning activities and programmes to educate different levels of students, community personnel about the importance of nature, wildlife and their habitat in its projects sites.
- Our long-term population monitoring data on tigers helped to predict the viable population of tigers in Manas NP which would help in the management of the wildlife and habitat.
- Enhanced law enforcement through mentoring and other support in Bansbari and Bhuyapara Ranges of Manas NP has improved protection of habitat and wildlife.
- Strategic conservation research in Bornadi-Jomotshangkha area in the Transboundary Manas Conservation Areas (TraMCA) landscape of India and Bhutan would help in strengthening the habitats for tiger and prey animals in the next decade.
- Strategic conservation research in Dibru-Saikhowa covering parts of eastern Assam and Arunachal Pradesh landscapes would help in strengthening the habitat for tiger and prey animals in the next decade.
- Participatory Natural Resource Management approach for conservation of habitat in Kaziranga-Karbi Anglong landscape would ensure ecosystem security and livelihood security for the people of the landscape.



Participants of the population monitoring training with the FD-Manas at the venue.



Patrol Kit distribution to Manas Panthers in presence of Field Director, Deputy Director, Range Officer In-Charge, OSD, ACF and other officials.

SUMMARY OF IMPACT

- Contributed to All India Tiger Monitoring 2018 conducted by the Government of India.
- Catalyzed to enhance transboundary cooperation among forest and wildlife managers across the TraMCA landscape of India and Bhutan, through joint camera trapping
- Strategic conservation planning to improve conservation scenario in the Barnadi-Jomotshangkha landscape in TraMCA and Eastern Assam-Arunachal Pradesh Landscape around Dibru-Saikhowa NP.
- Contributed to global achievement of Manas NP in doubling tiger population well before the target year of 2022.
- Sharing of scientific studies in Manas landscape among stakeholders across the world through scientific articles and presentation in national and international conferences.
- It has now been scientifically established through long-term studies that the ethno-political conflict in the Manas

Photo - TRCD, Aaranyak

Photo - TRCD, Aaranyak

Landscape had adversely affected the abundance and distribution of different animal species.

- Such study in Manas also helped in understanding temporal activity patterns of ungulates between MNP (with human disturbances) and Kaziranga National Park (without human disturbances) that human disturbances impacted the behaviour of animals in general.
- Technical support provided to Manas National Park to establish mSTRIPE Law enforcement monitoring tool.
- Livelihood security provided to hundreds of families across Manas and Kaziranga-Karbi Anglong landscapes has led to ecosystem service enrichment benefiting thousands of men, women and children.

ROAD AHEAD

- A landscape level assessment of species occupancy, habitat, threats and land-use land-cover changes in the Manas Tiger Reserve and strengthen law enforcement.
- Assessment of animal population, threat, habitat and connectivity across the Phibsoo-Kachugaon transboundary forest complex.
- Understanding Kohora River Basin and its ecosystems to strengthen communities' livelihood, conserve biodiversity and improve ecosystem services for sustainability and climate resilience.



FGDs and Community Consultation - NRM planning and village mapping with the villagers of Phumen Ingti village. 10 Apr 2019.

Photo - TRCD, Aaranyak



Summer Camp 2019, Chandrasing Rongpi memorial High School. Children keenly following Prof. Bhim Prasad Sarmah on properties of water - water elasticity.

Photo - TRCD, Aaranyak

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Water, Climate & Hazard Division (WATCH)



Photo - WATCH, Aaranyak

INTRODUCTION

Established in 2001 and having evolved with several names and thematic mandates over the last 18 years, the WATCH Division addresses issues in water resources (local water management practices, water governance, water conflict, river structures, environmental flow, transboundary waters, gender dimensions of water, water quality), climate change (hydrometeorology, impacts, vulnerability, mitigation, adaptation and resilience), water and climate induced disasters (flood, river bank erosion, disaster risk mitigation, flood early warning), wetland ecosystems, water based livelihoods, environmental migration, ecosystem services, natural resources management and sustainable development goals. The geographical area of interest of this Division is the Northeastern Region of India.

MAJOR ACHIEVEMENTS

Dr. Partha J Das delivered the key note speech on 'Wetlands of Assam: Protection, conservation and sustainable management' in the technical seminar on the occasion of "World Habitat Day-2018" organised by the Institution of Engineers-Upper Assam Local Committee at the JDSC College, Bokakhat on October 01, 2018.

- Through WATCH Division's involvement Aaranyak became part of an international project called 'Low -cost Innovative Technology for water quality monitoring and water resources management for Urban and rural water Systems in India' (LOTUS)' (as a collaborator to IIT Guwahati) funded by European Union and Department of Science & Technology, Government of India.



AWARDS/RECOGNITIONS

Through the work of WATCH Division Aaranyak was selected as a member of the 'BRIDGE GBM CSOs Network' in 2018. This is a regional network of more than 30 CSOs from five GBM (Ganga-Brahmaputra-Meghna River Basin) countries created by IUCN under the 'Building River Dialogue and Governance for the CSOs in the GBM River Basin' (BRIDGE GBM).programme.

STRATEGIC ACTIONS

- Completed three knowledge products on 'Natural Disasters, Climate Change and Sustainable Development Goals(SDG) for children' as part of the project 'Developing knowledge products on Sustainable Development Goals with focus on disaster risk reduction and climate change adaptation' supported by the Centre for Sustainable Development Goals, Government of Assam and UNICEF.
- Made a presentation on 'Transboundary water governance in the Brahmaputra River Basin in India and Implications for Bangladesh: Some contemporary issues' in the 'Special Conference on Delta Plan 2100 & Sustainable Development in Bangladesh' held at the Krishibid Institution, Dhaka, Bangladesh on 11-12 January 2019 organised by Bangladesh Poribesh Andolon (BAPA) and Bangladesh Environment Network (BEN).

Dr. Partha Jyoti Das delivering a presentation on '**Importance of conserving ecological and cultural heritage for sustainable management of the Brahmaputra River, India**' October 29, 2018 in the Session-I and Sub-session-II of the '**Great Rivers Forum**' held at Wuhan, China on October 28-30, 2018, organised by the UNESCO and the Wuhan Municipal Government.

- Made a presentation on 'Importance of conserving ecological and cultural heritage for sustainable management of Brahmaputra River, India' in the 'Great Rivers Forum' held at Wuhan, China during October 28-30, 2018 organised by UNESCO and the Wuhan Municipal Government, China.
- Launched the project 'Community resilience to water induced disasters and climate change: A study and documentation of good practices in selected river islands of the Brahmaputra River Basin, Assam' funded by India Water Partnership, New Delhi (Global Water Partnership-South Asia).
- Aaranyak provided support to the Assam Agriculture University, Jorhat in conducting the 'International Conference on Climate Change, Biodiversity and Sustainable Agriculture (ICCBSA-2018)' as a 'Knowledge Partner' in Jorhat during December 13-16, 2018.

SUMMARY OF IMPACT

- We intensively provide water education to the communities and CSOs on water governance in the Brahmaputra River Basin in Assam (BRBA). More than 200 people gained information and knowledge on various aspects of water governance from our programmes. We supported several CSOs in addressing local water governance issues.
- Our work helped in bringing children to the focus of discussions on disaster risk reduction, climate change adaptation and development planning in various forums. Our campaign in favour of child-centric and children-sensitive policies in these sectors were appreciated by many.
- Our analysis and critic of the Draft River Basin Bill, 2018 published through news papers and sent to the Ministry of Water Resources, River Development and Ganga Rejuvenation was used by several organisations in Assam for holding discussions on the issue.



Photo - WATCH, Aaranyak



Photo - WATCH, Aaranyak

Dr. Partha J Das delivering a presentation on '**Transboundary water governance in the Brahmaputra River Basin in India and Implications for Bangladesh: Some contemporary issues**' in the '**Special Conference on Delta Plan 2100 & Sustainable Development in Bangladesh**' held at the Krishibid Institution, Dhaka, Bangladesh on 11-12 January 2019 organized by Bangladesh Poribesh Andolon (BAPA) and Bangladesh Environment Network (BEN).



Photo - WATCH, Aaranyak

Dr. Partha J Das of Aaranyak and K.J. Joy during the '**Workshop on Environmental Justice, Ecological Economics and Water Infrastructure in the Northeast India: Hydropower and Waterways**' held at the Indian Institute of Bank Management, on March 2-4, 2019 co-organised by Aaranyak in collaboration with Forum for Policy Dialogue on Water Conflicts in India; Coventry University, UK; Water Resources Management Group of Wageningen University, Netherlands; Manthan Adhyayan Kendra, Pune; Centre for Public Affairs and Critical Theory (C-PACT) of Shiv Nadar University, UP; IIT Guwahati and Department of Peace and Conflict Studies and Management, Sikkim University, Gangtok.

ROAD AHEAD

- Promote inclusive water governance throughout the Brahmaputra River Basin in Assam.
- Create network of major stakeholders around water issues to champion the cause of good governance, justice, equity, people's right and sustainability in water management.
- Study vulnerability and resilience to disaster and climate risk in selected riverine islands of the Brahmaputra River Basin in Assam.
- Continue work on Urban Water, Climate and Hazard ; Water, Sanitation, Health and Hygiene (WASH) and 'water-energy-climate' nexus.
- Publish final versions of the drafts of all books, monographs and research papers.

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Photo - WGD, Aaranyak

INTRODUCTION

Wildlife Genetics Division (WGD) since its inception in 2008, has been excelling in the field of Conservation Genetics and Wildlife DNA Forensic Research in India and abroad. The Wildlife Genetics Laboratory (WGL), an in-house molecular biology laboratory, situated in Guwahati with state-of-the-art facility, is the thrust area of the functioning of WGD. The division functions with objectives such as building a reference genetic database of the rich biodiversity of North East India, standardising DNA-based techniques for species, gender and individual identification from various types of wildlife samples, and undertaking population genetic research to answer pressing wildlife management questions.



WGD team collecting fecal sample in Senchal Wildlife Sanctuary

AARANYAK

MAJOR ACHIEVEMENTS

Assistance provided to Assam forest department in Wildlife DNA Forensic cases involving species identification and forensic matching of evidence with crime scene through DNA fingerprinting.

- Training of frontline forest staff in the collection of biological samples for forensic analysis.
- Extensive ecological and genetic monitoring of tiger and leopard in North Bengal landscape.
- Tiger presence in Buxa Tiger Reserve, West Bengal was confirmed through pugmark and faecal DNA analysis.
- In a study conducted and published by National Centre for Biological Sciences with Wildlife Genetics Laboratory

as one of the collaborators, population genomic analysis of wild tigers across India reveals isolated populations that require urgent conservation attention and has identified strongholds of genetic variations in India.

STRATEGIC ACTIONS

- Assam Forest Department was assisted in investigations related to wildlife crime through forensic DNA analysis which include,
 1. Confirmation of parentage of new-born elephant calf.
 2. Confirmation of the crime through matching of seized rhino horn with carcass collected from the crime scene using DNA fingerprinting method.
 3. Confirmation of species identity for morphologically indistinguishable samples such as processed meat, seized by the Forest Department.
- A long-term project on assessment of genetic status of Critically Endangered White-bellied Heron in Bhutan is in progress. The study is being conducted in collaboration with Royal Society for Protection of Nature (RSPN), Bhutan.
- First phase of a study on leopard ecology along with socio-economic survey, was completed in North Bengal, with sign survey in the protected areas as well as a questionnaire survey in the fringe villages and

Photo - Mitrajit Deb



WGD researcher during household survey in fringe villages of Mahananda Wildlife Sanctuary

tea gardens. The phase II of the project is to estimate leopard population size and formulate policy guidelines and management suggestions to effectively deal with the human-leopard conflict situations in North Bengal which is an ongoing project.

