

Annual Report 2015-16



Achievements

Skill building
on conservation for

100+
youths

**K9 dog
squad**
helped nab
hardcore
wildlife
criminals

Community-based

Flood
Early Warning
System
implemented
in Lakhimpur

3000
people &

100

organisations
join the river side

cleaning
programme

Multiple trainings
for Forest officials
across north-east
and Bhutan on
species and habitat
conservation and
genetic population
estimation

Winter jackets,

shoes,
torches &
raincoats
provided to
frontline
forest staff

Elephant

conservation
awareness campaign

reaches

16000 students
& 34 schools,
200 teachers

Multiple

Remote

Sensing,

GIS & GPS

trainings

“Coolest
North easterner
2014”

award

Report of New

Primate

Species

for India

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.

Aaranyak

ANNUAL REPORT 2015-16

C O N T E N T S

From the Desk of Secretary General and CEO, Aaranyak	01
Acknowledgements	02
Background	04
Executive Committee Members	06
Avifauna Research and Conservation Division	07
Conservation and Livelihood Division	11
Elephant Research and Conservation Division	15
Environment Education and Capacity Building Division	19
Gangetic Dolphin Research and Conservation Division	23
Geo-spatial Technology and Application Division	27
Herpetofauna Research and Conservation Division	31
Legal and Advocacy Division	35
Primate Research and Conservation Division	39
Rhino Research and Conservation Division	43
Tiger Research and Conservation Division	47
Water, Climate and Hazards Division	51
Wildlife Genetics Division	55
Conferences and Seminars Attended by Aaranyak Staff	59
Workshops and Trainings Attended by Aaranyak Staff	60
Workshops and Trainings Organized by Aaranyak	62
Membership with other organizations	63
Publications	64
Financial Reports	66
Find Aaranyak	75
Staff of Aaranyak during 2015-16	76
Aaranyak's Footprints	78

From the Desk of Secretary General and CEO, Aaranyak



Aaranyak has grown with yet another year's of new experience towards leading and assisting conservation actions in North East India during 2015-16. Our researchers and conservation workers have been active in the field trying to contribute further towards overall conservation of biodiversity in the region. We have witnessed that the climate and overall environment of our region is changing fast. Winters are becoming shorter and summer and hot and humid days are increasing in past one decade. Restoration of degraded forest areas and plantations in all vacant land areas are crucial to counter the adverse effect of climate change on humankind and wildlife.

To cater the need of strengthening our overall biodiversity conservation approach keeping human well being in mind we have been updating our strategy and priorities to better leverage Aaranyak's unique strengths and assets in having diverse human resources, allowing us to more effectively address the challenges the North Eastern India are facing. We work with like minded conservation organisations in the region to compliment each other's efforts to achieve our common conservation goals. Forest departments of the region are always part of our conservation planning and field level activities.

During 2015-16, Aaranyak along with its local partner received the ' Sansad Adarsha Gram Yojana- Good Practices Award', from the Ministry of Rural Development, Govt. of India during an event in Bhopal, Madhya Pradesh, on 24th September 2015. The award was conferred for the 'Traditional Community Managed Irrigation System in Subankhata, Baksa District, Assam, jointly to Aaranyak and the Uttar Ancholik Dong Bundh Committee, Subankhata. This is indeed a great example of working in partnership with local grassroots level organisations.

Aaranyak is fortunate to have a colossal band of young, energetic conservation workers, all from the North Eastern region of India, dedicated to shoulder hard field condition in diverse challenging terrain to contribute towards the need of biodiversity conservation to ensure ecosystem good and services are used in sustainable means. Whatever efforts we are part of in diverse conservation actions, is not for ourselves, but for humanity and all life forms. To continue our efforts in days to come, we seek support, cooperation and partnership from all stakeholders, specially from local communities as we need to make better environment a movement of common people to ensure that we live in green and clean environment.

(Dr. Bibhab Kumar Talukdar)

Acknowledgements

Government Departments:

Assam Forest Department;
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 West Bengal Forest Department;
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 Department of Environment & Forest,
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 Department of Education, Government of
 Assam;

Organizations/Institutions

WWF-India;
 Bhumi;
 Laokhowa-Burhachapori Conservation
 Society (LBSC);
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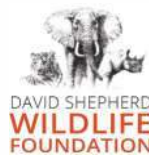
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BACKGROUND

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 DibruSaikhowa. 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 26 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 13 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.

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 (2015-16)



Ranjan Bhuyan,
President

Dilip Chetry, PhD.
Vice-President

Bibhab Kumar Talukdar, PhD.
Secretary General & CEO

Jimut Prasad Sarma,
Finance Secretary

Bibhuti Prasad Lahkar, PhD.
Programme Secretary

Abdul Wakid, PhD.
Organizing Secretary

Udayan Borthakur,
Publicity Secretary

Partha Jyoti Das, PhD.
Executive Member

M Firoz Ahmed, PhD.
Executive Member

Shyamal Dutta,
Executive Member

Rajib Rudra Tariang
Executive Member

**AVIFAUNA
RESEARCH AND
CONSERVATION
DIVISION
(ARCD)**



AVIFAUNA RESEARCH AND CONSERVATION DIVISION

The division includes two projects focused on conservation and population monitoring of two globally threatened species- Bengal Florican & Greater Adjutant Stork in the Brahmaputra Valley.

Bengal Florican Project

Bengal Florican is a Critically Endangered (IUCN, 2008) bird, restricted to the *terai* grassland regions of the Indo-gangetic floodplain and the Brahmaputra floodplains. It is found in India, Nepal and Cambodia with an estimated global population around 1000 individuals. This is the highest of IUCN's categories of endangerment, and is only applied to the species closest to extinction. Currently it has got the highest protection status as it is listed in Schedule I of the Indian Wildlife (Protection) Act of 1972. It is now in the Critically Endangered list of the IUCN. It is also listed in the CMS Convention, and CITES Appendix I, to both of which India is a signatory. Bengal Florican has been identified as one of the species for recovery programme under the Integrated Development of Wildlife Habitats (Centrally Sponsored Scheme) of the Ministry of Environment and Forests, Government of India, 2009. With the aim of strengthening the conservation of this critically endangered bird, the population of Bengal florican in Manas is being monitored on an annual basis involving communities on different conservation based activities.



Survey of Bengal florican in D'ering



GPS training for local youths

Major Achievements

- Assessed the grassland habitat of D'ering, Arunachal Pradesh but no direct sighting of Bengal florican recorded
- Interaction and discussion with local people and Forest department confirms presence of Bengal florican in grasslands of D'ering, Arunachal Pradesh

Strategic Activities

- Youths from local NGO and forest staff were trained to use GPS for long term monitoring and recording of sightings of Bengal florican in the grassland areas.
- Monitoring of identified Bengal florican territories and assessment of impact of threats to florican habitat.

Impact

During our survey some threats were identified

- High anthropogenic disturbance
- Thatch and reed collection from grassland areas also recorded

Road Ahead

- Annual Bengal florican population survey will be conducted to know its current population status in new grassland areas
- Identification of Bengal florican territories in new grassland areas and monitoring of identified territories.

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Greater Adjutant Stork Project

Endangered Greater Adjutant (*Leptopotilos dubius*) is distributed in Assam and Bihar in India and in Cambodia with less than 1000 global populations. Concerned over the rapid decline in the population globally, Aaranyak initiated a community based conservation project in 2009 to protect the population of this stork species. Currently Assam harbours about 700-800 individuals of this bird which is about 80% of its global population. Greater Adjutant makes nesting colonies in privately owned trees in thickly populated villages. So, support of nest tree owners and local villagers are crucial for conservation of this bird. Lots of scientific investigations are required to develop a conservation action for the species.

Major Achievements

- Purnima Devi Barman, the team leader of Greater Adjutant Conservation program was honoured with "Coolest Northeasterner 2014" by ThumbPrint online magazine.
- Shewas also a winner UNDP India Biodiversity Award in 2016.
- She also received Prestigious RBS Earth Hero under Save the species category by Royal Bank of Scotland in 2016
- She is also the winner of Prestigious Green Guru Award by Balipara foundation.



Hargilla game

Strategic Activities

- The Division honoured 5 tree owners family With "Hargila Mitra" Award in Nagaon nesting colony. The team celebrated wildlife Week with school children in Nagaon nesting colony. Very recently we organized a "Hargila Mitra Campaign" in Nagaon district of Assam. Nagaon used to harbour about 100 nests till 15 years back, but is now reduced to only couple of nests due to cutting down of nesting trees. The campaign is aimed at creating a similar impact in the area, similar to Dadara.
- Aaranyak in collaboration with Kamrup District Administration and Emami Ltd, Amingaon facilitated nets under nesting trees of Greater Adjutant in Dadara, Pachariya and Singimari village. 120 nets were supported by Kamrup District Administration.
- With staunch support of Kamrup District Administration, Aaranyak installed 15 conservation hoardings with engaging conservation messages and information. One of this hoarding includes legal information on Greater Adjutant on Wildlife protection Act 1972 which was prepared by Ajoy Kumar Das, Associate Lawyer of Aaranyak.
- With support from SIRD and KDA, Aaranyak formed 14 Women self-help groups of 70 members in Dadara to support the livelihood mechanism for women. These women were motivated to weave traditional clothes with stork motif not only to enhance their livelihood but also to create awareness among

masses with their weaving skills. The women were motivated to inherit the stork motif to their future progeny as their culture and tradition. The women names as 'Hargila Army' took pledge to protect Greater Adjutant from any obstacles.

- Integrating traditions in conservations has a major impact for emotional sensitization to community. Keeping this in mind, Aaranyak Greater Adjutant team organized stork baby shower every year. The program was organised with women community every year. This year the stork baby shower was organised in a local temple in Dadara which was highlighted by All India Radio.
- Mythology can be an effective tool for protecting an endangered species. Greater Adjutant is called as Garuda (the bird vehicle of Lord Vishnu) in Bihar mythology and people treat this bird as God. We used this mythology to sensitize the women group. On 5th September 2015, an awareness program was held during *Janmastomiutsav* (birth Festival of Lord Vishnu) with women communities of Dadara. The women were motivated to write *Naam* songs (Prayer songs) with Hargila conservation message and street drama to sensitize others.
- With support from Kamrup District Administration, local police, local villagers, Assam State Zoo, Hajo Range office, GAS team rescued and released several chicks in Kamrup District. The chicks were named after schools kids, toddlers of the village.
- The team leader Purnima Devi Barman has been continuously studying different behaviour parameters and monitoring nests by constructing bamboo platforms.



Net fitted under tree

Impact

Local community has developed ownership feeling for the presence of this bird in their villages. Women offer regular prayer for Greater Adjutants in ritual festivals. Local drama group performed street plays regularly in religious functions of the villages. Women developed 12 self help groups (Hargila Conservation Family) and now working for conservation of this rare bird of their own in the villages. Local youths now keep monitoring nests and they rescue the nest fall birds, if they came across. Local school sustained the campaign of their own and they become the guardian of the species in these villages. They displayed a bird statue to offer prayers by the students and create awareness. Greater Adjutant Pride campaign now becomes an important program of Village *Geeta Bhagawat* procession where more than 10000 people participate every year. Local police becomes the important key stakeholder of the species conservation programme. The Colony became globally famous for our work. The nests numbers has increased in the colony. In 2006 there were only 30 nests and last year we could count 171 nests. From 2010 not a single nesting tree has been cut.

Road Ahead

- To expand extensive awareness campaigns throughout Assam.
- To continue the community conservation activities in Dadara, Pasariya and Singimari villages.
- To do a plantation program in order to support nesting and increase resting trees of the bird.
- To design well planned incentive programme for the communities, especially for the tree owners.
- To establish a community conservation protected area and establish a community interpretation center with support from Government of Assam.
- To do sufficient research on different aspects of ecology, molecular biology, food toxicity of the bird.
- To design well planned rescue and rehabilitation for the Greater Adjutant Stork chick those fall off their nests.

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CONSERVATION AND LIVELIHOOD DIVISION (CLD)



CONSERVATION AND LIVELIHOOD DIVISION

The support, cooperation and constant contribution of the local communities' living adjacent to protected areas like Manas National Park is an integral part of long term conservation. There are 62 thickly populated villages on the southern boundary of Manas National Park, and the villagers' livelihood is closely dependent on forest resources. Despite the ecological and economic importance of the forests of Manas, ecosystems in the Park have been subjected to great stress and continue to face multiple threats due to lack of livelihood generating activities to enhance economic state of the communities living in fringe villages of Manas NP.



Beneficiaries of NGO - United Social Welfare Society, Kahitama with piglets in their piggery farm supported by Aaranyak



Beneficiaries of Raigajuli NGO, Chirang in Khuklung Dairy Farm supported by Aaranyak

Providing an alternative sustainable livelihood option to these communities, who are directly dependent on forest resources, will contribute towards reducing the depletion of natural resources of Manas. Through this Division, Aaranyak has been working with communities living in fringe areas around Manas since 2009 to redirect their livelihood and reduce dependency on forest resources, through motivation and awareness.

Major Achievements

- Construction of Weaving shade and Training centre were completed in January 2016.
- Three Dairy farms were constructed and a total number of 62 cattle were delivered
- One Pig Farm was constructed and a total number of 43 piglets were delivered
- Six fishery ponds were cleaned, repaired and fish fingerlings were distributed.



Glimpse of Khuklung Dairy Farm

Strategic Activities

- Aaranyak initiated Self Help Groups (SHGs) participated in local level fair during Sri Krishna Rash Mahotsav from 26th November to 12th December 2015 for exhibiting our products and market linkage.
- As part of market linkage, two SHGs participated in "3rd International North East Agri Fair" 2016 which was organised by Assam Agriculture University and Department of Agriculture, Govt. of Assam.
- For scaling up the current Food processing activities, light weight electronic juicer machine, sealing and packaging machine were procured and provided to the SHGs.



Beneficiaries with piglets of Daibajrang NGO, Udalguri supported by Aaranyak

- Mushroom spawns were provided to 50 individual women SHG members near Bhuyanpara Range of Manas National Park.
- Currently regular monitoring of all the SHGs' activities and their progress is in place.
- Consultative meeting with beneficiaries are held regularly.

Impact

In continuance with the previous years' impact, two SHGs supported by the Division continued to earn more than Rs. 20,000 by selling fish. SHG working on food processing and preservation are also continuing to earn around Rs. 18000 by selling their pickles, jam and jelly. SHG working on weaving were able to earn nearly Rs.40,000 by selling hand woven products. SHG working on Mushroom farming were also able to earn around Rs. 23000 by selling fresh mushroom in the local markets, as in the previous financial year. Beneficiaries of Dairy Farming are currently earning Rs. 9000 (approximately) by selling cow urine that is used for organic

manure and insecticide purposed and will be scaled up later.