- Ecological study to evaluate the population status of Royal Bengal Tiger in the protected areas of North Bengal, was completed.
- Phylogenetic relationship of macaques of sinica group with special reference to white-cheeked macaque found in Arunachal Pradesh is under investigation. Additionally, unique pattern of genetic clustering was observed

among sympatric macaque species suggesting further need of investigating the identity of a species complex in the area. DNA sequence data for field collected samples have been generated and further analysis is in progress.

SUMMARY OF IMPACT

The Wildlife Genetics Lab continues to assist the government agencies in obtaining wildlife forensic evidence through various DNA analysis techniques thereby assisting in wildlife crime mitigation, particularly for species such as tiger, greater one-horned rhino and elephant in Assam.



WGD team during sign survey in Neora Valley National Park

Photo - Pranjal Kr. Das

Photo - Pranjal Kr. Das



Photo - Udayan Borthakur

WGD Resercher during laboratory work

ROAD AHEAD

- The focus area of WGD's activities will be to continue assisting the government agencies of Assam and other states of Eastern India, in wildlife DNA Forensic Analysis-based Crime Investigation Support, along with sensitising of the agencies concerned in this matter.
- Undertaking a comprehensive study on carnivore population monitoring in North Bengal landscape.
- Undertaking long term work on primate phylogeny and genetic population monitoring work in Northeast India.

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Photo - Kalyan Varma



Threatened Species Recovery Programme (TSRP)

Photo - Helena Ebner



INTRODUCTION

The TSRP's flagship programme, Pygmy Hog Conservation Programme (PHCP - www.pygmyhog.org), is a long-term collaborative partnership project of Durrell Wildlife Conservation Trust, IUCN/SSC Wild Pig Specialist Group, Forest Department of Assam and the Ministry of Environment, Forest & Climate Changes - Government of India with EcoSystems-India as a local partner. Aaranyak joined partnership in the beginning of 2018 and formed TSRP for successful delivery of PHCP. The journey continues with key focus on conservation breeding, habitat restoration and reintroduction of critically endangered pygmy hog (*Porcula salvania*) in the sub-Himalayan grassland plains of Assam.



Photo - Bhabin Hazarika

Hog Transferring to Assam State Zoo cum Botanical Garden

AARANYAK

MAJOR ACHIEVEMENTS

- Successfully released six captive-bred pygmy hogs in the Bornadi Wildlife Sanctuary; they were implanted with intra-abdominal radio transmitters and were radio tracked extensively for greater understanding of their ecology.
- Developed a long-term Science, Research and Monitoring Plan for the next 5 years for PHCP, in collaboration with knowledge experts and partners.
- Updated camera trapping protocol for pygmy hog population monitoring and conducted trial in Manas National Park.
- Conducted a planning

workshop for IUCN/SSC Wild Pig Specialist Group for updating the Species Action Plan for Pygmy Hog (2020-2030).

- Successfully completed, major repairs and renovations at the two captive facilities (Pygmy Hog Research and Breeding Centre, Basistha and Pygmy Hog Pre-release Centre, Potasali) of PHCP.

STRATEGIC ACTIONS

- Under the conservation breeding plan 40 (15 males, 25 females) hogs were born at the two centres during the reporting period and 82.5% were reared till at least three months of age. Sixty-four hogs were being maintained in captivity at the end of the reporting period.
- The field team of the programme was restructured in the middle of the year after the incorporation of a field scientist in the PHCP team. At the same time, the programme's Science, Research and Monitoring Plan was developed in a field visit of DWCT's Conservation Knowledge Team.
- PHCP team members actively participated in grassland management initiative launched by Manas Project Tiger Director's office. The project team also assisted the park management in Bornadi and Orang National Park in grassland management intervention to ensure habitat integrity. Three experimental



Renovated Pygmy Hog Research and Breeding Center, Basistha

Photo - MPCD, Aaranyak

sample plots were created at Bornadi for the habitat management experiment.

- An adult pair of hog was transferred to Assam State Zoo cum Botanical Garden, Guwahati, in September for further strengthening the public display of the hogs in the Zoo.
- As part of outreach and training, three batches of frontline forest staff visited the PHCP centres to attend lectures and demonstration as part of their course. Some frontline staff of protected areas where the project is running, were trained in wildlife monitoring and habitat interventions in the field.
- PHCP also trained a veterinary intern from Vienna Veterinary University for 10 weeks and two M.Sc students of wildlife biology from Cotton University of Assam for four weeks.



Monitoring of Pygmy Hog through Radio-telemetry

Photo - MPCD, Aaranyak

SUMMARY OF IMPACT

PHCP is running of the most successful captive breeding programme for threatened species through its comprehensive conservation breeding efforts. The sustainability of the programme is built upon on the knowledge generation, sharing and learning through cross cutting of different ideas with multiple stakeholders. The habitat restoration efforts in sub-Himalayan grassland are

carried out through partnership building and therefore scaling up this most crucial component for conservation action. As part of the Conservation of the species and habitat, PHCP is developing a Community engagement model through consolidating different approaches and build upon a long term community action plan framework.



Photo - MPCD, Aaranyak

On-site student and project staff training

ROAD AHEAD

- Continuing population assessment of wild and reintroduced pygmy hogs through field-sign surveys and camera trapping.
- Exploring new sites for reintroduction.
- Establishing long term experimental plots in Manas NP to understand drivers of habitat dynamics in the sub-Himalayan grassland plains.
- Initiation of long term community intervention for securing the habitat of the species in Manas NP in collaboration with partners.



Photo - Jonmani Kalita

Recording Pygmy Hog field signs after grassland burning

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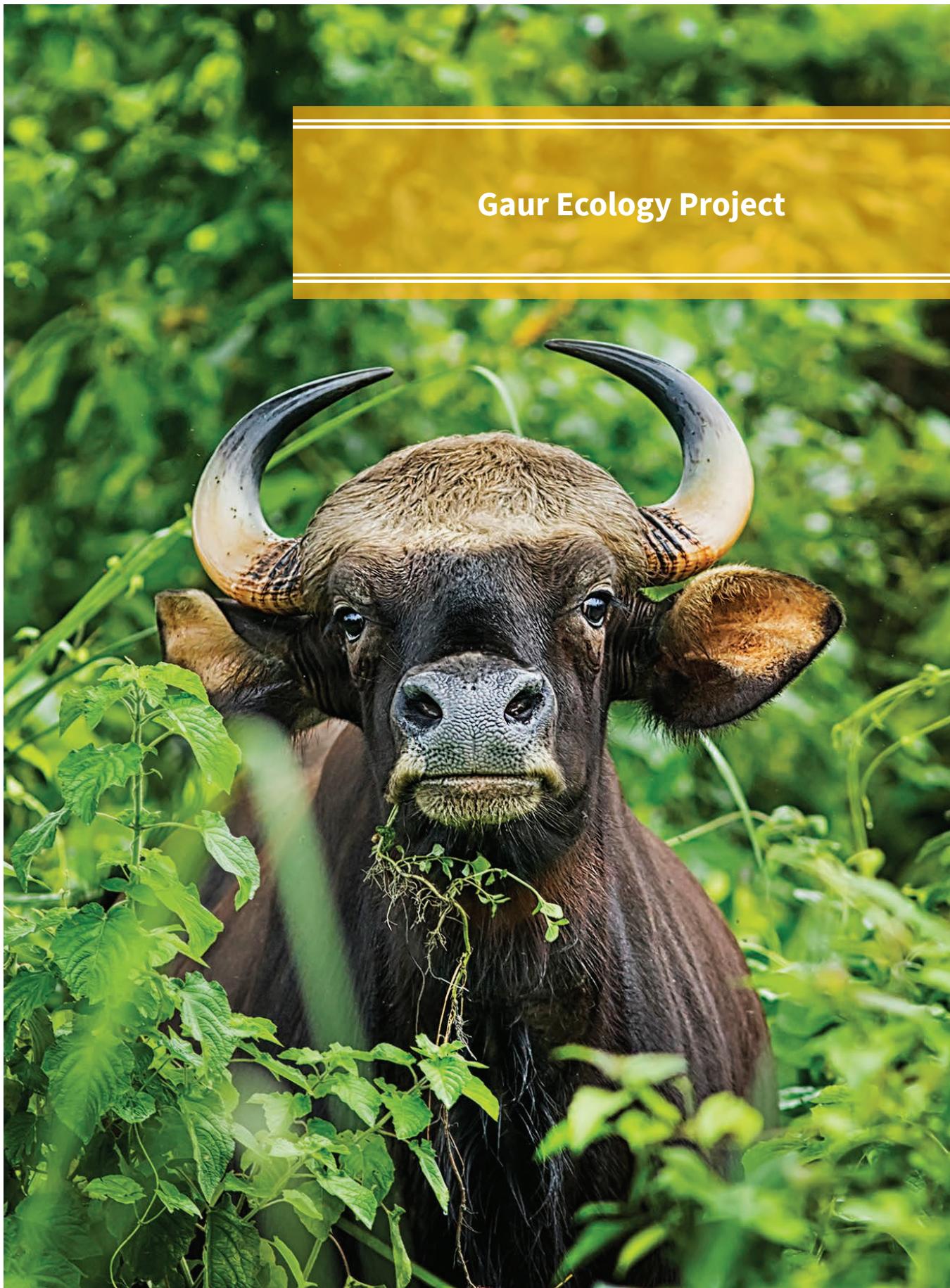


Photo - Aaranyak

INTRODUCTION

The gaur, *Bos gaurus*, is a threatened bovine, which was historically known to occur in South and southeast Asia. However, currently the global distribution has declined and is heavily fragmented throughout its distribution range. In India, the gaur is distributed in four major regions including Northeast Indian and North Bengal. We focused on the gaur population of northern West Bengal, as a part of the JICA-funded project to investigate the distribution pattern, population dynamics, resource utilisation and the human-gaur conflict pattern in the landscape.

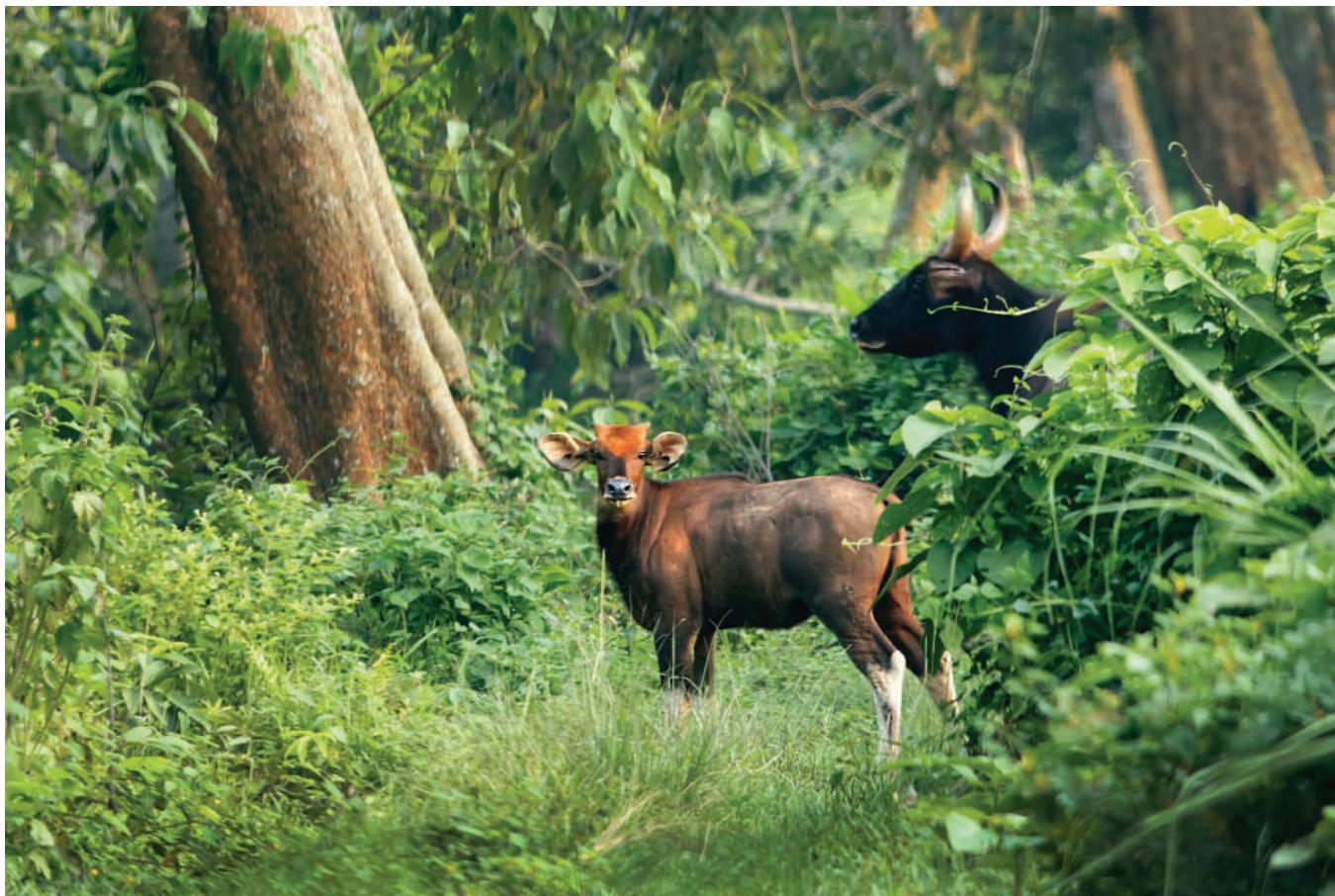
MAJOR ACHIEVEMENTS

An occupancy survey for two consecutive years were conducted in the forested areas of northern West Bengal which included both protected areas (PAs) and non-PAs.

- Based on the presence/absence of the species, attempts to estimate gaur population in the protected areas (as most of the Gaur population are concentrated in the PAs) were conducted.
- Information on other ecological parameters such as habitat utilisation pattern and feeding ecology were also gathered.
- Investigation on the underlying pattern of human-gaur conflict.



Gaur Line transect Jaldapara National Park



Gaur calf at Jaldapara during line transect (Moiradanga beat)

Photo - Aaranyak

STRATEGIC ACTIONS

- Research and conservation work on gaurs are limited from North Bengal including northeast India. Thus, site-specific conservation strategies to safeguard the species are lacking.
- Our work on gaur has generated the much-needed information of the species from this landscape. This three-year project has generated protected area-wise population estimate and the habitat use pattern by gaur in the landscape at a broader scale.
- The human-gaur conflict pattern has also been explored in the landscape to gain an understanding on the interaction. This is a human-dominated landscape, with small areas designated as PAs, where the gaurs mostly occur.
- A detailed field-based study has helped understand the current status of gaur in north Bengal landscape. Based on the study findings, a draft management plan content has been developed and consented by the competent authorities.



Photo - Aaranyak

Indian Gaur opportunistic sighting at Jaldapara NP

SUMMARY OF IMPACT

The project aims to collect information on ecological aspect and patterns of human-gaur conflict in the landscape with the purpose of developing a management action plan for the West Bengal Forest Department. This action-based activity will help in forming strategies to conserve the species in this landscape.

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INTRODUCTION

Hog deer is one of the least focused mammals of South Asia, which underwent a dramatic range-wide decline. Assam is one of the strongholds of hog deer population which experiences different degrees of threats in the protected and non-protected areas. However, information on current status of hog deer and its conservation needs are limited in the region. In this backdrop, hog deer conservation project was started in 2014 and presently studies are undertaken at two spatial scale- regional (across the state of Assam) and local (Manas National Park) to understand the current status and identify the extant threats of hog deer. The information generated is crucial for hog deer conservation in the region.

MAJOR ACHIEVEMENTS

- A landscape-wide occupancy survey was undertaken in Assam and Tripura to understand the distribution status of hog deer.
- Estimation of population abundance and factors affecting the population abundance and habitat-use of hog deer were examined.
- A change detection analysis was undertaken to understand the change in grassland habitat in Manas over a period of 30 years.

STRATEGIC ACTIONS

Hog deer is a conservation dependent species, whose conservation needs often go unnoticed. In Assam, most of the



Researcher conducting a line transect sampling from elephant back in the grassland habitat of Manas National Park.

Photo - Aaranyak



Researcher conducting field study in Manas National Park.

conservation attention is directed towards large charismatic species. In order to understand the current distribution and population status and create awareness on the species small-scale projects were undertaken over the years.

Presently, a landscape-wide survey was undertaken in Assam and Tripura to identify the areas that have hog deer. In Assam, most of the hog deer population are concentrated in the protected areas, the stronghold being the Kaziranga National Park. Beyond the protected areas, small and fragmented populations of hog deer also occur in few pockets. However, hunting is rampant in these areas and the future of hog deer is apparently bleak. In Tripura, hog deer have been wiped out from most of the region.



During an interaction with the frontline staff of Manas.

Photo - Aaranyak

Photo - Aaranyak



Photo - Aaranyak

During observing hog deer from a vantage point in Manas National Park.

SUMMARY OF IMPACT

As information on hog deer is scanty from the region, the finding of our work will serve as baseline information for implementing any conservation strategy for the species. In Manas, the population abundance of hog deer is estimated, which can feed in the Tiger Conservation Plan (TCP) of the Manas Tiger Reserve.

Hotspots of hog deer in Manas are identified and management intervention like restoration of habitat and controlling the invasion by invasive species are undertaken for long term survival of the species.

ROAD AHEAD

- Ensuring the long -term persistence of hog deer in the region through action-based conservation intervention.

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SEMINARS AND CONFERENCES ATTENDED BY AARANYAK STAFF

- **Bibhuti Prasad Lahkar** attended “Smart India Hackathon 2018organized by MHRD, Govt of India, AICTE, RambhuMhalgiPrabodhini, i4C, IIT Kharagpur and IIT Guwahati from 18 to 22 June, 2018 at IIT Guwahati.
- **Bibhuti Prasad Lahkar** attended “The 1st Rural Dialogue - a voice of Transformation “As a panelist on conservation and livelihood” organized by All India Institute of Local Self Government, Innovior and IIT Guwahati from 6 to 7 July, 2018 at IIT Guwahati.
- **Dr. Partha J Das** attended “Expanding Tradable Benefits of Trans-boundary Water: Promoting Navigational Usage of Inland Waterways in Brahmaputra Basin” organized by Cutt's International, Jaipur, Rajasthan on 31 July, 2018 at Lily Hotel, Guwahati.
- **Dr. Partha J Das** attended Changing perspectives on Urban Flood Management “Urban flooding” organized by Action on Climate Today in collaboration with Assam State Disaster Managememnt Authority and the Department of Environment and Forests, Government of Assam on 14 September, 2018 at Hotel Lily, Guwahati.
- **Bibhuti Prasad Lahkar** attended “the Pathways Europe 2018- Conference on Human Dimensions of Wildlife” organized by Colorado State University, Leibniz Institute for Zoo and Wildlife Research & Alfred Toepper, Akademie fur Naturschutz from 16 to 19 September, 2018 at Goslar, Germany.
- **Dr. M Firoz Ahmed** attended “27th National Conference of Soil Conservation Society of India (SCSI), New Delhi” organized by Assam Agricultural University from 5 to 27 October, 2018 at Assam Agricultural University, Jorhat, Assam.
- **Dilip Chetry** attended “6th Asian Primates Symposium & 5th Asian (Indochinese) Primates Conservation Symposium” organized by icimod and eastern himalaya biodiversity research, daliuniversity, chineseprimatological society and yunnamyulong national nature reserve, china from 19 to 23rd October,2018 at Dali Univesity,Dali.
- **Dr. Partha J Das** attended the Great Rivers Forum “Sustainable management of major rivers of the world” organized by UNESCO and the Wuhan Municipal Government from October 28 to 30, 2018 at Wuhan, China and presented on “Importance of conserving ecological and cultural heritage for sustainable management of the Brahmaputra River, India”.
- **Partha J Das & Arup Kumar Das** attended a National

Seminar titled “Harnessing wetlands and sustainable development” organized by Assam Science Technology & Environment Council & Cotton University from 26th to 27th November 2018 at Cotton State University, Guwahati.

- **Dr. M Firoz Ahmed** attended “International Conference on Climate Change, Biodiversity and Sustainable Agriculture” organized by Assam Agricultural University from 13 to 16 December, 2018 at Assam Agricultural University, Jorhat, Assam.
- **Dr. Partha J Das** attended an International Conference on “Climate Change, Biodiversity and Sustainable Agriculture (ICCBSA-2018)” organized by Assam Agriculture University, Jorhat from December 13 to 16, 2018 at Assam Agriculture University, Jorhat and presented on “Adapting to climate change: Practices and policies in Assam”.
- **Dr. Partha J Das** attended “State Consultation on Initiative to Develop Climate Ready Cities in Assam” organized by PurbaBharati Trust, Jorhat and the Gorakhpur Environmental Action Group on December 18, 2018 at Indian Institute of Bank Management, Khanapara, Guwahati.
- **Dr. Partha J Das** attended “Special Conference on Delta Plan 2100 & Sustainable Development in Bangladesh” organized by Bangladesh Poribesh Andolon (BAPA) Bangladesh Environment Network (BEN) from 11 to 12 January 2019 at Krishibid Institution, Dhaka, Bangladesh and presented on “Transboundary water governance in the Brahmaputra River Basin in India and Implications for Bangladesh: Some contemporary issues”.
- **Madhumita Borthakur** and **Kongseng Konwar** attended the WINN conference Organized by Aaranyak from 29th to 31st January 2019 at Hotel Radission Blue, Guwahati.
- **Dr. M Firoz Ahmed, Dipankar Lahkar** and **Prosenjit Sheel** attended “Tigers Forever Meeting” organized by Panthera and WCT from 3 to 7 December, 2019 at Pench Jungle Home Resort, Madhya Pradesh, India.
- **Dr. Purnima Devi Barman** attended the Women in Nature Network organized by International Ornithological Congress at N. Vancouver, BC, Canada.