Road Ahead

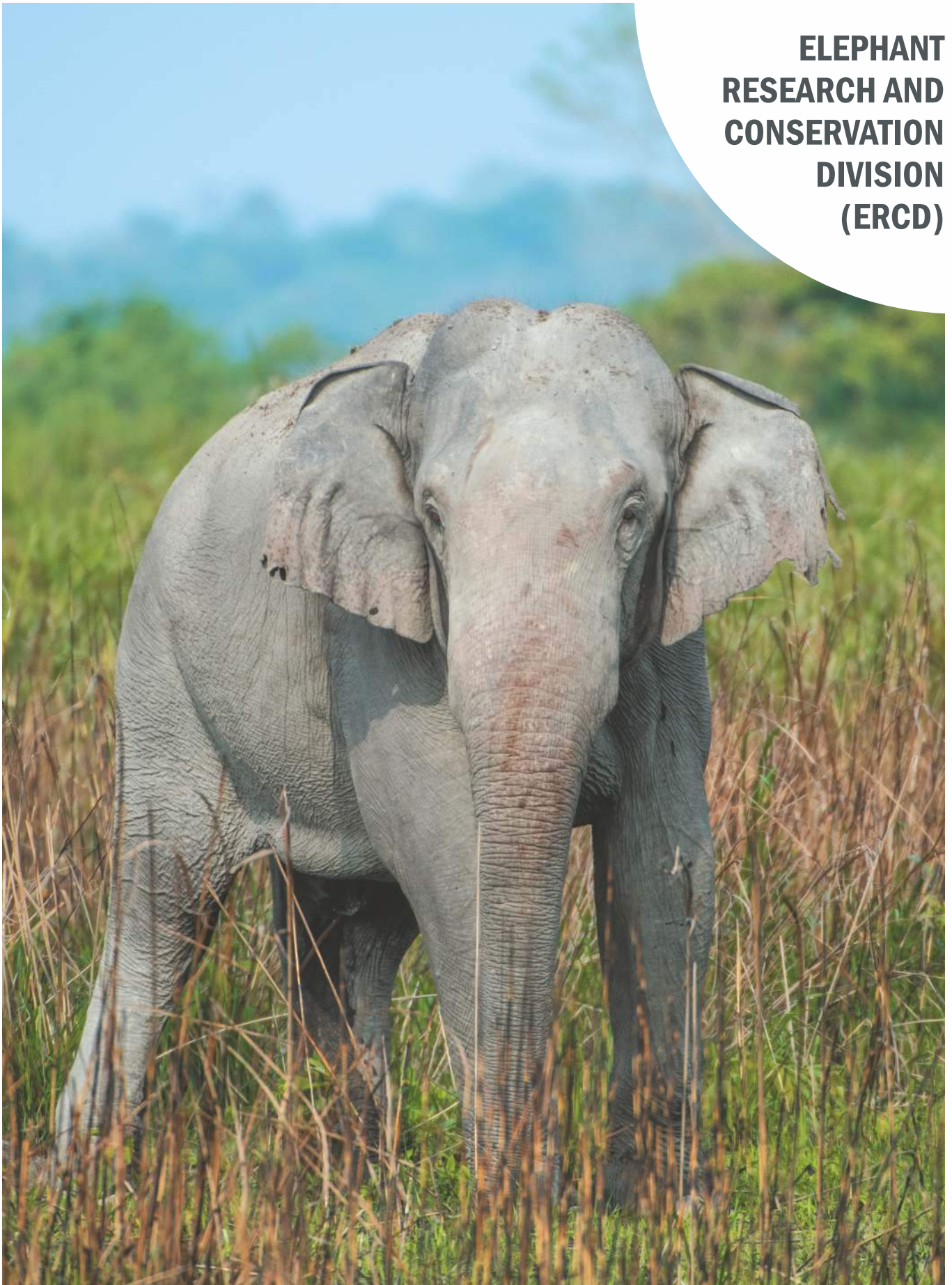
- For the upcoming year, the Division plans to distribute the following among local SHGs to promote livelihood options – 91 cattle and 173 piglets. 55 cattle and 33 piglets will be artificially inseminated
- 8 number of farms are planned to be constructed in the work area
- For long term sustenance some important strategic steps were taken up like linking up with available government schemes mainly for market linkages, and this will be continued further.
- The DC of two districts has already visited the Dairy farms initiated by Aaranyak and the Division will continue its efforts to link up government schemes to these farms for market linked chains.

- Aaranyak will facilitate the targeted SHGs to participate in events like trade fairs, agriculture shows and exhibitions organized by the state government, Bodoland Territorial Council and other private agencies round year in Guwahati and other cities.

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**ELEPHANT
RESEARCH AND
CONSERVATION
DIVISION
(ERCD)**



ELEPHANT RESEARCH AND CONSERVATION DIVISION (ERCD)

Since its inception, ERCD targeted to generate information on population status, distribution pattern and habitat conservation along with mass outreach on conservation issues among local stakeholders. The mitigation of human-elephant conflict is a key activity under this division while the participation of local community in the conservation programme is a vital part of the entire division. There have been several positive outcomes under this division over the years that achieved favourable response from the government agencies and successful implementation later on. At present, ERCD has been working in the Manas landscape including Manas National Park and eastern and western part of Chirang-Ripu Elephant Reserve, Golaghat district and Dehing-Patkai Elephant Reserve in eastern part of Assam and also in some parts of north Bengal.

Major Achievements

Dehing-Patkai WLS-

- The population of the sanctuary has been estimated during 2014-15. This year we continued our effort outside the sanctuary for more sampling. However, we are yet to analyse the recent data on population status.
- Abhijit Boruah, researcher at ERCD selected for a talk at the Students Conference for Conservation Science at Bangalore during September 2015. He presented on the population status of Asian elephants in Dehing-Patkai WLS.

Golaghat landscape –

- *Asiyo haatir bidyalay yatra* covered 34 schools across the district on elephant conservation.



Woman participants of Micro Enterprise Development Training



Group photo of Trainee Teachers at Workshop
“Haati Goes to School” in Jorhat.

Jorhat and Golaghat landscape-

- *Haati goes to School* Program conducted 4 workshops and where 146 teachers were trained on elephant conservation. The trained teachers have motivated 18250 students in the span of just 1 year, on Human- Elephant Co-existence and Conservation through different educational programs in Golaghat and Jorhat districts of Assam.

Subankhata-

- Ministry of Rural Development, Government of India has awarded the Divisions Restoration work along with Uttarkuchi traditional irrigation dhunh committee in Subankhata as a good practice. Ministry of Rural Development, Government of India received a total of 592 entries from different state of India, out of which we were one of 31 initiatives invited to present at the National Workshop on Good Practices in Rural Development Sectors on 23rd – 24th September, 2015 held at Bhopal, India.

Red Cap Project-

Decrease in the number of crop raiding specially in areas where community guarding system or Village Anti-depredation

Committee has been well organized.

Grassland management project-

- Best methods for control of *Chromolaena odorata* has been established

Strategic Activities

Dehing Patkai landscape

- The elephant population was estimated inside the sanctuary area for the first time. Present survey going to estimate the status in the Elephant Reserve area
- Human elephant conflict (HEC) in the region was assessed. So far, 102 HEC incidents were recorded during last one year.
- Elephant presence and use of three corridors (Bogapani, Golai and Katha) were assessed during last one year.

Golaghat Landscape –

- Human elephant conflict survey in the islands of Brahmaputra river in the eastern part of Kaziranga National Park
- More than 300 social interviews were conducted in 12 villages near elephant corridors to find their dependency on corridors.
- Micro-enterprise development training was held in March 2016 for selected Women Self Help

Groups. A total of 34 women participated in three day long training programme. With this training programme a platform was provided for knowledge sharing and to give them orientation to various enterprises.

- So far 350 interviews has been conducted in the conflict villages to gather socio economic status and perception to elephants to micro plan for HEC in Golaghat district.
- An effort on community conservation for Asian elephant is in process.
- Micro plan development for HEC mitigation is going on.

Manas landscape

- Population estimation of Asian elephant in Manas national Park following dung count method. So far, the field team has conducted 60 no of transects to count the dung piles of elephants. These one off transects are spatial replicates. Apart from the foot transects, the team surveyed 23 vehicle transects for direct count of elephants. There were 24 no of fresh dung piles that were marked and are monitored regularly.
- Aaranyak in collaboration with Forest department imparted training on elephant census following indirect method to the staff of Ripu Chirang Elephant Reserve and Royal Manas NP stretching from Haltugaon division to Udalguri division. The trainings were held in Jharbari range (Haltugaon), Bansbari Range (Manas National Park), Kumarikata Range (Mushalpur Divn) and Nonoi Range (Udalguri) from 2nd of February to 12th February 2016. More than 240 forest staff along with members from 6 different NGOs took part in the training.



Aaranyak researchers carrying out line transect method for elephant population monitoring in Manas

Red Cap Project-

- Continued monitoring of human elephant conflict in southern villages, at the periphery of Manas NP.
- Strengthening the community guarding system.
- Monitoring of highland machans
- Help strengthen the community guarding system by providing search lights, mosquito nets and plastic sheets to 54 local groups.

Subankhata Project-

- Monitoring forest restoration area
- Monitoring of community based electric fence
- Conservation education-summer school, mass awareness
- Alternative livelihood support such as mushroom farming, piggery, tailoring, bee keeping to victims of HEC and marginalized family who are dependent on forest resources.

Grassland management project-

- Monitoring of the existing status of invasive species in Manas NP.
- Monitoring on ungulate distribution that are impacted by invasive species

- Experiments conducted to identify the best control methods for the targeted invasive and for better management practices.

Impact

- The survey results of our population status in Dehing-Patkai sanctuary have been used by Department of forests in their proposal to upgrade the Sanctuary into a National Park.
- Our results on recent survey on elephant corridors has been used by Dr. Kashmira Kakati as a supporting material in the petition against developing a high way bypass through the forests of Digboi.
- Decrease in the number of crop raiding specially in areas where community guarding systems are in place.
- 14 km community based electric fencing in Subhankhata, has reduced the morality human live by almost 100%.
- Summer school is motivating local kids to concentrate on their study and also generate love for nature.
- Successful experimental plots for invasive are being adopted by park authorities and other organizations.

Road Ahead

- To extend our network of activity in the adjoining state of West Bengal with support from West Bengal Forest Department.
- ERCD will continue to focus on enhancing trans-boundary conservation efforts in two major inter-national conservation areas (Indo-Bhutan and Indo-Myanmar).
- ERCD plans to establish conservation networks across these landscapes at the management level. This will assist in establishing movement patterns of the elephants and identifying the international corridors. The human elephant conflict is rising concern for Asian elephant in the entire north east India. The ERCD aims to help in mitigating human elephant conflict in the region with support from local people.
- Enhancing the traditional crop guarding methods with new advanced practices is a key target for ERCD in next five years. Training and capacity building of local biologist to contribute towards elephant conservation will be a top priority.
- Studies on grasslands are very few and we have plans to continue our work on grassland ecosystem and its associated fauna. We have a future plan for habitat restoration to benefit an array of grassland dependent species.

Contact

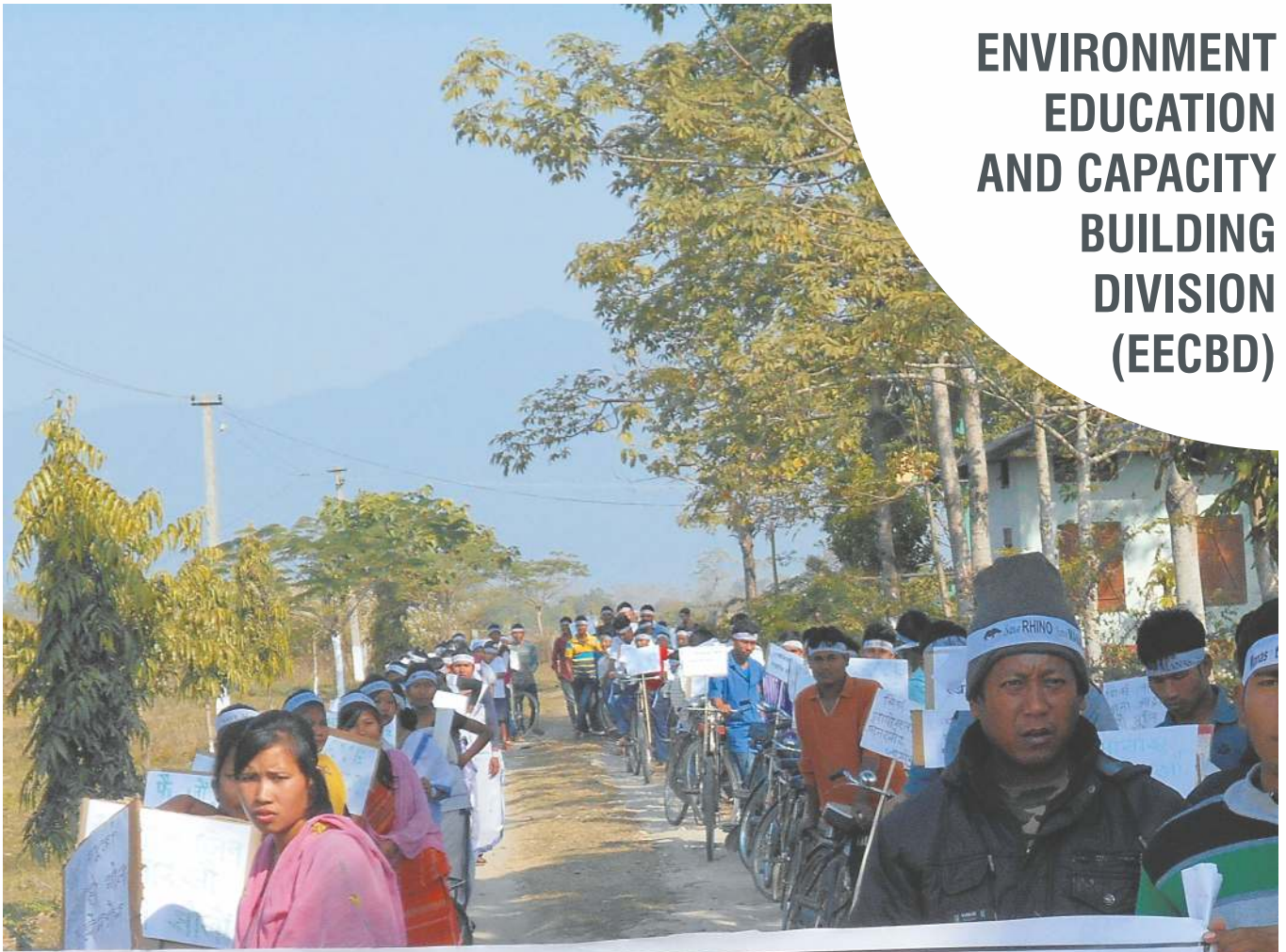
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**ENVIRONMENT
EDUCATION
AND CAPACITY
BUILDING
DIVISION
(EECBD)**



SAVE THE RHINO SAVE MANAS

People Rally to Create Conservation Awareness

at the Fringes of Manas National Park

Aaranyak



MMES

**Manas Bhuyanpara
Eco-tourism
Society**



ENVIRONMENT EDUCATION AND CAPACITY BUILDING DIVISION (EECBD)

Environment Education (EE) is a process of learning which has been evolving worldwide with time. The challenges that can be addressed through EE are mostly related to human persuaded issues, and public education and outreach are measures for its solution. EE is not only confined to creating awareness and outreach, but also makes people understand about the environment and associated problems in order to develop skills and expertise to address challenges, foster attitudes, motivations and commitments necessary for action. The division is growing with this concept and experiencing diverse activities with varied target audiences and emerging contemporary thoughts like experiential education, outdoor education, place-based education, citizen science etc. For instance, in student-centred education we found transformative learning technique is successful when activities are designed through infusion with the curriculum. To propagate our EE efforts worthwhile and effective emphasis has been given on designing apt strategies, approach and education materials.