TRAININGS AND WORKSHOPS ATTENDED BY AARANYAK STAFF

- **Dr. M Firoz Ahmed** attended “Tortoises and Turtles RedList Workshop” organized by IUCN from 12 to 16 March, 2017 at Singapore Zoo.
- **Arup Kumar Das** attended a talk on “Application of Geospatial Technology in forest and wildlife research” organized by D.C.B Girls College, Jorhat on 10th April 2018 at D.C.B Girls College, Jorhat.
- **Dr. Partha J Das and Nayan Das** attended “State-level Consultation on a Multi-Stockholder Platform (MSP) for Addressing River Bank Erosion in Brahmaputra River Basin” organized by OXFAM-India with IIT Guwahati (Aaranyak was a Technical Partner) on April 23, 2018 at Civil Engineering Conference Room, IIT Guwahati.
- **Arup Kumar Das** attended the Hollock Gibbon Conservation Training and presented on “Concept and hands on GPS” organized by Gibbon Conservation Center on 24th April, 2018 at Gibbon Conservation Center, Marian, Jorhat, Assam.
- **Bibhuti Prasad Lahkar** attended the 9th Meeting of the IUCN SSC Asian Elephant Specialist Group Members organized by IUCN SSC Asian Elephant Specialist Group from 25 to 27 April, 2018 at Avani Riverside Bangkok Hotel, Bangkok.
- **Dilip Chetry** attended “Workshop on the management of Gibbon Populations” organized by Chinese Association of Zoological Gardens, IUCN SSC PSG Section on Small Apes, Sun Yat-Sen University, and Cloud Mountain Conservation from 21 to 29th April, 2018 at Guangzhou, China.
- **Arup Kumar Das** attended a Hollock Gibbon Conservation Training and presented on “Concept and hands on GPS” Organized by Gibbon Conservation Center on 17th May 2018 at Gibbon Conservation Center, Marian, Jorhat, Assam.
- **Arup Kumar Das** attended Hollock Gibbon Conservation Training and presented on “Concept and hands on GPS” Organized by Gibbon Conservation Center on 2nd June 2018 at Gibbon Conservation Center, Marian, Jorhat, Assam.
- **Dr. Partha J Das** attended “District-level Consultation Meet on existing Water Governance Policies and Laws - A Multi-Stakeholder Platform (MSP) for Exploring Collaboration on Water Resources” organized by People’s Action for Development (PAD) on June 4, 2018 at Hotel Shahnaz, Lakhimpur and presented on “Basic issues of water governance for the

Brahmaputra River basin in Assam(Key note lecture)”.

- **Dr. Partha J Das** attended “District Consultation on Water governance” organized by North East Research and Social Work Networking on June 19, 2018 at Conference Room of Circuit House, Dhubri and presented on “Water governance in the Brahmaputra River Basin, Assam: Issues and Challenges”.
- **Dr.Kalloli Dutta** attended “Introduction to species modeling” organized by LACONES, Hyderabad in association with Colorado State University from 25th to 29th June, 2018 at LACONES, Hyderabad.
- **Dr. Partha J Das** attended a BRIDGE GBM CSOs Network Workshop: Dialogue on Nature Based Solutions and learning exchange with Media and presented on “Nature based solutions” organized by IUCN-Asia Regional Office, Bangkok from 27 to 29 June, 2018 at Hotel Summit, Kathmandu, Nepal.
- **Dr. Partha J Das** attended “Stakeholder Consultation on Cross Border Trade using Small Mechanised Boats between Dhubri(India) and Chilmari(Bangladesh)” organized by Cutt's International, Jaipur, Rajasthan on July 12, 2018 at Circuit House, Dhubri, Assam.
- **Dr. Partha J Das** attended a Meeting on River Erorion Control Projects “Sustainable river management” organized by State Innovation & Transformation Aayog (SITA), Government of Assam on July 18, 2018 at Office of the Vice Chairman, State Innovation & Transformation Aayog (SITA), Assam Secretariat, Dispur, Guwahati and presented on “dying rivers of Assam: A study on degradation of selected rivers and riverine ecosystems in the Brahmaputra Valley for developing a community based action plan for their rejuvenation”.
- **Dr. Partha J Das and Nayan Das** attended a Review & Planning Meeting of the Trans-Boundary Rivers of South Asia (TROSA) Project organized by Oxfam India from August 1 to 3 August, 2018 at Central Institute of Technology, Kokrajhar, Assam.
- **Arup Kumar Das** attended “Basic principles of Proposal writing organized by VibhaVani from New Delhi on 19th September 2018 at Science Musium, Khanapara-Guwahati, Assam.
- **Dr. Partha J Das** attended an awareness Meeting on Pollution due to Polythene “Environmetnal pollution due to plastic and plythene” organized by Navarun, The ‘Rising Ray’ in collaboration with the District Administration of Kamrup Metropolitan District on 24 September, 2018 at Sudmersen Hall, Cotton University and presented on “Importance of bringing behavioural change in urban citizens in disposing plastic wastes and adopting good practices of management by municipal bodies”.
- **Dr. Partha J Das** attended a nature Guide Training Workshop titled “Eco-tourism” organized by ABN Foundation and Aaranyak on 25 September 2018 at Nameri Eco Camp and presented on “Environment and Tourism”.
- **Dr. Partha J Das** attended “World Habitat Day-2018”organized by Institution of Engineers-Upper Assam Local Committee on October 01, 2018 at JDSC College, Bokakhat and presented on “Wetlands of Assam: Protection, conservation and sustainable management”.
- **Dr. M Firoz Ahmed** attended an advisory Board Meeting of Wild Landscapes organized by Wild Landscapes from 1 to 4 October, 2018 at OlPejeta Conservancy, Kenya.
- **Parag Jyoti Deka** attended an Effective Conservation Translocation Workshop and 2nd International Wildlife Reintroduction Conference organized by IUCN/SSC Reintroduction Specialist Group and Lincoln Zoo Park at Chicago, USA from 10 to 16 November 2018 at Lincoln Zoo Park at Chicago, USA.

- **Dr. Partha J Das** attended a National workshop ‘Learnings from Kerala Floods for River Rejuvenation and River Basin Management in the Context of Climate Change organized by Chalakudy Puzha Samrakshana Samithi and the Forum for Policy Dialogue on Water Conflicts in India from 15 to 16 November 2018 at Regional Theatre, Thrissur, Kerala and presented on “Learning for Northeast India from the experience of the Kerala Floods 2018”.
- **Dr. Partha J Das** attended “CSO Meet for the Brahmaputra River Basin” organized by IIT Guwahati on 26 November, 2018 at IIT Guwahati and presented on “On-going action research of Aaranyak on issues related to the Brahmaputra River and its basin”.
- **Dr. Kalloli Dutta** attended the Species Distribution Modeling with MaxEnt and R titled “Hands on training in MaxEnt and R” organized by Indian Statistical Institute, Kolkata from 3rd December to 9th December, 2018 at Indian Statistical Institute, Kolkata.
- **Dr. Partha J Das** attended a Workshop to develop strategy documents for network of CSOs on advocacy and influencing water governance in the Mahakali River Basin organized by Oxfam India from 7 to 8 December 2018 at Tanakpur, Uttarakhand, India.
- **Jyotish Ranjan Deka & Bankim Baruah** attended “Field course in Conservation Biology and Global Health” organized by Gibbon Conservation Center & Washington University & Jorhat Forest department from 10th to 15th December 2018 at Gibbon Conservation Center, Jorhat, Assam.
- **Abhijit Baruah** attended a Field Course in conservation biology and global health “Know more about our Elephant” organized by Aaranyak and University of Washington on 13 December, 2018 at Gibbon Conservation Centre, Jorhat, Assam.
- **Dr. Partha J Das** attended a Workshop on Formation of an advisory group for the development of a benefit sharing strategy for the Meghna basin “Sustainable development in Meghna River Basin” organized by IUCN- Asia Regional Office, Bangkok from 17 to 19 January 2019 at North East Hill University, Shillong .
- **Dr. Partha J Das** attended “Capacity Building of Catalysts on Transformative Leadership Skills for Improving Access to Government Schemes and Services” organized by Oxfam India from February 4 to 6, 2019 at SIPRD, Kahikuchi, Guwahati, Assam and presented on “Developing a module on Water Governance for communities: An Initiative under the TROSA Project”.
- **Dr. Partha J Das** attended Kick-off meeting of LOTUS Project “Discussion on inception activities of the project ‘low -cost Innovative Technology for water quality monitoring and water resources management for Urban and rural water Systems in India (LOTUS)” (as a collaborator to IIT Guwahati) funded by European Union and Department of Science & Technology, Government of India organized by European Union and Department of Science & Technology, Government of India from February 14 to 15, 2019 at National Institute of Immunology (NII), New Delhi.
- **Jayanta Kr. Roy** attended “International Applied Environmental Education Course (IAECC)” organized by Aaranyak, Satpuda Foundation and EECG from 28th January to 17th February 2019 at Guwahati.
- **Dr. Partha J Das** attended “CSO network meeting on water governance in the Eastern Brahmaputra River Basin, India” organized by People’s Action for Development (PAD) from March 28, 2019 at Hotel A & A 2, North Lakhimpur, Assam and presented on “Role of CSOs in Water Governance: Perspectives from the Eastern Brahmaputra River Basin”.

WORKSHOPS AND TRAININGS ORGANISED BY AARANYAK

PRIMATE RESEARCH & CONSERVATION DIVISION (PRCD)

- **PRCD** in collaboration with Nagaland Forest Department and Assam Forest Department organized “3rd Hoolock Gibbon Conservation Training for Foresters of Nagaland & Assam” on 24 to 30th April,2018 at Gibbon Conservation Centre, H. Gibbon Wildlife Sanctuary, Assam, India. The programme was supported by US Fish & Wildlife (GACF).
- **PRCD** in collaboration with Nagaland Forest Department, Assam Forest Department organized “4th Hoolock Gibbon Conservation Training for Foresters of Nagaland & Assam” on 16 to 22nd May,2018 at Gibbon Conservation Centre, H.Gibbon Wildlife Sanctuary, Assam, India.The programme was supported by US Fish & Wildlife (GACF).
- **PRCD** in collaboration with Nagaland Forest Department, Assam Forest Department organized ‘5th Hoolock Gibbon Conservation Training for Foresters of Nagaland & Assam’ on 1st to 7th June,2018 at Gibbon Conservation Centre,H. Gibbon Wildlife Sanctuary, Assam, India. The programme was supported by US Fish & Wildlife (GACF).
- **PRCD** in collaboration with Assam Forest Department supported by University of Washington, USA, One earth Institute, and Assam Forest Department (Jorhat Forest Division) organized ‘9th field course in Conservation Biology& Global Health’ from 10th to 14th December, 2018 at Gibbon Conservation Centre, H.Gibbon Wildlife Sanctuary, Assam,India.

WATER, CLIMATE & HAZARDS DIVISION (WATCH)

- **WATCH** Division in collaboration with Oxfam India organized “2nd Consultation on “Multi-Stakeholder Platform for Inclusive Water Governance in Brahmaputra River Basin” on 25-26 June 2018 at Hotel Cygnet Repose, GS Road, Guwahati, Assam.
- **WATCH** division in collaboration with Oxfam India, NERSWIN, PAD and Trust For Change and Development organized “Civil Society Consultation on Draft River Basin Management Bill 2018” on November 3, 2018 at Hotel Landmark, Guwahati.
- **WATCH** division in collaboration with Forum for Policy Dialogue on Water Conflicts in India; Coventry University, UK; Water Resources Management Group of Wageningen University, Netherlands; ManthanAdhyayan Kendra, Pune; Centre for Public Affairs and Critical Theory (C-PACT) of Shiv Nadar University, UP; IIT Guwahati and Department of Peace and Conflict Studies and Management, Sikkim University, Gangtok organized “Environmental Justice, Ecological Economics and Water Infrastructure in the Northeast: Hydropower and Waterways” on March 2 – 4, 2019 at Indian Institute of Bank Management (IIBM), Guwahati, Assam.