Major Achievements

- Capacity building activities that included workshop on green reporting, young naturalists indirectly supporting and encouraging conservation managers in Kaziranga National Park, Burhachapori Wildlife Sanctuary and Laokhowa Wildlife Sanctuary of Assam.
- Capacitated more than 100 youths to lead conservation education in grass-root levels in Assam and Nagaland.
- Species specific conservation messages reached more than 40,000 listeners across the State of Assam through utilization of the Radio as a media.



Jayanta Kr Pathak, Manager, EECBD interacting with children and community regarding rhino conservation at Dhania, Bura Chapori Wildlife Sanctuary

Strategic Activities

During the year, EECBD has precisely conceptualized, developed, and successfully executed number of activities in different part of the region. We were able to reach over 50,000 target audiences through various activities such as public outreach, awareness and sensitization, capacity building training and workshop.

Some of the activities were:

Education and Outreach:

- **Radio Talk:** A series of radio programme on biodiversity conservation has been designed jointly with All India Radio Guwahati. The series titled, 'Aamar Aranya' has been able to spread conservation messages successfully on amphibians, inland fishes, vultures, tiger as well as human wildlife conflict to over 40,000 listeners across the state.
- **Community Outreach:** The division reached over 8,000 fringe people directly through various activities like conservation theatre, awareness rallies, community awareness meeting that were carried out in and around Laokhowa and Burhachapori Wildlife Sanctuary (LBWLS), Manas National Park (MNP) and Kaziranga National Park (KNP).
- **Awareness and Sensitization:** Over 3000 school students reached directly in and around Guwahati, LBWLS, MNP, KNP and Rajiv Gandhi Orang National Park with key conservation messages. Besides the Division has organised a nature camp for the young professionals too.
- **Guest of the Month:** The aim of the program is to formulate conservation policies for the vital environmental issues through galvanising intellectual thoughts of key persons of the state and Aaranyak for participatory



"Aamar Aranya": a moment of recording of an episode on inland fishes at All India Radion Guwahati



Dr Bibhab Kumar Talukdar, Secretary General of Aaranyak, delivering speech on Rhino conservation in Assam

mitigation measures. Further through this program it is intended to percolate the approaches that have been taken by Aaranyak to the masses.

Capacity Building:

- Conducted training at KNP to capacitate a group of vibrant youths as naturalist. 31 youths representing 20 fringe villages covering four administrative districts of Assam had participated in the four-day long residential training held in March, 2016. The "Capacity

building training for the young naturalist" was focused to provide understanding on documenting observation, developing an EE program, PRA techniques, eco-tourism, and stimulating critical thinking.

- Khonoma, Nagaland has its unique identity in the conservation arena that received global appreciation for its community based conservation practices. The Division organized training at Khonoma village of Nagaland during February, 2016. Officials of local conservation organizations, representatives of



Successfully trained for Conservation Theatre to sensitize community on various conservation issues

Khonoma students union, local tourist guides, nature lovers as well as students participated in the training.

- The Laokhowa and Burhachapori Wildlife Sanctuaries are lesser known among eco-tourists inspite of its pristine beauty. In an effort to promote eco-tourism in the area, a capacity building training for the local youths and frontline staffs of forest department was successfully conducted at Burhachapori Wildlife Sanctuary in December, 2015. Over 60 participants from Laokhowa-Burhachapori Complex actively participated in the training. The training focused on building of eco-tourist guides, conservation educators from that locality.
- A two-day long training titled 'Teachers for Conservation' was organised at Uttarkuchi, Baksa in Manas Tiger Reserve for the elementary and high school teachers in July, 2015.
- To fulfil the need for environmental journalism in the

region we organised workshop on Green Reporting in the month of November, 2015. It was an effort to bring together correspondents of regional media houses, senior journalists, journalism students, and together take a firm step towards concentrated efforts for promoting the message of conservation through the media. We have observed positive impact of this orientation on the ground.

Impact

More than 90% participants reported the training for young naturalists as an eye opener for them and currently they are associated with conservation education related activities around KNP and beyond. Participants of capacity building training of LBWLS has organized mass awareness activities around LBWLS through which we reached more than 3000 people with key conservation messages. As follow up of Green Reporting it has been observed that vital conservation issues received attention from media and which indirectly supported conservation

managers in their day-to-day functioning at respective sites.

Road Ahead

- EECBD will continue to give emphasis to making its efforts meaningful and effective through designing apt strategy, approach and education materials.
- The division will work to advance environmental literacy and community engagement through education, training and public awareness and sensitization to ensure conservation in the region.
- The division will expand its work both thematically and geographically involving strategic partners across the region for a sustainable future.

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**GANGETIC DOLPHIN
RESEARCH AND
CONSERVATION
DIVISION
(GDRCD)**





River island cleaning programme in Suwalkushi



GANGETIC DOLPHIN RESEARCH AND CONSERVATION DIVISION (GDRCD)

Gangetic Dolphin Research and Conservation Division was established in 2005 with an aim to undertake long term conservation activities on the Gangetic dolphins of Brahmaputra river system in association with all concerned stakeholders. With dedicated survey boat, man power, equipments and community support, GDRCD is one of the best recognized dolphin conservation programme in India. Besides working on the Ganges River Dolphin of Brahmaputra river system, GDRCD has also been working on the dolphins (Irrawaddy dolphin and Indo-Pacific Humpback dolphins) of the Indian Sundarban of West Bengal.



Inauguration programme of Mission Clean Brahmaputra in Guwahati



Students coming through Aaranyak boat to participate in dolphin habitat restoration programme

Major Achievements

This year GDRCD conducted the 'Mission Clean Brahmaputra' as an attempt to restore important dolphin habitats in Brahmaputra river system. As a part of this Mission, total 55 community youths were given extensive training on waste management to keep the river side clean. River side cleaning activities were conducted in 28 sites, where about 3000 local people and more than 100 organizations participated. Mass awareness was conducted on keeping the river side clean in and around important dolphin habitats in Brahmaputra Valley.

Strategic Activities

Project: Restoration of important habitats of Gangetic dolphins in Brahmaputra river system

- Restoration activities were conducted in 28 important dolphin habitats.
- From 28 DCN sites, 55 community members were trained on the habitat restoration works of Gangetic dolphins, with special focus on waste management.
- About 3000 people from about 100 different organisations participated in the river side cleaning programme.
- Plantation programme was carried out in 20 sites.

Impact

The biggest impact of this project is to start the clean Brahmaputra campaign, which brought together a large number of youths and community organizations.

Road Ahead

Working towards

- Reducing the human caused pressures on the Gangetic Dolphins and their habitats
- Increasing their population in association with all concerned stakeholders.

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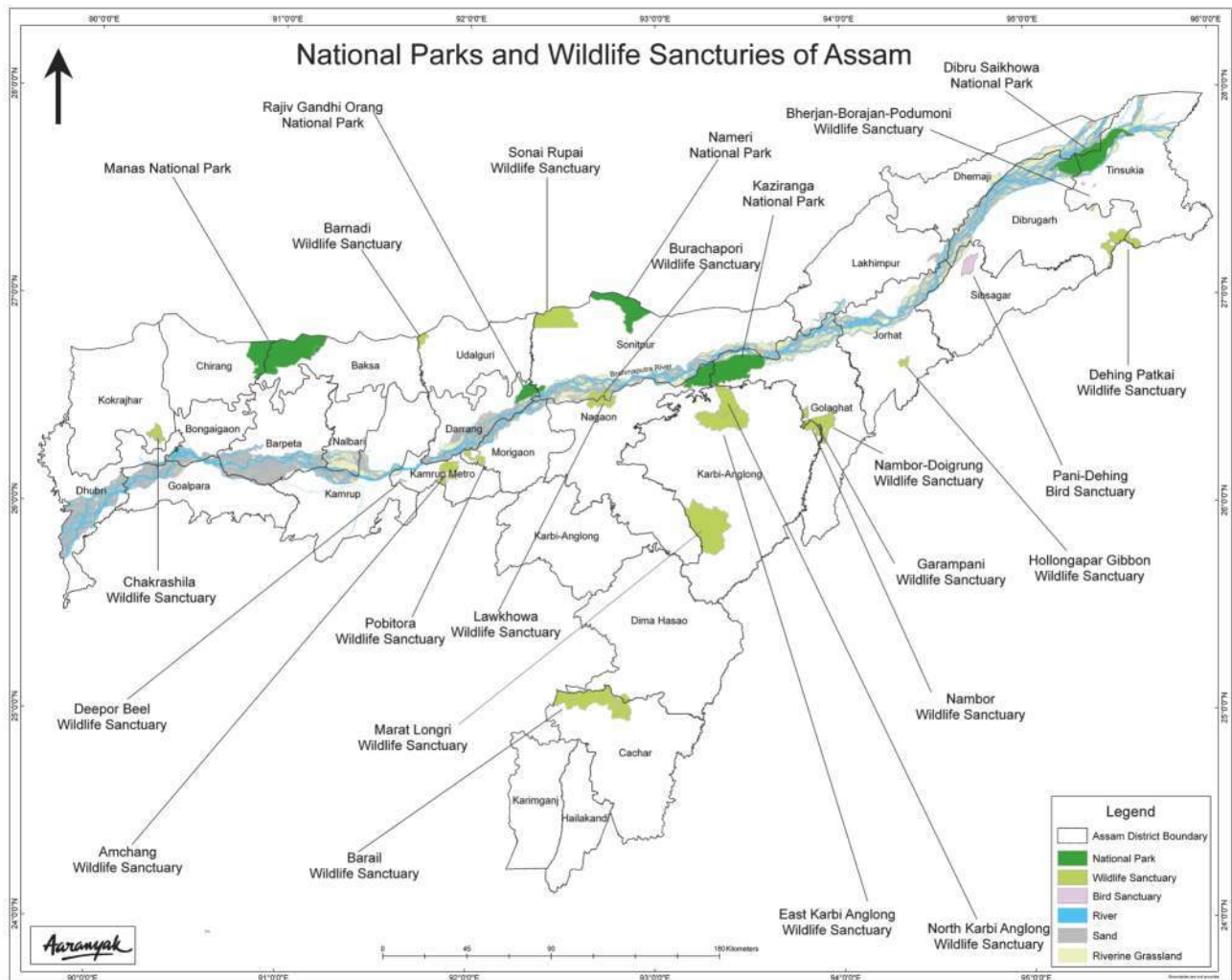
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GEOSPATIAL TECHNOLOGY AND APPLICATION DIVISION (GTAD)



GEOSPATIAL TECHNOLOGY AND APPLICATION DIVISION (GTAD)

Aaranyak has introduced this Division in the year 2004 as, Geo-Spatial Technology and Application Division, with the aim of bringing an understanding of the biological diversity of the vast landscape of this region. The division has continuously carried out research work in collaboration with the other research divisions of the Aaranyak on various aspects related to biological diversity and earth science. Apart from this the division also serves governmental and non-governmental organisation and academic institutions of the region.



Trainees at Assam State Zoo, Guwahati during hands on GPS training

The thrust areas of GTAD includes multi-temporal analysis of River basin using Remote Sensing and GIS, wetland mapping and analysis in different time period, Mapping of Human-Wildlife conflict in selected areas of Assam, Google Earth based GIS database creation, Providing necessary support through maps and other geo-related information to the concerned authorities for conservation and management of biodiversity in the region and popularizing the technology of Remote Sensing and GIS through training and capacity building among the young conservationist and imparting GPS hands on training to front line staff of forest department.

Major Achievements

- Imparted Remote Sensing, GIS & GPS training to 60 participants i.e. Bachelor degree students, Master degree students, PhD scholars, College faculties and NGO personals.
- Imparted hands on GPS training to forest staffs.
- Three research papers co-authored by Arup Kumar Das, Manager, GTAD, were published in peer reviewed Journals.

Strategic Activities

- Organized 18th & 19th One week Course on “Remote Sensing, Geographical Information System and Global Position System in various fields” attended by the 32 numbers of participants mostly research scholars, college faculties, and college / University students from various institutions.
- A week long state level workshop on Remote Sensing, GIS & GPS was jointly organized by Dr. B. K. B. College, Puranigudam, Nagaon & Geospatial Technology and Application Division Aaranyak for college students.
- Technical support to other divisions of Aaranyak:



Trainees during pre evaluation test before the Remote Sensing and GIS training.



Arup Kumar Das of GTAD Aaranyak taking class during one day workshop on GIS in the field of Wildlife Conservation Biology in the department of Zoology, Digboi College.

- Analysis and mapping on Land Use/ Land Cover for Ranganadi River catchment area using multispectral satellite data of the year 1991, 2001 & 2014. This work was carried out under WATCH, Division of Aaranyak.
- Google earth based micro level study of Jiadhal-Dihiri village of Dhemaji district of Assam. The GIS & GPS based study was carried to prepare the Land Use/ Land Cover and sand casting area maps for 2011, 2013 & 2016 for winter season. In addition, Vulnerability analysis and mapping was also done for the year 2016 under the WATCH, Division of Aaranyak.
- Land use/ Land Cover change detection of Numaligarh and adjoining areas for the years 1989, 2001, 2010 & 2015.



Arup Kumar Das demonstrates on hands on GPS to the participants during one day workshop on Geospatial Techniques in Ecological Studies in the department of Ecology and Environmental Science, Assam University, Silchar.