TIGER RESEARCH & CONSERVATION DIVISION (TRCD)

- **TRCD** in collaboration with Chief Forestry Officer, Jomotshankha Wildlife Sanctuary, Bhutan organized “Data Analysis Workshop on Trans-boundary Jomotshangkha-Barnadi Wildlife Monitoring” on 9-11 July, 2018 at Conference Hall, Aaranyak.
- **TRCD** in collaboration with WWF-India organized “Workshop on camera trapping data interpretation and analysis” on 20-23 July, 2018 at Conference Hall, Aaranyak.
- **TRCD** in collaboration with Panthera organized “Training on QGIS” on 25-29 July, 2018 at Manas Nest, Bhuyanpara Range, Manas National Park.
- **TRCD** in collaboration with Panthera organized “Training on CIRCUITSCAPE” on 30 July, 2018 at Conference Hall, Aarnyak.
- **TRCD** in collaboration with Directorate,Manas Tiger Reserve, IUCN-KFW &Panthera, organized “Short term professional training on Population Monitoring Techniques for Terrestrial Mammals” on 5-11 November, 2018 at Bansbari Forest Guest House, Manas National Park.

GEO-SPATIAL TECHNOLOGY & APPLICATION DIVISION (GTAD)

- **GTAD** organized ‘23rd week long RS/GIS training’ on 16th to 21st July 2018 at Conference Hall, Aaranyak.
- **GTAD** in collaboration with Don Bosco University, Azara & ESRI India organized ‘GIS day celebration’ on 14th November 2018 at Don Bosco University, Azara Campus.
- **GTAD** in collaboration with North Orissa University & ESRI India organized ‘GIS day celebration’ on 14th November 2018 at North Orissa University, Baripada, Odisha.
- **GTAD** organized 24th week long RS/GIS training on GIS & Remote Sensing on 6th from 11th January 2019 at Conference Hall, Aaranyak.

- **GTAD** in collaboration with Assam Forest Department & **PRCD** of Aaranyak organized “Hands on GPS training to forest staff of Doomdoma Forest Division” on 23rd and 24th January 2019 at Divisional Forest Office, Doomdomaforest division.

ENVIRONMENT EDUCATION & CAPACITY BUILDING DIVISION (EECBD)

- **EECBD** in collaboration with Cotton University organized “Popular Science Writings for Conservation of Biodiversity” on August 25, 2018 at Regional Science Centre, Guwahati.
- **ERCD** organized “Training programmme on Wildlife Tourism in around Dihing Patkai Wildlife Sanctuary” on 16 November 2018 at Airabat Bhawan, Digboi.
- **EECBD & MTCP** of Aaranyak in association with Environment Education and Conservation Global (EECG), USA and Satpuda Foundation (India) organized “International Applied Environmental Education Course (IAECC)-2019” from 27 January to 18 February, 2019 at Indian Institute of Bank Management, Khanapara, Guwahati; Smiling Tuskers, Manas and Oriole, Kaziranga.
- **EECBD** in collaboration with Chandra Sing Rongpi Memorial High School & Kohora River Basin Natural Resource Management Committee organized “Orientation Workshop on Climate Change” on 26 February, 2019 at Chandra Sing Rongpi Memorial High School, KarbiAnglong, Assam.
- **EECBD** in collaboration with SSA Barpeta organized “Workshop on Science Teaching” on 28 February 2019 at Tapa High School, Barpeta.
- **EECBD** in collaboration with Jan ShikshanSansthan, Kamrup organized “Orientation Workshop on Climate Change” on 8 March 2019 at Krisak Swahid Bhawan, Kamrup, Assam.

- **EECBD** in collaboration with Dalgaon Ban Banyaprani Suraksha Samiti & Wild Wings organized “Orientation Workshop on Climate Change” on 13 March 2019 at Koupati Gaon Panchayat office premises, Darrang, Assam
- **EECBD** in collaboration with Pobitora Eco-tourism Development Society organized “Orientation Workshop on Climate Change” on 28 March 2019 at Hatimuria Balika L P School, Morigaon, Assam.
- **EECBD** in collaboration with Bhumi&Golaghat West Development Block organized “Orientation Workshop on Climate Change” on 30 March 2019 at Aideo Handique Hall, Bokakhat, Golaghat, Assam.

THREATENED SPECIES RECOVERY PROGRAMME (TSRP)

- **TSRP** in collaboration with Durrell Wildlife Conservation Trust, IUCN/SSC Wild Pig Specialist Group, Conservation Planning Specialist Group South Asia and EcoSystems-India organized “IUCN/SSC Species Action Planning Workshop” from 26 – 28 November 2018 at Pygmy Hog Research and Breeding Center, Indira Nagar, Basistha.

MEMBERSHIP/ POSITION WITH OTHER ORGANIZATION

Dr. Abdul Wakid

- Member of the IUCN's Species Survival Commission

Dr. Bibhuti Prasad Lahkar

- Member of IUCN SSC Asian Elephant Specialist Group.
- Member of IUCN SSC Invasive species specialist Group
- Member World Commission on Protected Area
- Member Commission on Ecosystem Management

Dr. Bibhab Kumar Talukdar

- Member of Governing Council of Assam Science, Technology and Environment Council, Assam
- Member State Board of Wildlife, Govt. of Assam
- Member, Editorial Board of Pachyderm Journal
- Chair: IUCN/SSC; Asian Rhino Specialist Group
- Commission Member - IUCN CEESP Asia 2017-2020
- Commission Member - IUCN CEESP Theme on Environment and Peace 2017-2020
- Commission Member - IUCN CEESP Theme on Human Wellbeing and Sustainable Livelihoods 2017-2020
- Commission Member - IUCN CEESP Working Group - Natural Resource Governance Framework 2017-2020
- Commission Member - IUCN CEM Biosphere Reserves 2017-2020
- Commission Member - IUCN CEM Ecosystem Restoration 2017-2020
- Commission Member - IUCN CEM Ecosystems and Invasive Species 2017-2020
- Commission Member - IUCN CEM Forest Ecosystems 2017-2020
- Commission Member - IUCN CEM South Asia 2017-2020
- Commission Member - IUCN CEM Sustainable Use and Management of Ecosystems 2017-2020
- Commission Member - IUCN CEM Wetland Ecosystems 2017-2020
- Commission Member - IUCN SSC African Rhino Specialist Group 2017-2020
- Commission Member - IUCN SSC Chairs 2017-2020
- Commission Member - IUCN SSC Conservation Planning Specialist Group 2017-2020

- Commission Member - IUCN WCPA Capacity Development : Network 2017-2020
- Commission Member - IUCN WCPA Climate Change : Network 2017-2020
- Commission Member - IUCN WCPA Connectivity Conservation : Network 2017-2020
- Commission Member - IUCN WCPA Governance of Protected and Conserved Areas : Network 2017-2020
- Commission Member - IUCN WCPA Management Effectiveness : Network 2017-2020
- Commission Member - IUCN WCPA South Asia Region 2017-2020
- Commission Member - IUCN WCPA Tourism and Protected Areas : Network 2017-2020
- Commission Member - IUCN WCPA Transboundary Conservation : Network 2017-2020
- Commission Member - IUCN WCPA World Heritage : Network 2017-2020
- Commission Member - IUCN WCPA-SSC Biodiversity and Protected Areas : Network 2017-2020
- Commission Member - WI-IUCN SSC Threatened Waterfowl Specialist Group 2017-2020
- Member: European Association of Zoos and Aquarium (EAZA)- Rhino Taxonomic Advisory Group (TAG)

Dr. Dilip Chetry

- Vice Chair, IUCN, SSC Primate Specialist Group, South Asia Section.
- Executive member, IUCN, SSC Small Ape Section.
- Board of Director in Scholars Institute of Technology and Management, Guwahati, Assam.
- Member, International Primatological Society.
- Member, American Primatological Society.
- Member, Vijnabharati Northeast/Northeast Science Movements.
- Member, Nepal Biodiversity Research Society.

- Member, State Wildlife Board of Assam, Govt. of Assam
- Member, Gauhati University Ethics Committee.

Dipankar Lahkar

- Member, Society for Conservation Biology (SCB)
- Member of the Editorial Board, Newsletter for Birdwatchers (Bi-monthly published newsletter on Ornithology)
- District Level Project Evaluator, National Children Science Congress (NCSC), Assam—a program of the National Council for Science and Technology Communication, Department of Science and Technology, Govt. of India

Dr. M Firoz Ahmed

- Member, IUCN-SSC
- Member, Society for Conservation Biology (SCB)
- Advisor, WildLandscapes, USA

Dr. Partha J Das

- Member of the 'Advisory group for the development of a benefit sharing strategy for the Meghna basin', formed by the IUCN, Asia Regional Office, Bangkok in January 2019.

Dr. Purnima Devi Barman

- Director, Women in Nature Network, India Chapter
- Member of IUCN Stork, Ibis, Spoonbill group

Dr. Parag Jyoti Deka

- Member, IUCN/SSC Wild Pig Specialist Group

Udayan Borthakur

- Member, IUCN SSC Asian Rhino Specialist Group
- Member, IUCN SSC White-bellied Heron Working Group
- Member, Nikon Professional Services, India
- Official Wildlife Photography Mentor, Nikon School India

PUBLICATIONS

ABSTRACT

- Deka P. J. 2018. Breeding and reintroduction of Pygmy Hog (*Porcula salvania*). 2nd International Wildlife Reintroduction Conference, 13 - 16 November 2018. IUCN Reintroduction Specialist Group, Lincoln Zoo Park, Chicago, USA.

BOOKS

- Pathak, J. K., Barua, A. S. and Ahmed, M. F. 2018. Bagh aru Manooh (Tiger and Mankind), a book on conservation of Royal Bengal Tiger. Aaranyak, Pp 36. (Local language - Assamese). ISBN 978-81-936429-0-0
- Pathak, J.K., Barua, A. S and Ahmed, M. F. 2018. Mwsa Arw Mansi (Tiger and Mankind), a book on conservation of Royal Bengal Tiger. Aaranyak, Pp 36. (Local language - Bodo). ISBN 978-81-936429-1-7
- Siddiqui, S., Chohan, S. and Das, P. J. (2018). Reimagining Brahmaputra: Policy and Regulatory Aspects of Transboundary Water Governance, Oxfam India, July 2018, 52 p.

BOOK CHAPTERS

- Das, P. J. and Das, A. (2019). The Deepar Beel catchment and landscape: A spatial assessment using Remote Sensing and GIS for facilitating management of sustainable ecosystem services', In (Editor: Sarma, P.K.) 'Harnessing Wetlands for Sustainable Livelihoods', Notion Press-India, Chennai. Pp.211-227.
- Narayan G., Deka P. J. 2018. Pygmy Hog. Natural History of North East India, Volume 1 Mammals. Edited by Dr. Anwaruddin Choudhury and published by Rashmi Prakash, Page 194-197.

NON - PEER REVIEWED ARTICLES

- Deka P. J., Narayan G. 2018. Conservation breeding and reintroduction of critically endangered Pygmy Hog (*Porcula salvania*). Cheetal 55(3) Pp-12-20.

PEER REVIEWED ARTICLE

- Ghosh-Harihar M, An R, Athreya R, Borthakur U, Chanchani P, Chetry D, Datta A, Harihar A, Karanth KK, Mariyam D, Mohan D, Onial M, Ramakrishnan U, Robin VV, Saxena A, Shahabuddin, Thatte P, Vijay V, Wacker K, Mathur VB, Pimm SL, Price TD. 2019. Protected area and biodiversity conservation in India. Biological Conservation, 237: 114-124.
- Gross, E., Lahkar, B.P., Subedi, N., Nyirenda, V., Lichtenfeld, L., and Jakoby, O. 2018. Seasonality, crop type and crop phenology influence

crop damages by wildlife herbivores in Africa and Asia, *Biodiversity and Conservation*, DOI 10.1007/s10531-018-1523-0.