- Generated road network of the 15 km buffer area from the southern boundary of Mans National Park based on Google Earth. In addition, forest cover map of Manas National Park was done based on Google Earth.
- Mapping of historical and present distribution of Asian Elephant in South East Asia, Mapping of five Elephant Reserves of Assam and Mapping of Primate species distribution in North East India. This work was carried out under PRCD of Aaranyak.
- Provided technical support through maps and analysis to the concerned PhD scholars of Assam University, USTM & Gauhati University.
- Attended as Resource persons for various workshop/Lecture/Training organized by the Digboi College, Karimganj College, Prof. B.K.B. College, Assam University, USTM.
- Organize week long training course in Remote Sensing (RS), Geographical Information System (GIS) and Global Positioning System (GPS) for the College/University students, researchers and young conservationist.

Impact

Mapping and analysis of Remote Sensing & GPS based information greatly supported various research projects undertaken by other divisions of Aaranyak.

Road Ahead

- To provide technical assistance and support to various divisions of Aaranyak and other Non-Governmental Organizations, Colleges/universities students and concerned government departments of North East India.

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**HERPETOFAUNA
RESEARCH AND
CONSERVATION
DIVISION
(HRC D)**





Field activities and field condition at 3000m (asl), Dibang Valley, Arunachal Pradesh, India



HERPETOFAUNA RESEARCH AND CONSERVATION DIVISION (HRCD)

The Division was established in 1997 to enhance herpetofauna research and conservation in Northeast India. HRCD is involved in herpetofauna inventory, taxonomy, ecology and conservation research programme from Brahmaputra flood plains to Alpine forest of the Himalayan mountains in the region.

The prime objectives of the division are herpetological inventory; assess ecosystem health; vulnerability of herpetofauna species to the anthropogenic habitat changes/habitat loss; understand and resolve the taxonomic problems associated with the group using integrated approaches of taxonomy and educate the common people about herpetofauna in the environment and need for their conservation.

Major Achievements

- First distribution record of high altitude *Oreolalax* sp from India.
- Predictive habitat distribution map for Asian box turtle *Cuora mouhotii* was prepared from Northeast India.
- New distribution record of *Maculopaa chayuensis* and *Odorrana chloronota* from Arunachal Pradesh, India; and rediscovery of *Theلودerma moloch*, a rare amphibian, after its original description by Annandale in 1912, over 100 years now.
- Monitoring of mini weather station established at six altitudinal gradients between 250-3500 m (asl) in Dibang Valley of Arunachal Pradesh.

Strategic Activities

- Monitoring and data collection from 250-3500 m (asl) for amphibian distribution and habitat assessment, Dibang river basin, Arunachal Pradesh.
- Predictive distribution modeling for Asian box turtle *Cuora mouhotii* was estimated using Maxent.



Oreolalax sp (First distribution record from India)

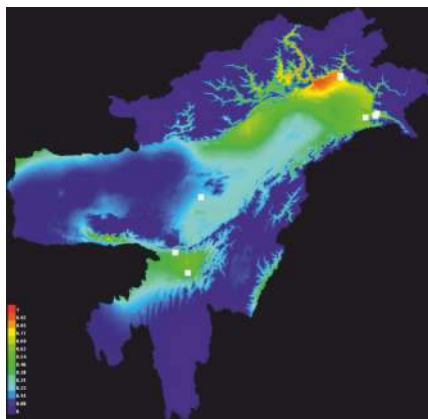
Impact

Monitoring amphibian habitat and assessment across Dibang river basin, Arunachal Pradesh.

A total of 39 anuran species were recorded across Dibang river basin, Arunachal Pradesh. The decline in anuran species richness with altitude was

observed during the study period. Anuran body size (Snout Vent Length: SVL) decreases with increase in elevation at landscape level. Detailed distribution map of each species are being prepared with the data collected and the same is going to be improved as study progresses.

precipitation during dry period (23mm to 150mm) showed higher suitability for the turtle species. Therefore, we concluded that the future precipitation rate will have an impact to the distribution of *Cuora mouhotii* and other herpetofauna species.



Predictive habitat distribution map for Asian box turtle *Cuora mouhotii* from Northeast India.

Predictive habitat distribution modeling for Asian box turtle *Cuora mouhotii*

The predicted distributions of *Cuora mouhotii* using current environmental data matched closely with the field observation, which suggests that the precipitation influences turtle distribution and acted as a triggering factor during the driest period of the year. The altitude to the distribution of *Cuora mouhotii* was found effective since the turtle species was recorded altitude between 50–600m in present record. The

Road Ahead

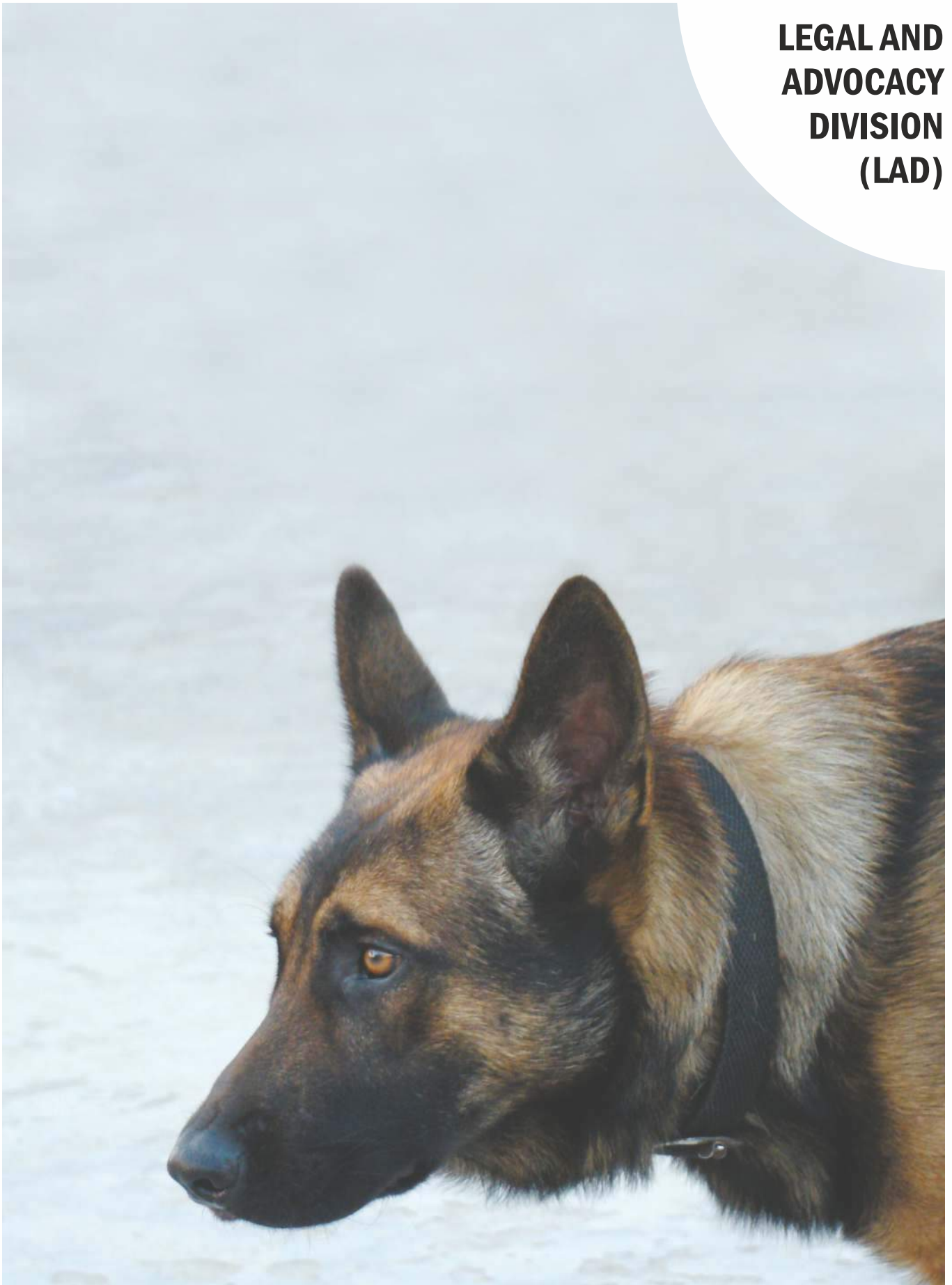
- Understanding a river valley ecosystem across altitudinal gradients using amphibians as an indicator to ecosystem health.

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**LEGAL AND
ADVOCACY
DIVISION
(LAD)**



LEGAL AND ADVOCACY DIVISION (LAD)

The Division has been proactively operational to assist enforcement agencies curb crime against wildlife, particularly poaching and illegal trade on wildlife parts and its finished products. It runs a Wildlife Crime Motoring Project (WCMP) and has been continuously monitoring the modus operandi of wildlife criminals which serves as complimentary investigative aids for the enforcement agencies. The project works as a watchdog over occurrence of wildlife crimes and if possible its doers, to analyse the causation of wildlife crimes and constantly build strategies to mitigate it. It organises legal orientation workshops for a range of law enforcement agencies to tackle wildlife crimes primarily Forests & Police officials. The workshops are conducted by a team of experienced lawyers of the Hon'ble Gauhati High Court headed by eminent Advocate Mr. Gautam Uzir. The division has been pursuing key Public Interest Litigations in the Courts in the interest of forest and wildlife and has been successful in obtaining favourable orders for conservation. Another important asset for the Division has been the dog-squad comprising of two K-9 dog along with its handlers, which have been active to assist forest and police officials in Kaziranga National Park along with other rhino bearing areas in Assam resulting into nab of many poachers. The K9 unit has been running with generous support received from UK based organization, the David Shepherd Wildlife Foundation.

Major Achievements

Dog squad success stories:

The inputs of the K-9 dogs had provided valuable leads in investigation of wildlife crimes. As such, the squad successfully contributed towards nabbing hardcore wildlife criminals in the recent years of 2015 & 2016 by forest and police officials, and the wildlife criminals are currently facing prosecution in the Court of law.



A presentation on "Wildlife Laws in India, and the Duties & Powers of Police Under it", before an August gathering of Policemen from Police Stations of Guwahati on the occasion of WORLD ENVIRONMENT DAY 2015. The presence of Shri Jyotirmay Chakrabarty, IPS (Commissioner of Police, Guwahati) and N.M.A.S.F. Haque, IPS (Joint Commissioner of Police, Guwahati) had graced the occasion. The event was jointly organized by Institute of Engineers India (Assam State Centre) & Aaranyak.



Presentation made on 'Wildlife Laws and its Enforcement' in the workshop organized by Aaranyak in collaboration with Kaziranga National Park Authority and World Wildlife Fund-India at Bagori Range Office (Kaziranga National Park) on 22nd April, 2016 for the freshly recruited Forest Officers of the park.



Presentation on “Wildlife laws and its enforcement” on the occasion of World Environment Day at Digboi College organized by Aaranyak in collaboration with Digboi College, Department of Police and Forest.

Strategic Activities

- On April 11, 2015, Aaranyak in association with Assam State Legal Service Authority organized a seminar on “Challenges in Forest and Wildlife Conservation in Assam” which was attended by Acting Chief Justice of Gauhati High Court along with three high court judges and over 12 judges from various District and Session Courts and Chief Judicial Magistrate courts of Assam. The seminar was also attended by police and forest officials.

Workshops & Presentations

1. An orientation workshop and presentation was organized on 26th April 2015 for the Forest Guards of Assam at Gibbon Conservation Centre at Gibbon Wildlife Sanctuary on “Legal Procedures for Dealing with Wildlife Crime, with specific references to real cases faced by the participants on duty”.
2. An orientation workshop was organized in collaboration with Institute of Engineers India (Assam State Centre) on the occasion of World Environment Day 2015 on 5th June, 2015 on Wildlife Crime Management and role of police. A presentation was also made on the topic “Wildlife laws in India, and the duties & powers of police under it”.
3. A presentation was made on legal issues at Aryabhata Bhavan, Digboi (Assam) to wildlife law enforcement agencies of Digboi and adjoining areas on 12th June

2015, which was organized by Aaranyak and Department of Forest, Government of Assam.

4. A presentation was made for the forest officers and police officers of Nagaon on the topic “How to build up a strong wildlife crime case on behalf of the prosecution in the court ?” on 17th November 2015 at Divisional Forest Office, Katimari (Nagaon) organized by the Department of Forest, Government of Assam and WWF-india.
5. An orientation workshop was organized in collaboration with Forest School of Makum, Tinsukia, Assam on 20th February 2016 for the selected Forest Officers from Assam on topic "Wildlife Crime, Crime-Scene-Investigation, methods to enhance the prospects of winning prosecution cases in the Court of law."
6. An orientation workshop was organized in collaboration with Kaziranga National Park Authority and Freeland-India at Conservation Center, Kohora (Kaziranga) on 12th March 2016 for the Forest Officers from Assam selected by office of the PCCF (Wildlife), Assam. The course for the event was designed to combat wildlife crime and illegal trade on wildlife, which included practical combat training on raids and military tactics by eminent expert. Apart from Court procedures to deal with wildlife crime cases with specific references to Assam, the participants were also imparted practical inputs on how to firmly face cross-examinations in the Court and how to avoid *alibi*,

which is usually created in the Court by the defense lawyer.

7. A presentation was made at a legal orientation workshop organized in collaboration with Kaziranga National Park Authority and Freeland-India at Conservation Center, Kohora (Kaziranga) on 12th March 2016 for the selected Forest Officers from Assam.

Dog Squad:

- On 24th December 2015, one rhino was killed by poachers in western part of Kaziranga National Park. The dog squad stationed in KNP was asked to assist KNP staffs and police. Accordingly the dog squad reached the spot of the rhino poaching and taking smell from the scene of crime around 0650 hrs, the dog led the KNP and police team to the house of one suspect in nearby village. Although the accused was not at his residence, but KNP and police got the vital clue from our K9 dog unit.
- On 27th December, one female rhino was killed by poachers in western part of KNP. The K9 dog unit asked to assist and accordingly K9 unit got some leftover bag and empty bullet shells and started tracking the exit route of poachers from the smell from the bag. The dog unit tracked to a nearby tea garden. However dog unit could not get smell from tea garden onwards and it is presumed that the poachers may have ridden a car from there.
- On 10th January 2016, one rhino was killed by Poachers in western part of KNP. The dog unit went to the spot as put into service by KNP authorities and tracked the exit route towards river Brahmaputra where one abandoned country boat used by poachers was found.