- Lahkar D, Ahmed MF, Begum RH, Das SK, Lahkar BP, Sarma HK, Harihar A. 2018. Camera-trapping survey to assess diversity, distribution and photographic capture rate of terrestrial mammals in the aftermath of the ethnopolitical conflict in Manas National Park, Assam, India. *Journal of Threatened Taxa*, 10(8): 12008–12017. <http://doi.org/10.11609/jott.4039.10.8.12008-12017>.
- Natesh M, Atla G, Nigam P, Jhala YV, Zachariah A, Borthakur U, Ramakrishnan U. 2017. Conservation priorities for endangered Indian tigers through a genomic lens. *Nature Scientific Reports*, 7:9614. DOI:10.1038/s41598-017-09748-3.
- Nath, A., Sinha, A., Lahkar, B.P. & Brahma, N. 2019. In search of Alien: factors influencing the distribution of *Chromolaena odorata* L. and *Mikania micrantha* Kunth in the Terai grasslands of Manas National Park, India. *Ecological Engineering*. 131: 16-26.
- Purohit D, Ram M S, Pandey V K, Pravalika S, Deka P J, Narayan G, Umapathy G. 2019. Cross-specific markers reveal retention of genetic diversity in captive bred pygmy hog, a critically endangered suid. *Conservation Genetics Resources*. <https://doi.org/10.1007/s12686-019-01091-1>
- Roy, J.K., Begum, R.H. and Ahmed, M.F. 2018. Amphibians of the Dibang River Basin, Arunachal Pradesh: an annotated checklist with distribution records. *Journal of Threatened Taxa*, 10(15): 12940–12952.

TECHNICAL REPORTS

- Borthakur U, Das PK, Deb M, Maheen R, Neog A, Das AK and Barua B (2019). Population status of tiger in North Bengal. *Aaranyak*, Technical Report, Pg. 1-63.
- Das, P.J. (2018). Disaster Risk Reduction and Children. Knowledge Product-1. Report submitted to the Centre for Sustainable Development Goals, Government of Assam.
- Das, P.J. (2018). Climate Change and Children. Knowledge Product-2. Report submitted to the Centre for Sustainable Development Goals, Government of Assam.
- Das, P.J. (2018). Disaster Risk Reduction, Climate Change, SDGs and Children. Knowledge Product-3. Report submitted to the Centre for Sustainable Development Goals, Government of Assam.
- Swargowari, A., Sarma, H.K., Ahmed, MF., Lahkar D., Das, SK. (2018). Technical Summary Report: Annual monitoring of tigers, co-predators and prey in Manas National Park, India, 34pp. Submitted to Directorate Manas Tiger Reserve, Barpeta Road, Assam, India.

FINANCIAL REPORT
2018-19



Photo - Udayan Bortahkur

DHAWAN PANDEY & ASSOCIATES
Chartered Accountants

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FORM NO. 10B
(See rule 17B)

Audit report under section 12A(b) of the Income-tax Act, 1961, in the case of charitable or religious trusts or institutions

I/We have examined the balance sheet of **AARANYAK** as at 31st day of March, 2019 and the income and expenditure account for the year ended on that date which are in agreement with the books of account maintained by the said trust or institution.

I/We have obtained all the information and explanations, which to the best of my/our knowledge and belief were necessary for the purposes of the audit. In my/our opinion, proper books of account have been kept by the head office and the branches of the above-named trust/institution visited by me/us so far as appears from my/our examination of the books, and proper returns adequate for the purposes of audit have been received from branches not visited by me/us, subject to the comments given below:

In my/our opinion and to the best of my/our information, and according to information given to me/us, the said accounts give a true and fair view –

- (i) in the case of the balance sheet, of the state of affairs of the above-named trust/institution as at 31st day of March, 2019, and
- (ii) in the case of income and expenditure account, of the excess of Income over Expenditure of its accounting year ending on 31st day of March, 2019

The prescribed particulars are annexed hereto.

Place: Guwahati
Date: 10.09.2019

For, DHAWAN PANDEY & ASSOCIATES
Chartered Accountants

Biswajit Baruah
(CA. BISWAJIT BARUAH)
Partner
M. No. 063538
FRN: 013617C



FINANCIAL REPORT

AARANYAK
SAMANWOY PATH, SURVEY, BELTOLA, GUWAHATI-781028, DIST. KAMRUP, ASSAM.

BALANCE SHEET AS ON 31ST MARCH 2019

LIABILITIES	AMOUNT(')	ASSETS	AMOUNT(')
FUND ACCOUNT			
General Fund		Fixed Assets	
Opening Balance	21,463,574.14		34,550,189.00
Less: Net deficit during the year	2,346,089.19		
Less: Project expenses from own fund	826,038.00	18,291,446.95	
		Current Assets	
		Tax Deducted at Source	1,773,048.00
		Advance for Project Expenses	825,830.01
Capital Fund out of Project Expenses			
Opening Balance	24,041,854.00		
Add: Additions during the year	2,032,988.00	26,074,842.00	
		Indian Oil Corporation	(7,649.33)
		Loan to Employee	15,000.00
Unutilised Project Funds		CLOSING BALANCE	
For current year	57,441,554.26	Cash in hand	4,875.57
Add: Amount spent out of own fund	826,038.00		
GDRCD (Loan)	10,000.00		
Less: GDRCD(Loan) repaid	10,000.00		
Funds from Individuals for specific purposes:		INVESTMENTS	
Jane Macdonald (Greater Adjutant Stork)	1,098,660.00	Fixed Deposits with Bank of Baroda, Dispur Branch	52,370,531.06
Dawson Christopher (Boat)	12,906.44	Fixed Deposit with Union Bank of India, Basistha Road branch	909,637.00
		UTI	5,400,000.00
		BANK ACCOUNTS	
		HDFC, Bongaigaon Branch (ERCI-1)	9,140.98
		HDFC, Bongaigaon Branch (ERCI-2)	3,652.45
		HDFC, Bongaigaon Branch (ERCI-3)	697.07
		HDFC, Bongaigaon Branch (GDRCI)	1,332.61
		HDFC, Bongaigaon Branch (ARCI)	338,212.50
		HDFC, Bongaigaon Branch (WGP)	4,860.71
		Kotak Mahindra (LAD)	-
		HDFC, Bongaigaon Branch (LIVELIHOOD)	437.64
		HDFC, Bongaigaon Branch (PRCI)	1,171.67
		HDFC, Bongaigaon Branch (RRCI)	46,698.97
		YES BANK (RRCI)	176,010.60
		State Bank of India, Bongaigaon (TRCI-2)	36,720.67
		State Bank of India, Bongaigaon (TRCI-2S/A)	-
		TRCI-4	36,695.67
		State Bank of India, Bongaigaon (TRCI)	45,495.97
		TSRP	6,382.00
		IDBI, Bongaigaon Branch (WATCH)	39,925.02
		Bank of Baroda, Dispur Branch	4,020,187.22
		Punjab National Bank, Bongaigaon Branch	181,771.37
		Union Bank of India, Basistha Road Branch (PRCI)	1,139.27
		State Bank of India, Dispur	89,928.94
		AARANYAK LIVELIHOOD-2	19,902.17
		INDUSLAND BANK	436,230.47
		Union Bank of India	453,655.34
		AARANYAK HDFC (WATCH)	45.79
		AARANYAK (TRCI-3)	32,526.19
		YES BANK (AARANYAK)	841,345.04
		Bank of Baroda (TTMP)	9,956.35
		HDFC (TTMP)	238.54
		Manas Traditional Dress cluster (PNB)	1,067,867.50
		Yes Bank Ltd (WGd-2)	1,757.62
TOTAL	103,745,447.65	TOTAL	103,745,447.65

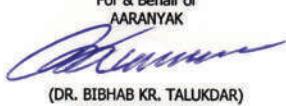
Place: Guwahati
Date: 10/09/2019

For & Behalf of
AARANYAK

(DR. BIBHAB KR. TALLUDAR)
SECRETARY GENERAL

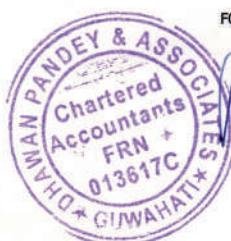
Secretary General

Aaranyak



As per our report of even date
FOR DHAWAN PANDEY & ASSOCIATES
CHARTERED ACCOUNTANTS

Biswajit Baruah
(CA. BISWAJIT BARUAH)
PARTNER
M.No.063538
FRN.013617C



AARANYAK
SAMANWOY PATH, SURVEY, BELTOLA, GUWAHATI-781028, DIST. KAMRUP, ASSAM.

CONTRIBUTION RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2019

RECEIPTS	AMOUNT(')	PAYMENTS	AMOUNT(')
To OPENING BALANCE CASH IN HAND	1,415.00	By Project Expenses out of grants/ contributions Gross expenses 95,029,567.35 Less: Expenses out of own fund 826,038.00	-
To INVESTMENTS Fixed Deposits with Bank of Baroda, Dispur Branch 38,887,567.56 Fixed Deposit with Union Bank of India, Basistha Road branch 783,497.00 UTI 4,300,000.00	43,971,064.56	By Advance for Project Expenses	94,203,529.35 825,830.01
To BANK ACCOUNTS HDFC, Bangaghar Branch(ERCI-1) 13,173.17 HDFC, Bangaghar Branch (ERCI-2) 3,790.45 HDFC, Bangaghar Branch (ERCI-3) 304.68 HDFC, Bangaghar Branch(GDRCI) 1,599.41 HDFC, Bangaghar Branch(ARCI) 327,612.65 HDFC, Bangaghar Branch(WGP) 142,235.57 KOTAK MAHINDRA (LAD) 17,266.30 HDFC, Bangaghar Branch(LIVELIHOOD) 172.99 HDFC, Bangaghar Branch(PRCI) 48,905.67 HDFC, Bangaghar Branch (RRCI) 56,384.91 YES BANK (RRCI) 160,210.75 State Bank of India, Beltola (TRCI-2) 96,959.55 TRCI-4 38,213.11 State Bank of India, Beltola(TRCI) 71,308.12 TSRP 1,249.00 IDBI, Beltola Branch(WATCH) 4,540.41 Bank of Baroda, Dispur Branch 2,933,266.37 Punjab National Bank, Beltola Branch 200,728.44 Union Bank of India, Basistha Road Branch(PRCI) 9,213.83 State Bank of India, Dispur 16,417.44 AARANYAK LIVELIHOOD-2 19,689.97 INDUSLAND BANK 157,662.97 Union Bank of India 456,007.90 AARANYAK HDFC (WATCH) 45.79 AARANYAK (TRCI-3) 128,948.93 YES BANK(AARANYAK) 2,216,567.81 Bank of Baroda (TTMP) 3,298,906.15 HDFC(TTMP) 745.14 Manas Traditional Dress cluster (PNB) 2,465,715.00 Yes Bank Ltd (WGd-2) 24,588.18	43,971,064.56	By Bank Charge By Administrative Expenses By Audit Fees By GDRCD (Loan) repaid By Consultancy Fees By CLOSING BALANCE Cash in hand	96,068.97 6,041,308.78 35,990.00 10,000.00 141,840.00 4,875.57
To Contribution Received	104,084,844.39	By INVESTMENTS Fixed Deposits with Bank of Baroda, Dispur Branch 52,370,531.06 Fixed Deposit with Union Bank of India, Basistha Road branch 909,637.00 UTI 5,400,000.00	58,680,168.06
To Recovery of Project Advances	1,803,126.96	By BANK ACCOUNTS HDFC, Bangaghar Branch(ERCI-1) 9,140.98 HDFC, Bangaghar Branch(ERCI-2) 3,652.45 HDFC, Bangaghar Branch(ERCI-3) 697.07 HDFC, Bangaghar Branch(GDRCI) 1,332.61 HDFC, Bangaghar Branch(ARCI) 338,212.50 HDFC, Bangaghar Branch(WGP) 4,860.71 Kotak Mahindra (LAD) - HDFC, Bangaghar Branch(LIVELIHOOD) 437.64 HDFC, Bangaghar Branch(PRCI) 1,171.67 HDFC, Bangaghar Branch(RRCI) 46,698.97 YES BANK(RRCI) 176,010.60 State Bank of India, Beltola(TRCI-2) 36,720.67 State Bank of India, Beltola(Trci-2S/A) -	
To Bank Interest	170,088.90	TRCI-4 36,695.67 State Bank of India, Beltola(TRCI) 45,495.97 TSRP 6,382.00 IDBI, Beltola Branch(WATCH) 39,925.02 Bank of Baroda, Dispur Branch 4,020,187.22 Punjab National Bank, Beltola Branch 181,771.37 Union Bank of India, Basistha Road Branch(PRCI) 1,139.27 State Bank of India, Dispur 89,928.94 AARANYAK LIVELIHOOD-2 19,902.17 INDUSLAND BANK 436,230.47 Union Bank of India 453,655.34	
To Interest on Bank Fixed Deposits	2,829,021.00		
To Interest on IT refund	10,411.00		
To IOCL Bonus Receipt	1,027.43		
To Indian Oil Corporation	42,817.01		
To RECEIVED FROM GDRCD	10,000.00		
To Donation	842,320.23		
To Internship	16,500.00		
To Membership Fees	18,000.00		
To Insurance Receipt	15,000.00		
To MPCD POBITORA WORKSHOP	20,750.00		
To GIBBON TRAINING PROGRAM	36,000.00		
To Jane Macdonald: Individual grant for specific purpose	1,098,660.00		
To Dawson Christopher: Individual grant for specific purpose	12,906.44		
To Tax Deducted at Source	47,212.50		
TOTAL	167,943,597.08	TOTAL	167,943,597.08