Summer K9 Training

- On 27th January 2016, one rhino was killed in western part of Kaziranga NP. K9 unit sniffed from scene of crime and on way towards the national highway found the left over axe and one dagger used by poachers. From the national highway, the dog unit could not track the smell and it was assumed that the poachers may have used waiting vehicle in the National Highway to safer place.
- On 30th January 2016, one rhino was killed in eastern part of Kaziranga NP. The dog unit sniffed the smell from the scene of crime and tracked to a nearby village. But since it was dark by the time dog unit reached the village, the operations had to be abandoned due to safety reasons.

Impact

The division through effective liaisons with various law enforcement agencies working in Assam has been able to have understanding to share information in checking hunting and illegal trade on wildlife parts. The division not only conducts awareness

workshops but works as catalysts in bringing all sections of the society to work in tandem and to trigger a crusade for conservation in this region. It has also been able to be of assistance to Judiciary through various Court cases to bring justice to the wild animals in Assam.

Road Ahead

The division shall continue with the current Wildlife Crime Motoring Project (WCMP) in the upcoming years. It plans to provide intensive support to all law enforcement agencies by developing info-education materials on Environmental Law for the frontline staffs. The dog-squad shall have more numbers of K-9 dogs in the poaching prone forest areas.

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**PRIMATE
RESEARCH AND
CONSERVATION
DIVISION
(PRCD)**





Group photo of 6th Field course in Conservation Biology and Global Health.

PRIMATE RESEARCH AND CONSERVATION DIVISION (PRCD)

Non-human Primate constitutes one of the important components of the bio diversity of Northeast India. This region has the highest primate diversity in the country. Out of the total 26 species known from India, 12 species are available in the seven states of Northeast India. Therefore, aiming at spreading awareness, research, training and conservation of these nonhuman primates of Northeast India, Aranyak in the year 2002 launched Primate Research and Conservation Division (PRCD). PRCD mainly focus on the conservation of the primate of Northeast India.

Major Achievements

- Trained 50 Forest Guards from different Gibbon habitats of Assam on Hoolock gibbon Conservation at Gibbon Conservation Centre in Hollongapar Gibbon Wildlife Sanctuary.
- Building network among the participants for gibbon conservation.
- Strengthening bonds with the forest department of the state.
- Supporting Jorhat Forest Division during Gyan Jyoti Programme
- Trained 15 trainees from university Georg-August University, Dibrugarh University, University of Calcutta, Pondichery University, CKB College and Digboi College, Conservation Biology and Global Health at Gibbon Conservation Centre in Hollongapar Gibbon Wildlife Sanctuary.

Strategic Activities

A. Training of Forest Guards for the Conservation of Hoolock Gibbon in Assam:

This is the first programme of its kind in India. The goal of this programme was to ensure a long-term conservation of Hoolock gibbons and its habitats in Assam by producing a group of trained, skilled and motivated forest guards who can take up the difficult task of protection and conservation of Hoolock gibbon as gibbon ambassadors by involving community. Training Programme was designed to offer 7 days of intensive, fully residential course on all aspects of “Hoolock Gibbon Conservation”. The basic principle of this program was “LEARNING BY DOING”. The course inputs were comprised of lectures, seminars, group discussions, individual and group assignments and field study in Gibbon Wildlife Sanctuary. We had conducted three training camps where 50 Forest Guards from different Gibbon habitat of Assam were trained and supplied certificates and education materials viz. book on Hoolock gibbon (Ammar Halou), Gibbon poster, stickers with conservation message of Gibbon.

B. Field Course in Conservation Biology and Global Health

6th field course in collaboration with University of Washington, Centre for Global Field Study and Assam Forest Department (Jorhat Forest Division). This course provided an introduction to the disciplines of Conservation Biology and Global Health - at the Human-Environment Interface. A wide range of related topic areas were covered including field study methods, management and conservation strategies, wildlife conservation in Assam, primate behavior and



Trainee Forest Guard and Resource Person at 5th Training Camp for Hoolock Gibbon Conservation



Arup kumar Das in the training of Forest Guard for Hoolock Gibbon Conservation Trainee (Forest Guard) and resource person at 5th Training Camp for Hoolock Gibbon conservation

ecology, the human-environment interface, and translational research. This course had provided participants with an initial understanding of the basic principles of Conservation Biology, experience with the methods and techniques used in field research, an appreciation of the need for population and ecosystem management and conservation, and an appreciation of the complex relationship between environmental health and global health- at the human-environment interface. The course consisted of daily lectures, field exercises, and community outreach education.

The lectures focused on a variety

of topics relating to Conservation Biology including field study methods, population assessment, primate behavior and ecology, management and conservation strategies, tiger conservation, vulture conservation, avian influenza, human-primate interaction, emerging infectious disease, conservation medicine, and biodiversity of Assam. Several field exercises were conducted during the course which focus on field observation techniques, equipment and technology (e.g., use of GPS, radio telemetry, traps cameras, etc.), behavioral sampling methods, line-transect sampling, biological sample collection techniques, etc.



Blow pipe Activity during 6th Field Course in Conservation Biology and Global Health.

Impact

A total number of 50 Forest Guard from 25 Forest Divisions of Assam have been trained in two training camps at Gibbon Conservation Centre, Hollongapar Gibbon Wildlife Sanctuary, Assam.

Different topics on Gibbon Conservation viz. Population estimation, habitat study, legal aspects, community participation etc. were covered and imparted to the trainees by adopting effective classroom and field activities at the sanctuary.

Total 15 conservation biology trainees from Georg-August University Germany, Gauhati University, Dibrugarh University, University of Calcutta, Pondichery University, CKB College and Digboi College had participated in the training. Field exercises were conducted during the course which focused on field observation techniques, equipment and technology (e.g., use of GPS, radio telemetry, traps cameras, etc.), behavioral sampling methods, line-

transect sampling, biological sample collection techniques, etc.

Road Ahead

Training:

Our vision will be to expand Hoolock gibbon conservation training programme in other states of northeast India for ensuring better protection towards gibbons and their habitats in particular and other primates in general.

Research:

- To explore the unexplored area of Northeast India to know the different species of primates.
- To focus on the reassessment on distribution and current status of Hoolock gibbon along its distribution range.
- Ecological studies on Eastern Hoolock gibbon.
- Genetic study of the gibbons and other primates of India in collaboration with Wildlife Genetics Division of Aaranyak

- Parasitological studies on primates.
- Identification of potential habitat for conservation of Primates of Northeast India.
- Publication of book on different Primates of Northeast India.

EDUCATION & AWARENESS:

To conduct the education and awareness Programmes on Hoolock gibbon Conservation.

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**RHINO
RESEARCH AND
CONSERVATION
DIVISION
(RRCD)**





Dr. Bibhab Kr. Talukdar assisting a Rhino Capture in North Bengal



RHINO RESEARCH AND CONSERVATION DIVISION (RRCD)

The Division has been actively assisting rhino research and conservation activities in Eastern India since 1998. It also regularly provides provision towards key field equipment needed for rhino conservation and protection to rhino bearing areas of Assam. The salient support to rhino protection in Kaziranga National Park included 10 years wireless communication support to the national park during 2003-2012, two floating boat camps, over 80 solar panels, raincoats etc. It also provided wireless equipment in Pabitora Wildlife Sanctuary and Orang National Park along with solar panels. This division works closely with Wildlife Genetics Division of Aaranyak for rhino monitoring in Assam, West Bengal and in Indonesia.

Major Achievements

During 2015-16 this division contributed in the following fields to enhance rhino conservation in Assam.

- Supported Village Defense Party members under Jakhlabundha Police Station working around western part of Kaziranga NP with over 150 raincoats and field shoes in a function organized at the Jakhlabundha Police Station on 30th July 2015.
- Provided about 150 winter jackets in Pabitora Wildlife Sanctuary in December 2015 for use by frontline forest staffs and forest protection forces.
- Assisted West Bengal Forest Department in planning and re-locating of a stray rhino in Mahananda Wildlife Sanctuary in December 2015.
- Assisted Indian Rhino Vision 2020 to capture two rhinos in Kaziranga NP on 29th March 2016 and shift them to Burhachapori Wildlife Sanctuary as a member of Rhino Task Force and Translocation Core Committee, Assam.

Strategic Activities

- Conducted more than 30 Rhino Goes to School educational activities around rhino bearing areas in Assam, along with Environment Education and Capacity Building Division of Aaranyak.
- Assisted rhino bearing areas with field gears based on the need shared by respective rhino bearing area's officials.
- Assisted West Bengal Forest Department with technical inputs to re-locate one stray rhino in North Bengal. As part of a committee constituted by West Bengal Forest Department, Aaranyak made strategic suggestions with regards to possible additional alternate areas in North Bengal for rhino range expansion.
- Conducted a number of rhino conservation awareness around Laokhowa and Burhachapori WLS and around Manas National Park in association with local NGOs and forest officials and journalists.

Impact

The field equipment provided to rhino bearing areas assisted the management to effectively enhance their patrol to safeguard the rhinos and habitats. The wireless equipment helped in speedy communication among forest camps and solar chargers helped charge the wireless batteries in the interior camps. The floating boat camps enabled forest guards in covering river fronts from intrusion. The 'Rhino goes to school' campaign imparted much needed rhino conservation awareness among students. Support to VDP members helped them enhance their efforts to assist forest and police officials to check rhino poaching and other illegal activities.



Winter Jackets given to forest staffs of Pabitora WLS



Raincoat and Field Shoes given to VDPs working under Jakhlabunda PS to assist road side patrol in western part of Kaziranga

Road Ahead

- Continue equipment assistance to rhino bearing areas in Assam and West Bengal based on requirement.
- Undertake gap analysis on applied research needs in Asian Rhinos in South and South East Asia to assist proactive management.
- Assist other rhino bearing states in India with regards to range extension with technical inputs.
- Work closely with rhino conservation agencies in national and international level to address the challenges faced by rhinos.

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TIGER RESEARCH AND CONSERVATION DIVISION (TRCD)





Deploying a camera traps in Manas NP

TIGER RESEARCH AND CONSERVATION DIVISION (TRCD)

Since its inception in 2005, TRCD has been meticulously engaged in the research and conservation of tigers, co-predators and their prey animal through multiple approaches. These include applied research, supplement professional paradigm to protection, conservation education and alternative livelihood support to reduce the dependency of the forest in different tiger habitats of north-east India.

The salient objectives of the TRCD are- (a) ecological research on tigers, co-predators and their prey animals, (b) create a database on habitat connectivity corridors along the tiger bearing forests in GIS domain, (c) promote conservation education, awareness and capacity building among the fringe people for the tiger habitat, (d) foster local researchers, conservation volunteers and forest staff.

The division assists the Forest Departments particularly the Protected Area Management in generating a population

data of tigers, co-predators and prey animals through the long term population monitoring in the three key tiger habitats of Assam, viz. Orang (since 2007), Kaziranga (since 2009) and Manas National Park (since 2010). During the year 2015, the division focused on Research and conservation of Manas National Park and Transboundary Manas Tiger Conservation Area in India and Bhutan. In addition, the division also carried out first ever status survey of Fishing Cat in Assam.

Major Achievements

1. Carried out a joint monitoring of tigers in the Transboundary Manas Conservation Area (TraMCA) in the Manas National Park of India and Royal Manas National Park of Bhutan. A comprehensive report for the joint monitoring in the session 2014-15 has been published in collaboration with Forest Department (BTC), WWF India and Royal Manas Park Authority (Bhutan)
2. Creating baseline on distribution pattern prey and predator species in relation to anthropogenic threats in the Manas National Park.
3. Inception of monitoring tigers, co-predators and prey animals in Dibru-Saikhowa National Park, Assam through a short snapshot study using camera traps in 2015-16.
4. Carried out a survey of Fishing Cat in few districts of Central Assam districts to understand its status and distribution in relation to anthropogenic threats.
5. Creating baseline on distribution pattern on different prey and predator species in relation to anthropogenic threats in the the Manas National Park.

Strategic Activities

- Population estimation of tigers, co-predators and their prey animals in Manas National Park.
- Technical and logistics support to Royal Manas National Park authority to estimate the population of tigers and co-predator population by providing camera traps and other necessary supplies. This leading to joint monitoring of tigers and co-predators in the Transboundary Manas Conservation Area (TraMCA) in India and Bhutan.
- Conducted a Basic Patrol Training from 29th February to 12th March 2016 for 20 forest personnel of the Bhuyapara Range of Manas National Park to improve protection of tigers and habitats.
- Handed over 10 motorbikes to Manas National Park to initiate motorbike patrol to increase efficiency of frontline forest staff.
- Assisted the Manas National Park with supply of batteries for walkie talkies and solar charging systems for the forest camps in the park.
- A mass awareness campaign was conducted covering six districts of Assam viz. Nagaon, Marigaon, Biswanath, Sonitpur, Golaghat and Jorhat, targeting school students on the conservation of Fishing cat. Under this initiative around 3000 target audiences were reached.
- Celebrated International Tiger Day on 29th July 2015 at JDSG college, Bokakhat. Around 100 students from the local schools and colleges participated. Wildlife Quiz and extempore speech competition were also held on the occasion.
- A successful phone in programme at All India Radio was organized with AIR Guwahati



Animal sign survey in Manas NP



A moment of field data recording in Manas NP

on 28th July 2015 on the occasion of International Tiger Day.

- As part of the Manas Tiger Conservation Programme (MTCP) a series of livelihood activities has taken place in the fringe villages of Manas that shall be reported in the Conservation Livelihood Program section of this report.

Impact

1. Considering the fact realized through the continued research on tiger population, habitats and connectivity carried out in Orang National Park, Assam by the TRCD since 2007, the Assam Government has declared Orang and its adjoining areas including the riverine Islands as Orang Tiger reserve in February 2016. Our study dated 2008 and 2011 on the use of river islands by tigers and other animals in the Brahmaputra Floodplains between Orang and Kaziranga had recommended strict protection of the riverine area between Kaziranga and Orang and that is realized now by declaration of Orang Tiger Reserve and proposed 1st addition to Burhachapori Wildlife Sanctuary (the western buffer of Kaziranga Tiger reserve).
2. Population estimation of tigers in Manas National Park has helped the park management in keeping regular track of the tigers in the park over the years. This also helped in restoring the status of the park in the country as the park is witnessing an increasing trend of tiger population since the population was down to few individuals immediately after the socio-political turmoil in the landscape. An increase in number of tigers has attracted the national and global attention and the National Tiger Conservation Authority is likely to increase its grant support to the Tiger Reserve soon.
3. As the concept of TraMCA (Transboundary Manas Tiger Conservation Area) has gained popularity through sustained coordination among the stakeholders (park management and NGOs across the boundary), the NTCA has stressed more in formalizing this initiative during a meeting of delegations of India and Bhutan in Delhi in February 2016.
4. Considering the potential of recovery of tigers in the Manas Landscape and long term engagement of Aaranyak team there, IUCN and KfW, has supported a three year long

Manas Tiger Conservation Program to a partnership of Aaranyak, Panthera, Wildlife Conservation Trust, Awely and Forest Department (BTC).