Place: Guwahati
Date: 10/09/2019

Secretary General

Aaranyak

For & Behalf of
AARANYAK(DR. BIBHAB KR. TALUKDAR)
SECRETARY GENERAL

AARANYAK
SAMANWOY PATH, SURVEY, BELTOLA, GUWAHATI-781028, DIST. KAMRUP, ASSAM.

INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2019

EXPENDITURE	AMOUNT(')	INCOME		AMOUNT(')
To Bank Charge	96,068.97	By Bank Interest		170,088.90
To Administrative Expenses	6,041,308.78	By Interest on Bank Fixed Deposits		2,829,021.00
	-	By Interest on IT refund		10,411.00
To Audit Fees	35,990.00	By IOCL Bonus Receipt		1,027.43
To Consultancy Fees	141,840.00	By RECEIVED FROM GDRCD		10,000.00
	-	By Donation		842,320.23
		By Internship		16,500.00
		By Membership Fees		18,000.00
		By Insurance Receipt		15,000.00
		By MPCD POBITORA WORKSHOP		20,750.00
		By GIBBON TRAINING PROGRAM		36,000.00
		Surplus of Expenditure over Income		
		By Income		2,346,089.19
TOTAL	6,315,207.75	TOTAL		6,315,207.75

Place: Guwahati
 Date: 10/09/2019

For & Behalf of
 AARANYAK

(DR. BIBHAB KR. TALUKDAR)
 SECRETARY GENERAL

Secretary General

Aaranyak

As per our report of even date
 FOR DHAWAN PANDEY & ASSOCIATES
 CHARTERED ACCOUNTANTS

Biswajit Baruah
 (CA. BISWAJIT BARUAH)
 PARTNER
 M.No.063538
 FRN.013617C



FIND AARANYAK

Registered address:

50, Samannoy Path,
Beltola Survey, Guwahati,
India - 781028

Administrative Office:

Aaranyak,
13, Tayab Ali Byelane,
Bishnu Rabha Path, Beltola Tiniali,
Bhetapara Link Road,
P.O. Beltola, Guwahati,
India - 781028

Email: info@aaranyak.org

Tel: +91-361-2230250

Fax: +91-361-2228418

Research Division Office:

12, Kanaklata Path,
Byelane 3, Ajanta Path,
Beltola Survey, Guwahati,
India - 781028

Field Stations:

Manas Landscape:

Aaranyak, C/o Biraj Das, Chandrapur, Ward No. 7
Aaranyak, C/o Utpal Das, Chandrapur, Ward No. 7
Barpeta Road

- Panbari Field Station, Panbari Range, Manas National Park
- Majrabari Field Station, Bhuyanpara Range, Manas National Park
- Bansbari Field Station, Manas National Park, Baksa
C/o Gangarani Sarkar, Gyati Gaon, Bansbari - 781315
Mobile: +91-7896508018
- Manas Nest, Bhuyanpara, Manas National Park, Baksa.
C/o Bhuyanpara Ecotourism Society
Bhuyanpara - 781318
Contact Person - Baburam Basumatary
Mobile: +91-9435763149

Kaziranga Landscape:

Aaranyak, C/o M. Firoz Ahmed, Pilkhana, Kohora - 785609
Contact - Arif Hussain, Mobile: +91-9854797419

Golaghat Landscape:

Aaranyak, C/o Girish Lahon, Near LIC Office
Bokakhat, PIN - 785612

Eastern Assam Landscape:

Aaranyak, C/o Bipin Chandra Datta
Itabhatta, Near Digboi College, Digboi - 786171

Gibbon Wildlife Sanctuary and Jorhat District:

Aaranyak, C/o Dilip Chetry, Gibbon Conservation Centre,
Gibbon Wildlife Sanctuary
P.O. Mariani PIN - 785634
Mobile: +91-9435043892

North Bengal Field Station

*C/o Utpal Mazumdar, Near Netaji School, Lechutala
Alipurduar Junction, PIN - 736121*

Roing Field Station

*T. Meya Complex, Mayu, Roing
PIN - 792110, District: Lower Dibang Valley (Arunachal Pradesh)
Land mark: Near Government Secondary School, Mayu*

STAFF LIST

(1st April of 2018 to 31st March 2019)

ADMIN & ACCOUNTS DIVISION

Dr. Bibhab Kumar Talukdar,
Scientist G, SG & CEO

Ms. Bobby Nath,
Administrative Officer

Mr. Ranjan Jyoti Khound,
Manager (Finance)

Mr. Bhaskar Sarkar,
Manager (Accounts)

Md. Zakir Islam Bora,
Manager to the Office of SG & CEO

Ms. Binita Subba,
Accountant

Mr. Gauri Sankar Borah,
Associate Accountant

Mr. Pranab Goswami,
Organising Officer

Ms. Bijoyinee Sarma,
Executive (Administration)

Mr. Nripen Kumar Nath,
Office Executive (Operation)

Mr. Gouranga Mandal,
Office Assistant

Mr. Rajesh Das,
Office Supporting Assistant

Mr. Krishnamoni Das,
Office Supporting Assistant

Mr. Moni Kumar Haloi,
Field Assistant cum Watchman

Mr. Arun Basfor,
Office Cleaner

AVIFAUNA RESEARCH & CONSERVATION DIVISION (ARCD)

Ms. Purnima Devi Barman,
Project Manager, GAS

Mr. Bibekananda Kakoty,
Project Assistant, GAS

CONSERVATION & LIVELIHOOD DIVISION (CLD)

Dr. Putul Bhuyan,
Manager

Mr. Kumar Brahma,
Field Assistant

Mr. Jack Karjee,
Field Assistant

Mr. Swapan Kumar Das,
Cluster Development Executive

ELEPHANT RESEARCH & CONSERVATION DIVISION (ERCD)

Dr. Bibhuti Prasad Lahkar,
Scientist E, Head ERCD & Landscape Administrator, Manas Landscape

Dr. Jyoti Prasad Das,
Manager

Ms. Alolika Sinha,
Research Scholar

Mr. Abhijit Boruah,
Project Coordinator

Mr. Monjit Konwar,
Project Assistant

Mr. Sandhi Mitra,
Consultant Biologist

Mr. Niranjan Bhuyan,
Community Coordinator

Mr. Animekh Hazarika,
Research Scholar

Mr. Avijan Saha,
Field Coordinator

Mr. Rajib Saha,
Project Assistant

Mr. Rubul Tanti,
Junior Research Scholar

Mr. Rupam Goyari,
Driver cum Field Assistant

Mr. Porash Moni Hazarika,
Field Assistant

Mr. Ankur Nahok,
Field Assistant

Mr. Pradeep Barman,
Driver

ENVIRONMENT EDUCATION & CAPACITY BUILDING DIVISION (EECBD)

Mr. Jayanta Kumar Pathak,
Manager

GANGETIC DOLPHIN RESEARCH & CONSERVATION DIVISION (GDRCD)

Dr. Abdul Wakid,
Head

Mr. Gobardhan Mallah,
Boat Pilot

Mr. Kedar Mallah,
Boat Driver

Mr. Ishwar Prasanna Saikia,
Boat Assistant

Md. Nur Islam,
Driver

Mr. Subodh Patgiri,
Driver

GEOSPATIAL TECHNOLOGY & APPLICATION DIVISION (GTAD)

Mr. Arup Kumar Das,
Manager

Ms. Madhumita Borthakur,
Spatial Database Officer

Ms. Kongseng Konwar,
Database Officer

Mr. Bankim Baruah,
Project Coordinator

Mr. Jyotish Ranjan Deka,
GIS Assistant

HERPETOFAUNA RESEARCH & CONSERVATION DIVISION (HRCD)

Dr. Firoz Ahmed,
Scientist F, Head, TRCD

Mr. Jayanta Kumar Roy,
Senior Research Scholar

Mr. Thejavitso Chase,
Research Assistant

LEGAL & ADVOCACY DIVISION (LAD)

Mr. Ajoy Kr. Das,
Associate Lawyer

MEDIA PUBLICATION & COMMUNICATIONS DIVISION

Mr. Udayan Borthakur,
Head, MPCD

Ms. Munmita Baruah,
Public Relations and
Communication Officer

Mr. Sarkiripo Rongpi,
Documentation Officer

Mr. Kukil Gogoi,
Documentation Assistant

PRIMATE RESEARCH & CONSERVATION DIVISION (PRCD)

Dr. Dilip Chetry,
Scientist E, Programme Head,
PRCD

Mr. Mridupaban Phukan,
Field Manager

RHINO RESEARCH & CONSERVATION DIVISION (RRCD)

Dr. Bibhab Kumar Talukdar,
Head, RRCD

Mr. Manas Kumar Bhattacharjya,
Manager

Md. Arif Hussain,
Senior Project Officer (Conservation)

Mr. Bijay Sankar Bora,
Consultant

Mr. Anil Kumar Das,
K-9 Dog Squad Handler cum field
and Office Assistant

Mr. Goura Baidya,
K-9 Dog Squad Handler cum field
and Office Assistant

Mr. Nirmal Kalita,
K-9 Dog Squad Handler cum field
and Office Assistant

Mr. Sanatan Mali,
K-9 Dog Squad Assistant Handler
cum Field and Office Assistant

Mr. Rahul Das,
Assistant Dog Handler, K9 Dog
Squad cum office Assistant

Mr. Minkul Sarma,
Assistant Dog Handler, K9 Dog
Squad

Mr. Bitumoni Lahkar,
Assistant Dog Handler, K9 Dog
Squad

Mr. Mrigen Das,
Probationary Assistant Dog Handler
in K-9 Dog Squad

Mr. Montu Boro,
Animal Keeper

THREATENED SPECIES RECOVERY PROGRAMME (TSRP)