Road Ahead

The TRCD would focus on the following during the next year-

Understand the tiger conservation landscape of eastern Assam and bordering Arunachal Pradesh by identifying key potential source population and/or habitats and its connectivity to eastern forest complexes in Assam and Arunachal Pradesh.

Extensive monitoring of tigers, co-predators, their prey animal and habitat in the buffer areas of the Manas Tiger Reserve to understand the status of tigers and habitat connectivity among the protected areas of India and Bhutan across international boundary.

Continuous monitoring of tigers, co-predators their prey animal in key tiger habitats in the northeast India to understand their population dynamics

Joint tiger monitoring in the Transboundary Manas Conservation Area (TraMCA) covering around 1400 sq km covering both Indian part of Manas National Park and Royal Manas National Park of Bhutan.

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WATER, CLIMATE AND HAZARDS DIVISION (WATCH)



WATER, CLIMATE AND HAZARDS DIVISION (WATCH)

The Division has evolved over the last 15 years by responding to the pressing needs of the Northeast region pertaining to the water, disaster risk reduction and climate change sectors with an interdisciplinary approach. The Division addresses issues in water resources (local water management practices, water governance, water conflict, impact of hydropower and river dams, environmental flow, transboundary waters, water quality), climate change (hydrometeorology, impacts, vulnerability, 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 and ecosystem services. The activities are carried out in both programme and project mode through inter-disciplinary research, action research/field intervention, education/awareness, capacity building and policy advocacy. The WATCH Division works in close collaboration with local communities, civil society partners, government agencies, research institutions and national and international donors.



Jintu Kalita, WATCH Division Project Assistant making people aware about the CB-FEWS in a villages on the bank of the river Ranganadi in Lakhimpur District



Villagers voicing their concerns in the 'Consultation Meeting on Ranganadi: Environment and Flood Problem at the Pahumora High School, North Lakhimpur on 11 July 2015



Villagers of Dihiri transporting relief materials to the village using the boat donated by Aaranyak during the floods 2015



WATCH division staff after installation of a Flood Warning System in the Ranganadi in the Jehing area

Major Achievements

- Provision of early warning of flood was piloted in the Ranganadi at the request of the Deputy Commissioner of Lakhimpur District. This was a significant recognition of the success of the CB-FEWS project that was already implemented in the Singora river of the district from 2013.
- The operational mechanism of the 'Community Based Flood Early Warning System (CB-FEWS)' was demonstrated in the Indira Paryavaran Bhavan, the premises of the Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India, New Delhi during the India-ICIMOD Partnership Week 11-15 December 2015. It was at the invitation of the GB Pant Institute of Himalayan Environment and Development and International Centre for Integrated Mountain Development. This resulted in the CB-FEWS project getting attention of many national level institutions and experts

Strategic Activities

The following three projects were completed during 2015-16

- Enhancing awareness of educational institutions and local civil society on climate change through knowledge sharing outreach programmes in four districts of Assam, funded by the Assam Science Technology and Environment Council (ASTEC), Government of Assam
- An appraisal of water and sanitation status in the state of Assam, India, sponsored by South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERS), Hyderabad
- A study of water related problems and community needs in the area located around the Hindustan Unilever Limited in Tinsukia District, Assam

The following two projects were launched during 2015-16

- Community-Based Flood Risk Management through provision of flood early warning and flexible flood management planning in two districts of Assam, India with financial support from Give 2 Asia, USA
- Implementation of the Community-Based Flood Early Warning System in the Ranganadi Catchment of Lakhimpur District, Assam with funding from District Disaster Management Authority- Lakhimpur

Impact

The CB-FEWS project benefitted about 10, 000 people living in the catchments of the Singora and Jiadhali in Lakhimpur and Dhemaji Districts respectively both directly and indirectly. People who received early information about floods could become alert, take proactive measures and save lives and properties. This population also includes about 1000 people who were sensitized about the best practices of flash flood mitigation and coping and adaptation.

Road Ahead

- The Division will launch a programme on 'Urban Water, Climate and Hazard (U-WATCH)' to study the problems of water management, climate change impacts and hazard mitigation in urban and peri-urban areas
- Study on renewable energy as a climate change mitigation/adaptation measure will be initiated



WATCH Division Project Coordinator Ms. Nikumoni Saikia interviewing flood prone people living on the bank of the river Ranganadi in Lakhimpur District



Visitors Mr. Adam Winfred Eads, Director of Disaster Programs of the Give 2 Asia, US and Mr. Wilson John D. Barbon, Program Manager, Disaster Risk Reduction and Climate Change Adaptation in the International Institute of Rural Reconstruction, Philippines with the villagers of Dihiri and Kekuri villages in Dhemaji District with the boat that Aaranyak donated to the community with financial support of Give 2 Asia.

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WILDLIFE GENETICS DIVISION (WGD)



WILDLIFE GENETICS DIVISION (WGD)

The Wildlife Genetics Division, since its inception in 2008, has the principle mandate of undertaking conservation genetics research in India. The Division has been contributing to this field through Wildlife Genetics Laboratory (WGL), a state of the art in-house molecular biology laboratory situated at Guwahati. The salient objectives of the Division are to (a) build up a reference genetic database of the rich biodiversity of North East India, (b) standardize DNA based techniques for species, gender and individual identification from various wildlife samples and (c) undertake population genetic research to answer pressing wildlife management questions. WGD has been offering support to various state forest departments in India in genetic monitoring of various threatened species such as tiger, greater one-horned rhino etc. WGL is a recognized facility for wildlife genetics and forensic DNA analysis in the state of Assam. Apart from its work in India, WGD has been offering consultancy and technical support to conservation genetic projects undertaken internationally, including countries like Indonesia and Bhutan.



Field activity in Manas National Park to collect scat samples for genetic population monitoring of tigers



White-cheeked macaque (*Macaca leucogenys*),
a species of macaque discovered for the first time for India in Eastern Arunachal Pradesh.

Major Achievements

- Discovered a new primate species for India, the white-cheeked macaque (*Macaca leucogenys*) from eastern Arunachal Pradesh, made by Wildlife Biologists of WGD and Primate Research and Conservation Division, together with Dr. Ranjan Kumar Das, Associate Professor of Tinsukia College.
- Carried out genetic monitoring of tigers in Manas National Park using technology optimized by WGL in 2012.
- Optimized a panel of microsatellite markers for population genetic analysis of White-bellied Heron in Bhutan, jointly with the Royal Society for Protection of Nature, Bhutan.

- Provided forensic DNA analysis support to Assam Forest Department in several cases.

Strategic Activities

- Field work carried out in Manas National Park, jointly with the Tiger Research and Conservation Division team to collect tiger scats as a source of DNA for genetic analysis and population estimation.
- Provided training to frontline forest department staff on handling and collection of noninvasive genetic samples of wildlife origin in December 2015.

- Laboratory work is in progress to identify individual tigers and their gender from scat DNA samples of Manas National Park and to estimate population size of the species in the study area.
- The Phase II of population genetic assessment of Critically Endangered White-bellied Heron has been initiated at WGL.
- Laboratory work on analysis of greater one-horned rhino dung DNA samples collected from Jaldapara National Park is in progress, in order to estimate population size using capture-recapture sampling.
- Conducted “Hands on training on molecular marker applications and phylogenetics)” during 6-8 April 2015 at WGL.
- Conducted “Hands on training on genetic population estimation” for the officials of Bhutan Forest Department during 7 to 13 December 2015 at WGL.

Impact

Based on population genetic studies on greater one-horned rhinos conducted by WGD in Eastern India, meeting of the IUCC SSC Asian Rhino Specialist Group held at Jaldapara National Park, West Bengal in November 2015, emphasized on undertaking restocking of the greater one-horned rhino population in West Bengal and creating alternative habitats for retaining genetic diversity of the species in the landscape.

DNA fingerprinting technology for greater one-horned rhinos developed by WGL, Aaranyak has been endorsed by the Ministry of Environment, Forest and Climate Change, Govt. of India, vide circular no. F.No. 4-22/2015/WL dated 22nd February 2016, which will be used for Implementing Rhino DNA Indexing System (RhODIS) in India by Wildlife Institute of India in collaboration with Aaranyak.



Hands on Training on Molecular Marker Applications and Phylogenetics organized by Wildlife Genetics Division, Aaranyak



Field worker collecting tiger scat samples as a noninvasive source of DNA for species monitoring

Road Ahead

- Continue working on development of forensic DNA analysis system for greater one-horned rhino and provide necessary support to the rhino-bearing states of India.
- To continue assisting the Forest Department in wildlife forensic DNA investigations.
- To initiate elephant population monitoring using noninvasive genetic tools.
- Continuous monitoring of tiger and other carnivore populations in North East India using noninvasive genetic tools.
- Undertake expeditions in priority landscapes identified by Aaranyak, to understand the presence and distribution of lesser known fauna.

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CONFERENCES AND SEMINARS ATTENDED BY AARANYAK STAFF

Dr. Bibhab Kumar Talukdar attended a seminar on “Challenges in Forest and Wildlife Conservation in Assam” organized by Aaranyak in collaboration with Assam State Legal Service Authority on 11th April 2015 at Hotel Gateway Grandeur, Guwahati.

Dr. Namita Brahma attended “International Ornithological Congress of Southeast Asia 2015” organized by the Department of Environmental Science Faculty of Science, Khon Kaen University during 20th to 22nd July 2015 at Khon Kaen University, Khon kaen, Thailand and presented on topic “Bengal Florican *Houbaropsis bengalensis* population and habitat in Manas National Park”.

Purnima Devi Barman attended “International ornithological Congress at Khonkaen, Thailand by Khonkaen University” organized by Khon kaen University, Thailand during 20th to 22nd July, 2015 at Rachawadee resort, Khonkaen and presented on topic “Breeding biology of greater Adjutant and community conservation model village of greater Adjutant in Assam, India”.

Dr. Jyoti P Das attended “International congress for Conservation Biology” organized by Society for Conservation Biology during 2nd to 6th August 2015 at Montpellier, France and presented on topic “Crop, Community and conflict”.

Dr. Partha Jyoti Das attended “CoCooN-Exchange-2015: CoCooNXchange and CoCooN Conference on Natural Resource Conflicts: Sense and Sensitivity” organized by Institute of Social Studies, The Hague and Ministry of Foreign Affairs during 25th to 27th November, 2015 at Institute of Social Studies, The Hague and presented on topic “Conflicts over Natural Resources Management”.

Dr. Partha J Das attended “National Conference on Peri-Urban Agriculture and Ecosystems: The multi-faceted contribution to urban resilience” organized by Gorakhpur Environmental Action Group, National Institute of Urban Affairs, RUA Foundation during 22nd to 23rd February, 2016 at India International Centre, New Delhi and presented on topic “Peri-Urban Agriculture and Ecosystems”.

Arup Kumar Das attended “UGC SAP III National Seminar” organized by Department of Geography, Gauhati University on 30th March, 2016 at Department of Geography, Gauhati University and presented on topic “Human activities and wildlife conflict: A study of Hollongapar Gibbon Wildlife Sanctuary and its buffer areas using Geo-spatial Technology”

WORKSHOPS AND TRAININGS ATTENDED BY AARANYAK STAFF

International

Dr. Jyoti P Das attended “Training on Animal abundance and occupancy modeling” organized by Smithsonian Conservation Biology Institute (SCBI) during 26th April to 8th May, 2015 at Front Royal, Virginia, United States.

Dr. Dilip Chetry attended “Asian Primate Red list Assessment Workshop” organized by IUCN, Primate Specialist Group and Singapore Zoological Garden during 19th to 24th Nov, 2015.

Dr. Bibhab Kumar Talukdar attended “Meeting of IUCN/SSC; African Rhino Specialist Group” organized by IUCN/SSC African Rhino Specialist Group during 17th to 22nd February, 2016 at Kruger NP, South Africa and presented two presentations on “Current status of Asian Rhinos in South and South East Asia” and “Rhino Poaching and Trade from Asian Range State's Perspective”.

National

Arup Kumar Das attended “One day workshop on Geospatial Techniques in Ecological Studies” organized by Centre for Biodiversity & Natural Resource Conservation, Department of Ecology & Environmental Science, Assam University on 4th April, 2015 at Assam University, Silchar and presented on topic 'Application of Remote Sensing, GIS and GPS in Ecological studies'.

Dr. Partha J Das attended “Brain storming Session on the Water Risk Assessment of the Brahmaputra Basin” organized by WWF India on 24th of April, 2015 at WWF India Auditorium, New Delhi, Assam and presented on topic “Water risk assessment”.

Arup Kumar Das attended “Hoolock Gibbon Conservation Training Programme” organized by Gibbon Conservation Centre, Assam Forest Department & Aaranyak during 24th to 30th April, 2015 at Gibbon Conservation Centre and presented on topic “Basics of GPS and hands on training”.

Dr. Partha J Das attended “National Consultation Workshop on Understanding Ecosystem Services Perspectives for Effective Resource Management in the Far Eastern Himalayan Landscape” organized by GB Pant Institute of Himalayan Environment and Development and International Centre for Integrated Mountain Development during 25th to 27th May, 2015 at Itanagar and presented on topic “Ecosystem services and resources management”.

Dr. Partha J Das attended “National Consultation Workshop on Developing Livelihood Interventions for Far Eastern Himalayan Landscape” organized by GB Pant Institute of Himalayan Environment and Development-Northeast Unit and International Centre for Integrated Mountain Development during 28th to 29th May, 2015 at Itanagar and presented on topic “Livelihood and resources management”.

Dr. Partha J Das attended “Celebration of World Environment Day” organized by Boko College on 5th June, 2015 at Boko Collège, Kamrup District, Assam and presented on topic 'Natural Resources Management’.

Dr. Partha J Das attended “National Consultation on Adaptation and Disaster Resilience in India's INDC” organized by Climate Action Network South Asia, Adaptation Action and Disaster Risk Reduction, Alternative Futures, Development Alternatives during 23rd to 24th July, 2015 at India International Centre, New Delhi and presented on topic “Adaptation and Disaster Resilience”.

Dr. Partha Jyoti Das attended “Summer School on Environmental Justice and Water Governance In the Eastern Himalaya” organized by Sikkim University and CoCooN (Conflict and Cooperation in the Management of Climate Change) Programme of the NWO-WOTRO Science for Global Studies, The Netherlands during 27th July to 1st August, 2015 at Department of Geography, Sikkim University, Samdur, Gangtok, Sikkim, India and presented on “Environmental Justice and Water Governance”.