Dr. Parag Jyoti Deka,
Programme Manager

Mr. Jonmani Kalita,
Junior Field Biologist

Mr. Bhaben Hazarika,
Site Coordinator

Mr. Ajay Kumar Das,
Site Coordinator

Md. Chand Miyan,
Senior Animal Caretaker

Ms. Monora Begum,
Animal Caretaker

Mr. Dinesh Kalita,
Junior Animal Caretaker

Mr. Tulshi Nath,
Animal Caretaker

Mr. Dibyeswar Barman,
Junior Animal Caretaker

Mr. Dwipendra Dev,
Senior Field Assistant

Mr. Raju Mili,
Field Assistant

Mr. Kishur Payeng,
Field Assistant

Mr. Rajib Boro,
Junior Field Assistant

Ms. Sewali Rabha,
Site Assistant

Ms. Mamata Mondal,
Site Assistant

Mr. Amal Deka,
Field Assistant

TIGER RESEARCH & CONSERVATION DIVISION (TRCD)

Dr. Firoz Ahmed,
Scientist F, Head, TRCD

Mr. Dipankar Lahkar,
Manager Research, TRCD &
Senior Project Officer - Research
and Monitoring, MTCP

Ms. Kalloli Dutta,
Senior Project Officer, TRCD

Mr. Sarlongjon Teron,
Project Officer, TRCD

Dr. Sudip Kanta Basistha,
Deputy Project Manager, MTCP

Mr. Bipul Das,
Assistant Manager, MTCP

Ms. Binita Baruwati,
Sr. Project Officer - Intel Analyst,
TRCD

Mr. Prosenjit Sheel,
Sr. Project Officer - Protection,
TRCD

Mr. Pronit Basumatary,
Asst. Project Officer - Protection,
TRCD

Mr. Bijoy Basumatary,
Asst. Project Officer Livelihood - 1,
MTCP

Mr. Detsung Basumatary,
Project Officer - Conservation
Education, MTCP

Ms. Aprajita Singh,
Project Officer (Biologist), TRCD

Mr. Mizing Boro,
Asst. Project Officer - Protection,
TRCD

Mr. Binod Dewry,
Asst. Project Officer - logistics,
TRCD

Ms. Manoshi Goswami,
Communication Officer, MTCP

Dr. Hridullal Das,
Field Veterinarian, MTCP

Mr. Phwjwngsar Narzary,
Law Enforcement, MTCP

Mr. Silash Basumatary,
Sr. Project Officer - Livelihood 2,
MTCP

Mr. Manjit Basumatary,
Project Officer, MTCP

Mr. Tapash Mahanta,
Accounts Assistant, MTCP

Mr. Amit Dewry,
Assistant Project Officer- Logistics,
MTCP

Mr. Jiban Kr. Chetry,
Assistant Project Officer,
Livelihood 4, MTCP

Mr. Kuldeep Das,
Sr. Project Officer, Conservation
Education, MTCP

Mr. Rinku Das,
Data Operator (Trainee), MTCP

Mr. Ranen Basumatary,
Project Officer, MTCP

Mr. Longso Yimchunger,
Documentation Officer, MTCP

Mr. Mukesh Kherkatary,
Trainee Project Officer -
Protection, MTCP

Mr. Dipen Deka,
Field Assistant, MTCP

Mr. Gobinda Narzary,
Field Assistant, MTCP

Mr. Kunja Brahma,
Field Assistant - Livelihood, MTCP

Mr. Nabin Basumatary,
Field Assistant, MTCP

Ms. Shewali Swargiary,
Field Assistant, MTCP

Mr. Songsar Basumatary,
Field Assistant - Livelihood, MTCP

Mr. Udang Basumatary,
Field Assistant - Livelihood, MTCP

Mr. Raju Boro,
Nursery Caretaker, MTCP

Md. Majammil Hoque,
Office Assistant cum Driver, TRCD

Mr. Birdutta Baro,
Field Assistant - Protection, TRCD

Mr. Ratul Das,
Field Assistant - Livelihood, MTCP

Ms. Alary Brahma,
Field Assistant, MTCP

Mr. Pankaj Das,
Field Assistant, Livelihood, MTCP

Mr. Swmdwm Basumatary,
Field Assistant - Conservation
Education, MTCP

Mr. Amin Basumatary,
Project Officer - Conservation
Education, MTCP

Mr. Khanen Boro,
Assistant Project Officer (Cluster
Coordinator), MTCP

Mr. Pranjal Kumar Dutta,
Manager Livelihood, MTCP

Ms. Beuti Rani Basumatary,
Field Assistant, MTCP

Mr. Hiranyajit Moran,
Field Assistant (Research), TRCD

Mr. Koushik Medhi,
Project Officer - Admin and
Management, MTCP

Mr. Chandan Das,
Marketing Coordinator and
Community Mobilizer, TRCD

Mr. Pranjon Daimari,
Project Officer - Protection, TRCD

Mr. Yadav Chandra Mandal,
Consultant, MTCP

Mr. Rathindra Nath Das,
Consultant - Law Enforcement and
Informant Coordinator, MTCP

Mr. Bijoy Kalita,
Driver, MTCP

WATER CLIMATE & HAZARDS DIVISION (WATCH)

Dr. Partha Jyoti Das,
Scientist E, Head, Water Climate
and Hazard Division

Mr. Nayan Das,
Project Coordinator

Mr. Dipmoni Nath,
Driver cum Technical Field
Assistant

WILDLIFE GENETICS DIVISION (WGD)

Mr. Udayan Borthakur,
Scientist E, Head, Wildlife Genetic
Division

Dr. Pranjal Kumar Das,
Manager

Mr. Ankur Neog,
Researcher

Ms. Rumana Maheen,
Researcher

Mr. Mitrajit Deb,
Project Manager

REGIONAL COORDINATORS

EASTERN ZONE

Mr. Tikendrajit Gogoi,
Coordinator

Mr. Sailendra M. Das,
Assistant Coordinator

Mr. Sanjay Das,
Assistant Coordinator

CENTRAL ZONE

Mr. Arif Hussain,
Coordinator

Mr. Niranjan Bhuyan,
Assistant Coordinator

WESTERN ZONE

Dr. Ashoke Kr. Das
Coordinator

Dr. Kushal Choudhury
Assistant Coordinator

Mr. Ankur Barman
Assistant Coordinator

LEGAL ADVISORS

Mr. Gautam Uzir,
Advocate - Gauhati High Court

Mr. Bhaben Narzary,
Advocate - Gauhati High Court

RESEARCH ADVISORY BOARD

Prof. Alak Kr. Buragohain

Dr. Annwaruddin Choudhury,
D.S.C.

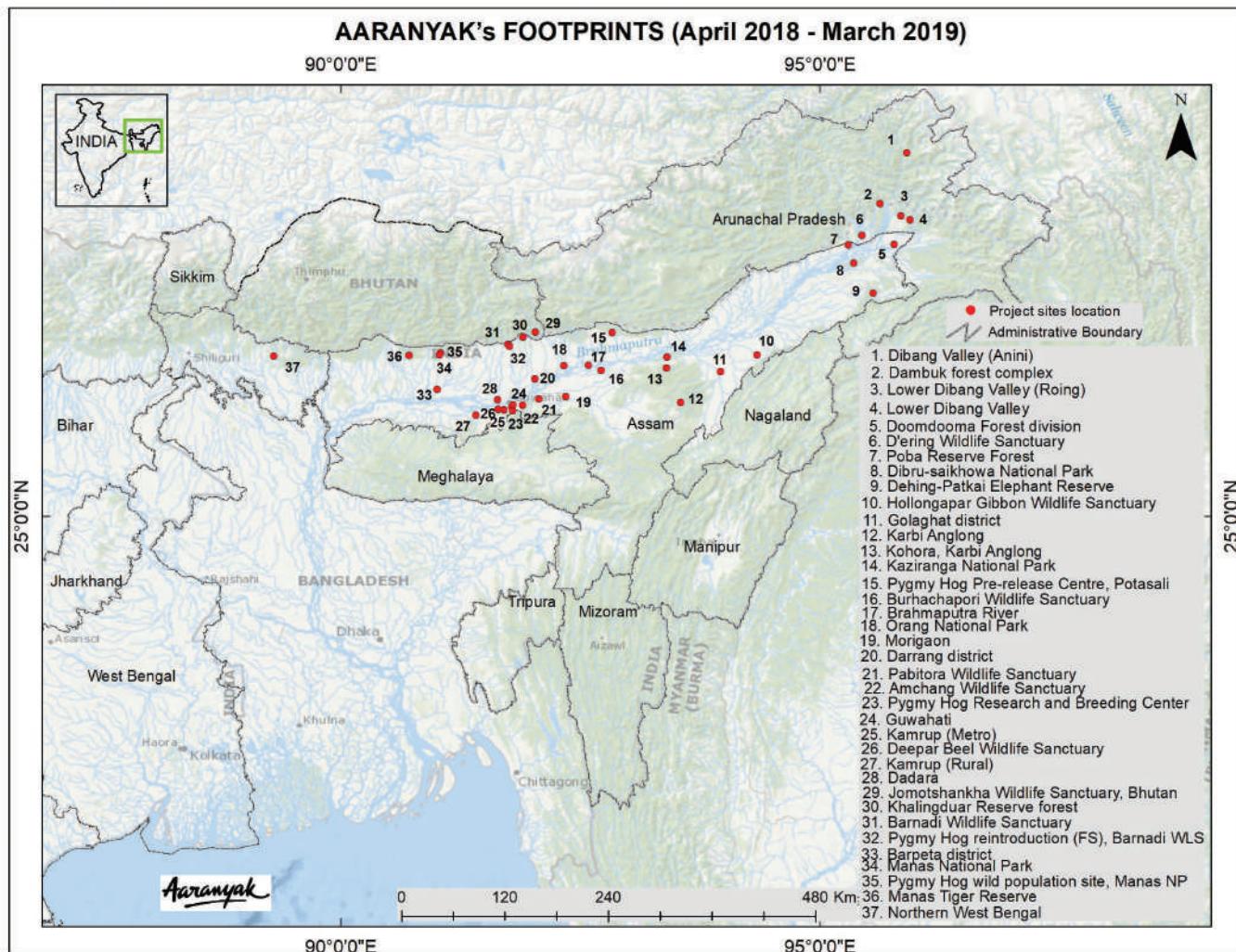
Prof. Qamar Qureshi

Prof. S. K. Dutta

Chief Wildlife Warden of Assam

Secretary General of Aaranyak
as Member Secretary of RAB

AARANYAK'S FOOTPRINT



NOURISHING NATURE TO SECURE OUR FUTURE

We strive to protect nature and its resources ranging from animal and plant species, forests, various water bodies, mountains, as we believe that welfare of our communities is intricately linked to pristine nature. We work to secure a future for all species that are under any sort of threat. We bank on scientific means, law, advocacy, community engagement, education and much more, in our endeavour to protect land, water, and climate that are vital for survival of all animal and plant species. The efforts to leave behind a vibrant nature face a range of national and worldwide threats to biodiversity that include overpopulation, climate change and man's quest for rapid development. Now into the 30th year of our mission, we try hard for continued expansion, creativity, and unrestrained action for protection of most endangered species, rivers and water bodies, mitigating impact of changing climate in North East India.

Aaranyak

Administrative Office

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