Dr. Partha J Das attended “Dissemination workshop for Brahmaputra Dialogue: Phase II” organized by South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATeRS), IIT-Guwahati, Asia Foundation, Bangladesh University of Engineering and Technology on 6 August 2015 at NEDFi House, Guwahati, India and presented on topic “Cooperation on the Brahmaputra”.

Arup Kumar Das attended “North East India Biodiversity Portal” organized by North Eastern Hill University & ATREE during 23rd to 25th September, 2015 at Department of Botany, NEHU, Shillong and presented on topic “Launch and Training workshop”.

M Firoz Ahmed attended “SERB School in Herpetology” organized by Wildlife Institute of India during 1st to 14th October, 2015 at Wildlife Institute of India and presented on topic “A two week hands on course on Herpetology”.

Dr. Partha J Das attended “National Workshop on Hydropower, Climate Change and Environmental Justice in the Eastern Himalayas” organized by Forum for Policy Dialogue on Water Conflicts in India and Wageningen University, Netherlands during 8th to 9th December, 2015 at Park Hotel, Kalimpong, Darjeeling District, West Bengal, India and presented on topic “Hydropower & climate change”.

Dr. Partha J Das attended “India-ICIMOD Partnership Week” organized by GB Pant Institute of Himalayan Environment and Development and International Centre for Integrated Mountain Development during 11th to 15th December, 2015 at Indira Paryavaran Bhavan, MoEFCC, New Delhi and presented on topic 'Community based early warning of floods in Assam'.

Dr. Partha J Das attended “South Asia Water Dialogue (SAWD): People, power and technological innovation” organized by The Observer Research (ORF) Foundation during 17th to 18th December 2015 in Kolkata and presented on topic 'Water Cooperation'.

Arup Kumar Das attended “Certificate course on wildlife research techniques” organized by University of Science and Technology, Meghalaya & Aaranyak on 7th January, 2016 at University of Science and Technology, Meghalaya and presented on topic 'Use of GPS'.

Dr. Partha J Das attended “Steering Committee Meeting of the Forum for Policy Dialogue on Water Conflicts in India” organized by Forum for Policy Dialogue on Water Conflicts in India during 27th to 29th January, 2016 in Pune and presented on topic “Water Conflicts”.

Arup Kumar Das, Dr. Partha J Das, Mosfique Alam Hazarika, Madhumita Borthakur, Angana Phukan & Manas Bhattacharjya attended “Conservation of water bodies within & adjacent to Guwahati metro Politan city and role of stakeholders & community” organized by Rural woman upliftment association of Assam during 28th to 29th January, 2016 at Simanta Sankar Dev Krishi Kendra, Guwahati and presented on topic 'Study of Deepor Beel using Geo-spatial Technology'.

Dr. Partha J Das attended “North East India Dialogue on land and other natural resources” organized by Action Aid-NE, Human Rights Law Network and Peoples Action for Development during 22nd to 23rd February, 2016 at Rajiv Gandhi University, Doimukh and presented on topic 'Integrated Natural Resources Management'.

Dr. Partha J Das attended “Capacity Building Workshop for Civil Society on Understanding hydropower and climate change in the Indian Eastern Himalayas from an environmental justice perspective: Relationship, Issues and Prospects” organized by Forum for Policy Dialogue on Water Conflicts in India and Wageningen University, Netherlands during 2nd to 5th March, 2016 at Park Hotel, Kalimpong, Darjeeling District, West Bengal, India and presented on topic “Hydropower & climate change”.

Arup Kumar Das attended “Prof. Lakshikamal Bhattacharya memorial lecture” organized by Dept. Of. Zoology, Karimganj College on 25th March, 2016 at Karimganj College and presented on topic “Remote Sensing, GIS and Regional Planning”.

Arup Kumar Das attended “Guest lecture for the classes of Career Oriented Certificate Course on Wildlife Conservation Biology” organized by Dept. of Zoology, Digboi College on 29th March, 2016 at Digboi College and presented on topic “Remote Sensing, GIS and GPS in wildlife conservation”.

WORKSHOPS AND TRAININGS ORGANIZED BY AARANYAK

GTAD organized a training course title “18th One week training course on Remote Sensing, GIS and GPS Applications in Various Fields” during 13th to 19th July, 2015 at Conference Hall, Aaranyak, Guwahati and gave training on “Geospatial Technology and its Application”.

GTAD organized a training course title “19th One week training course on Remote Sensing, GIS and GPS Applications in Various Fields” during 25th to 31st July, 2015 at Conference Hall, Aaranyak, Guwahati and gave training on “Geospatial Technology and its Application”.

EECBD in collaboration with Barpeta Road Press Club, WWF-India, MEWS, Forest Department, BTC organized a workshop title “Orientation on Green Reporting” on 22nd November, 2015 at Conference hall of Barpeta Road Press Club, Barpeta Road, Barpeta and gave training “Green Reporting, Magnitude of environment journalism, Investigative journalism in wildlife-environment arena, Rhino Conservation in Assam, etc.

WGD organized a training course title “Hands on training on genetic population estimation” to the officials of Bhutan Forest Department during 7th to 13st December, 2015 at Wildlife Genetics Laboratory, Aaranyak, Guwahati.

EECBD in collaboration with Nagaon Wildlife Division, WWF-India, Laokhowa-Burhachapori Conservation Society organized a workshop title “Building eco-tourist guide in Laokhowa-Burhachapori WLS engaging local youths” during 25th to 27th December, 2015 at BuraChapori WLS and gave training on topic “Developing EE program, Prospect of eco-tourism, Role & responsibilities of tourist guide, conservation theatre, biodiversity of LB complex, etc.”

EECBD in collaboration with Khonoma Nature Conservation and Tragopan Sanctuary organized a workshop title “Capacity Building Training” during 26th to 28th February, 2016 at T.U. Community Building, Khonoma, Nagaland and gave training on topic “How to develop EE program, Eco-tourism etc”.

GTAD in collaboration with Dept. of Geography, Dr. B. K. B. College, Puranigudam, Nagaon organized a workshop title “7 days State level workshop on Remote Sensing and Application” during 11th to 17th March 2016 at Dept. Of Geography, Dr. B. K. B. College, Nagaon and gave training on “Geospatial Technology and its Application”.

EECBD in collaboration with WWF-India organized a workshop title “Capacity building training for the young naturalist” during 21st to 24th March, 2016 at Dhanshiri Eco-camp, Agaratali, Kaziranga and gave training on topic “Documenting observation, How to develop EE program, PRA techniques, Eco-tourism etc.

MEMBERSHIP/POSITION WITH OTHER ORGANIZATION

Dr. Bibhab Kumar Talukdar

1. Chair and Member of the IUCN/SSC; Asian Rhino Specialist Group
2. Member of IUCN/SSC; African Rhino Specialist Group
3. Member, European Association of Zoos and Aquarium (EAZA) - Rhino Taxon Advisory Group (TAG)

Dr. Dilip Chetry

1. Honorary Wildlife Warden, Govt. of Assam
2. Member, State Wildlife Board of Assam, Govt. of Assam.
3. Member, IUCN, Primate Specialist Group.
4. Member, IUCN, Small Ape Section
5. Member, International Primatological Society
6. Member, American Primatological Society
7. BoD in Scholars Institute of Technology and Management, Guwahati, Assam.

Dipankar Lahkar

1. Editorial Board Member, Newsletter for Birdwatchers, Bi-monthly newsletter published from Bangalore since 1960 (ISSN no. 0028-9426)
2. Member from India, Captive Breeding Specialist Group, SSC, IUCN

Jayanta Kumar Pathak

1. Member of the Editorial Board of 'BIJNAN JEUTI' (ISSN: 2319-3085) published by Assam Science Society.

Dr. M Firoz Ahmed

1. Member, Forest Advisory Committee (FAC) of the Ministry of Environment and Forest and Climate Change, Govt. of India.
2. Core team Member of the group called Transboundary Manas Conservation Area (TraMCA).
3. Member, IUCN SSC

Dr. Namita Brahma

1. Member of IUCN, Bustard Specialist Group

Dr. Partha Jyoti Das

1. Member of Steering Committee, Forum for Policy Dialogue on Water Conflicts in India, Pune based national water think tank
2. Life member of Indian Society for Ecological Economics, Bangalore
3. Life member of India Water Partnership, New Delhi

Udayan Borthakur

1. Member, IUCN SSC Asian Rhino Specialist Group
2. Member, IUCN SSC White-bellied Heron Working Group

PUBLICATIONS

BOOKS

Rekha Chetry and Dilip Chetry. 2015: "Haati auru Manuh: Sahabasthan, Songhat auru Sanrakson" (Man and Elephant: Co-existence, Conflict and Conservation), 1-180pp. Published by Aaranyak.

PEER REVIEWED PAPERS

1. Chetry Dilip, Borthakur Udayan and Das Ranjan Kr. 2015. A short note on First distribution records of White cheeked macaque *Macaca leucogenys* from India. *Asian Primate Journal* 5 (1).45-47pp.
2. Borthakur U, Das PK, Talukdar A, Talukdar BK. 2016. Noninvasive genetic census of greater one-horned rhinos in Gorumara National Park, India – A pilot study for population estimation. *Oryx*, available on CJO2016. doi:10.1017/S0030605314001161.
3. Das PK, Borthakur Udayan, Sarma H, Talukdar BK. 2015. Population genetic assessment of extant populations of greater one-horned rhinoceros (*Rhinoceros unicornis*) in India. *European Journal of Wildlife Research*. DOI 10.1007/s10344-015-0960-2
4. Dutta, H, Singha, H, Dutta, B, K, Deb, P, Das, A.K, (2015)" Human-Wildlife Conflict in the Forest Villages of Barak Valley, Assam, India". *Current World Environment*, Vol.10 (1), PP. 245-252, April 2015.
5. Nath Anukul, Singha Hilloljyoti, Deb Panna, Das Arup Kumar, Lahkar Bibhuti P., (2015)" Nesting in a crowd: Response to house sparrow towards proximity to spatial cues in commercial zones of Guwahati city". *The Zoological Society Kolkata, India*, May 2015.
6. Sarma K. Pranjit, Das Arup Kumar, Talukdar Bibhab Kumar, (2015) "Assessment of Forest Cover and wildlife habitat in Kamrup Metropolitan District of Assam: A geo-spatial Approach". *International Journal of Science and Engineering Invention*, Vol. (1), Dec 2015.
7. Roy, J.K., Das, A., Vasudevan, K., Begum, R.H. and Ahmed, M.F. (In review). Stream habitat relation to the occurrence of selective amphibian species along head water stream, Lower Dibang valley, Arunachal Pradesh, India. Hamadryad.

8. Lahkar, D (2015). Vulture conservation in the Indian context: Need for extensive coverage of habitats and feeding ecology studies. *Newsletter for Birdwatchers* 55(5): 56-58.
9. Lahkar, D (2015). Estimation of Encounter rate and population structure of ungulates by using vehicle road transect in Ranthambore National Park, India. *Indian Forster* 141 (10):1087-1091.

TECHNICAL REPORTS

1. Ahmed, M.F., D. Lahkar, T. Sharma, P. Chakravarti, J. Borah, J. C. L. Prabu, A. S. Adhikarimayum, Y. V. Jhala and Q. Qureshi. 2015. Northeast Hills and Brahmaputra Floodplains: Manas National Park, Assam. In: Jhala, Y.V., Q. Qureshi and R. Gopal (eds) 2015. The Status of tigers, co predators and prey in India 2014. National Tiger Conservation Authority, New Delhi and Wildlife Institute of India, Dehradun. TR2015/21. pp 260-262.
2. Ahmed, M.F., D. Lahkar, A. Hussain, B. K Talukdar, T. Sharma, I. Ahmed, M. Kalita, J. Borah, N. Jambu, R. Sharma, R. B. Bhagat, Y. V. Jhala and Q. Qureshi. 2015. Northeast Hills and Brahmaputra Floodplains: Kaziranga National Park, Assam. In: Jhala, Y.V., Q. Qureshi and R. Gopal (eds) 2015. The Status of tigers, co predators and prey in India 2014. National Tiger Conservation Authority, New Delhi and Wildlife Institute of India, Dehradun. TR2015/21. pp 269-270.
3. Ahmed, M.F. and D. Lahkar. 2015. Northeast Hills and Brahmaputra Floodplains: Orang National Park, Assam. In: Jhala, Y.V., Q. Qureshi and R. Gopal (eds) 2015. The Status of tigers, co predators and prey in India 2014. National Tiger Conservation Authority, New Delhi and Wildlife Institute of India, Dehradun. TR2015/21. pp 271-272.
4. Das, J.P., A. Boruah, R. R. Tariang, S. Arandhara, R. Tanti, B. P. Lahkar (2016). Strengthening Protection Machinery for Asian Elephant Conservation through Research and Community Edge in Dehing Patkai Elephant Reserve, Assam. *Technical Report, ERCI (01)*, 2016.

5. Lahkar, B.P., Das, B. and Talukdar, T. 2016: Save elephant by empowering community (SEEC) II phase - an initiative in the eastern part of Chirang Ripu Elephant Reserve. Conservation Report _Aaranyak_ERCI_03/2016.
6. Lahkar, B.P., Nath, A. and Sarmah, P (2016). Improving the protection of Asian elephants and their habitat by setting up community based GPS patrolling in Kachugaon Forest Division under Ripu Reserve Forests of Chirang Ripu Elephant Reserve, India, *Technical Report, ERCI (02), 2016*.
7. Chetry D, Borthakur U, Das RK. 2015. A short note on a first distribution record of White-cheeked Macaque *Macaca leucogenys* from India. *Asian Primates Journal*. 5(1): 45-47.
8. Das, P. J. (2016). Report on 'Enhancing awareness of educational institutions and local civil society on climate change through knowledge sharing outreach programmes in four districts of Assam' supported by the Assam Science Technology and Environment Council, Government of Assam and Implemented by Aaranyak during 2013-2015
9. Das, P.J. and Das, N.(2015). Summary Report on 'A study in the present status of water and sanitation management in Assam', sponsored by SaciWATERS (Hyderabad) and implemented by Aaranyak during April-September, 2015
10. Das, P. J., Hazarika, M.A., Das, N., Sonowal, B., (2015). Final Report on 'A study of water related problems and community needs in the area located around the PPF of the HUL in Tinsukia District, Assam
11. Final project report" Training of Forest Guard for the Conservation Hoolock gibbon in Assam, India"1-79pp.
12. Final Project report "Haati goes to School in Assam",Aaranyak.1-59pp.
13. Roy, J.K., Choudhury, M.R., Chakdar, B., Deb, P. and Singha, H. (2016). Sightings of Northern Pig-tailed Macaque (*Macaca leonina*) Blyth (1863) in Assam University Campus, Silchar, Assam. *ZOO's Print*, Vol. XXXI, No. 5, pp: 16-18
14. Roy, J.K and Dey, M. (2015). Studies on anuran diversity and threats to the herpetofauna on Assam University Campus, Northeast India. *Hamadryad*, Vol. 37, No. 1 & 2.
15. Dey, M, Roy, J.K, Tamuly, D. and Singh, P. (2015). Anuran Biodiversity of Barak Valley, Assam and Impact of Human Interference. *ZOO's Print*, Vol XXX, No. 4.
16. Roy, J.K. (2015). Effect of Forest management on amphibians as indicator to ecosystem health in Lower Dibang Valley, Arunachal Pradesh, India. *Rufford Small Grant: 15997-1*.

ABSTRACT:

1. Pathak J.K., N. Brahma and B.P. Lahkar. 2015. *Role of teachers in changing perception of communities towards human elephant conflict around Manas Tiger Reserve*. WEEC2015. Pp145 (608)

Financial Reports

AARANYAK
SAMANWOY PATH,SURVEY,BELTOLA,GUWAHATI-781028,DIST.KAMRUP,ASSAM.
RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2016

RECEIPTS		AMOUNT(₹)	PAYMENTS		AMOUNT(₹)
Opening Balance			Project Payments		5,20,74,731.36
Cash in hand	12,227.00		Advance for Project Expenses		11,57,358.94
Fixed Deposits with BOB	2,39,24,196.00		Bank Loan Repaid		1,16,110.00
LICI	8,40,223.00		Audit Fees		52,670.00
Bank of Boroda	28,71,396.92		Accounting charge		68,000.00
SBI (TRCI) Account)	1,52,059.28		Bank Charges		36,008.84
Punjab National Bank	1,73,941.78		IOC		8,001.98
AARANYAK LIVELIHOOD-2	1,325.84		Tax Deducted at Source		3,13,283.00
INDUSLAND BANK	58,117.00		Admin Salary		388177.27
AARANYAK (ERCI-1)	3,64,719.10		Loan to Employee		15,000.00
AARANYAK (ERCI-2)	5,00,000.00		Miscellaneous expences		3,000.00
AARANYAK (ERCI-3)	3,572.76		Closing Balance		
AARANYAK (GDRCI)	1,51,150.10		Cash in hand	4,053.00	
AARANYAK (LIVELIHOOD)	10,719.10		Fixed Deposits with BOB	5,35,27,257.00	
AARANYAK (PRCI)	2,471.90		LICI	10,48,811.00	
AARANYAK (PRCI) HDFC	4,702.25		Bank of Baroda	19,36,108.91	
AARANYAK (RRCI) YES BANK	14,748.69		SBI (TRCI) Account	5,766.83	
Punjab & Sind Bank, Dispur	14,993.00		AARANYAK(ERCI-1)	97,800.27	
State Bank of India, Dispur	7,930.44		AARANYAK(ERCI-2)	337.95	
UTI	16,00,000.00		AARANYAK(ERCI-3)	20,507.05	
Union Bank of India	85,833.30	3,07,94,327.46	AARANYAK(GDRCI)	1,002.39	
			AARANYAK(LIVELIHOOD)	40,814.85	
Membership fees		2,099.00	AARANYAK(PRCI)	523.17	
Project Receipts		7,73,88,560.08	AARANYAK(PRCI)HDFC	31,318.59	
Bank Interest		3,15,921.96	AARANYAK(RRCI)YES BANK	9,321.16	
Interest on Bank Fixed Deposits		49,17,119.00	Punjab National Bank	1,50,463.44	
Recovery of Project Advances		12,14,259.05	AARANYAK (ARCI) HDFC	3,050.00	
Donation received		7,62,008.00	AARANYAK (WGP) HDFC	371.53	
			AARANYAK (TRCI 2) SBI	57,811.60	
			AARANYAK (TRCI 2 S/A) SBI	1,000.00	
			AARANYAK (WATCH) IDBI	1,640.00	
			STATE BANK OF INDIA, DISPUR	7,930.44	
			UTI	6,00,000.00	
			AARANYAK (LIVELIHOOD-2)	504.34	
			INDUSLAND BANK	30,033.16	
			UNION BANK OF INDIA	7,35,105.30	
			AARANYAK (WATCH) HDFC	54.72	
			Fixed Deposit (TTMP)	11,56,644.00	
			Bank of Baroda (TTMP)	6,12,765.00	
			HDFC (TTMP)	957.46	
			Manas Traditional Dress Cluster	10,80,000.00	6,11,61,953.16
		11,53,94,294.55			11,53,94,294.55

Place: Guwahati
Date : 22.09.2016

For & Behalf of
AARANYAK

Sd-
(Ranjan Bhuyan)
PRESIDENT, AARANYAK

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

Sd-
(CA. BISWAJIT BARUAH)
- M. No. 063538

RECEIPTS

■ AMOUNT (₹)

Donation received	762008.00
Recovery of Project Advances	1214259.05
Interest on Bank Fixed Deposits	4917119.00
Bank Interest	315921.96
Project Receipts	77388560.08
Membership fees	2099.00
Union Bank of India	85833.30
UTI	1600000.00
State Bank of India, Dispur	7930.44
Punjab & Sind Bank, Dispur	14993.00
AARANYAK (RRCI) YES BANK	14748.69
AARANYAK (PRCI) HDFC	4702.25
AARANYAK (PRCI)	2471.90
AARANYAK (LIVELIHOOD)	10719.10
AARANYAK (GDRIC)	151150.10
AARANYAK (ERCI-3)	3572.76
AARANYAK (ERCI-2)	500000.00
AARANYAK (ERCI-1)	364719.10
INDUSLAND BANK	58117.00
AARANYAK LIVELIHOOD-2	1325.84
Punjab National Bank	173941.78
SBI (TRCI) Account	152059.28
Bank of Boroda	2871396.92
LICI	840223.00
Fixed Deposits with BOB	23924196.00
Cash in hand	12227.00

PEYMENTS

■ AMOUNT (₹)

Manas Traditional Dress Cluster	1080000.00
HDFC (TTMP)	957.46
Bank of Baroda (TTMP)	612765.00
Fixed Deposit (TTMP)	1156644.00
AARANYAK (WATCH) HDFC	54.72
UNION BANK OF INDIA	735105.3
INDUSLAND BANK	30033.16
AARANYAK (LIVELIHOOD-2)	504.34
UTI	600000
STATE BANK OF INDIA, DISPUR	7930.44
AARANYAK (WATCH) IDBI	1640
AARANYAK (TRCI 2 S/A) SBI	1000
AARANYAK (TRCI 2) SBI	57811.6
AARANYAK (WGP) HDFC	371.53
AARANYAK (ARCI) HDFC	3050.00
Punjab National Bank	150463.44
AARANYAK (RRCI) YES BANK	9321.16
AARANYAK (PRCI) HDFC	31318.59
AARANYAK (PRCI)	523.17
AARANYAK (LIVELIHOOD)	40814.85
AARANYAK (GDRCI)	1002.39
AARANYAK (ERCI-3)	20507.05
AARANYAK (ERCI-2)	337.95
AARANYAK (ERCI-1)	97800.27
SBI (TRCI) Account	5766.83
Bank of Baroda	1936108.91
LICI	1048811.00
Fixed Deposit with BOB	53527257.00
Cash in hand	4053.00
Miscellaneous expences	3000.00
Loan to Employee	15000.00
Admin Salary	388177.27
Tex Deducted at Source	313283.00
IOC	8001.98
Bank Charges	36008.84
Accounting Charges	68000.00
Audit Fees	52670.00
Bank Loan Repaid	116110.00
Advance for Project Expenses	1157358.94
Project Payments	52074731.36

AARANYAK
 SAMANWOY PATH, SURVEY, BELTOLA, GUWAHATI-781028, DIST. KAMRUP, ASSAM.
INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2016

EXPENDITURE	AMOUNT(₹)	INCOME	AMOUNT(₹)
Audit Fees	52,670.00	Membership fees	2,099.00
Bank Charges	36,008.84	Bank Interest	3,15,921.96
Accounting charge	68,000.00	Interest on Bank Fixed Deposits	49,17,119.00
Miscellaneous expences	3,000.00	Donation received	7,62,008.00
Admin salary	3,88,177.27		
Project expences from internal resources for which fund not received	10,81,804.78		
Surplus of Income over Expenditure	43,67,487.07		
TOTAL	59,97,147.96	TOTAL	59,97,147.96

Place: Guwahati
Date : 22.09.2016

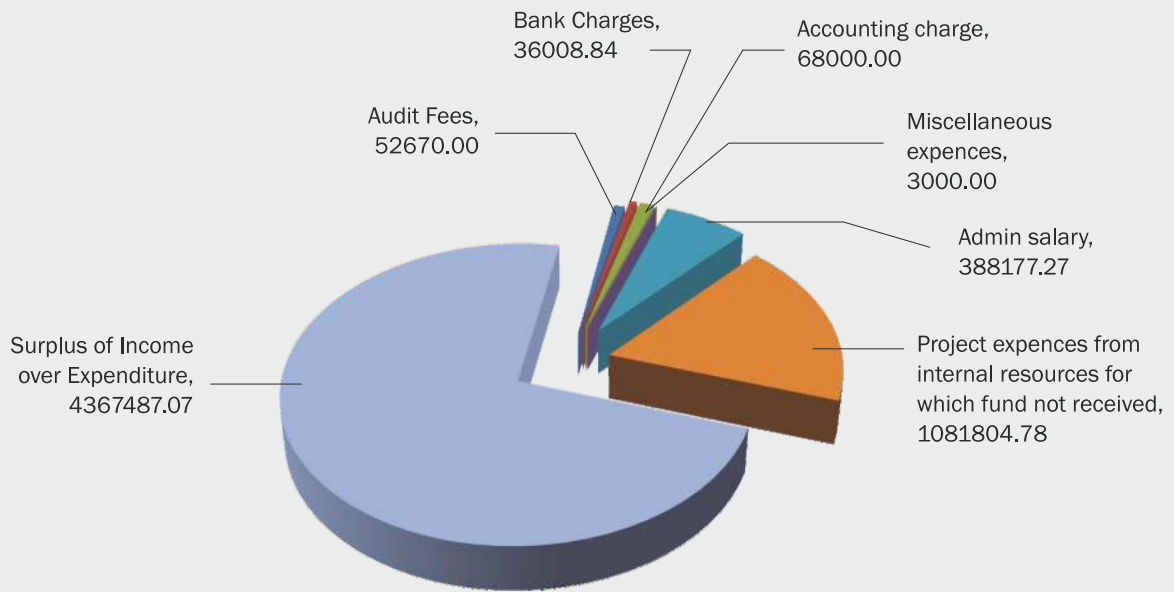
For & Behalf of
AARANYAK

Sd-
(Ranjan Bhuyan)
PRESIDENT, AARANYAK

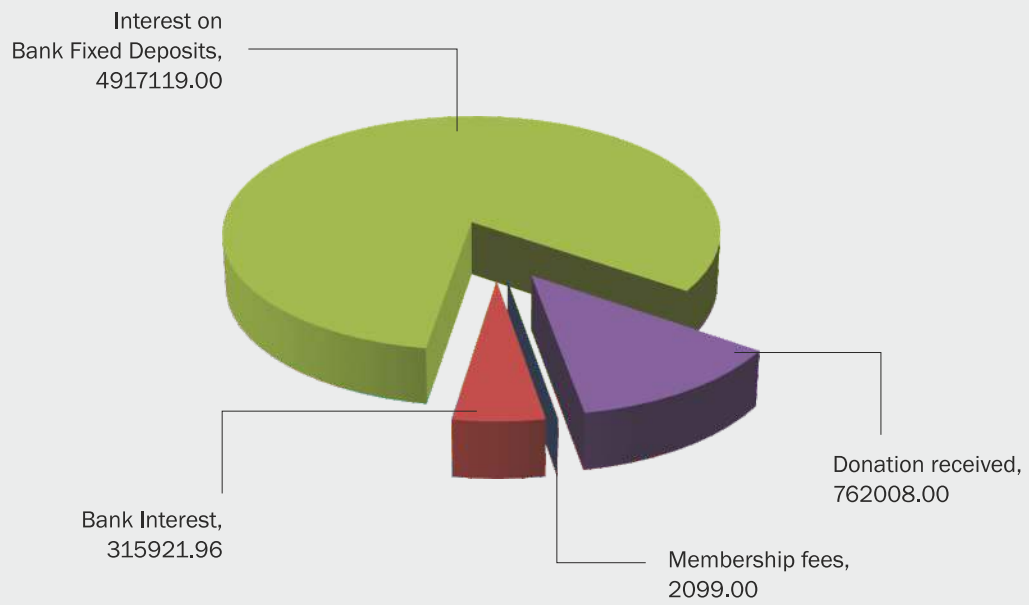
As per our report of even date
FOR DHAWAN PANDEY & ASSOCIATES
CHARTERED ACCOUNTANTS

Sd-
(CA. BISWAJIT BARUAH)
- M. No. 063538

EXPENDITURE



INCOME



AARANYAK
SAMANWOY PATH,SURVEY,BELTOLA,GUWAHATI-781028,DIST.KAMRUP,ASSAM.
BALANCE SHEET AS ON 31ST MARCH 2016

LIABILITIES		AMOUNT(₹)	ASSETS	AMOUNT(₹)
<u>FUND ACCOUNT</u>			<u>Fixed Assets</u>	2,40,97,181.00
<u>General Fund</u>				
Opening Balance	1,30,78,253.97		<u>Current Assets</u>	
Add: Surplus of Income over	43,67,487.07	1,74,45,741.04	Tax Deducted at Source	10,08,705.00
Expenditure				
			Advance for Project Expenses	11,57,358.94
Loan from Bank of Baroda	1,16,110.00			
Less: Repaid	1,16,110.00			
			IOC	23,001.98
<u>Capital Fund out of Project Expenses</u>				
Opening Balance	1,28,06,852.00		Loan to Employee	15,000.00
Add: Additions during the year	32,14,982.00	1,60,21,834.00	Fixed Deposits with Bank of Baroda, Dispur Branch	5,35,27,257.00
			LICI	10,48,811.00
Unutilised Project Funds		5,39,95,625.04	Cash	4,053.00
			Balance with Bank of Baroda, Dispur Branch in	
			Savings Account No. 27670100001898	19,36,108.91
			AARANYAK (ERCI-1)	97,800.27
			AARANYAK (ERCI-2)	337.95
			AARANYAK (ERCI-3)	20,507.05
			AARANYAK (GDRCI)	1,002.39
			AARANYAK (LIVELIHOOD)	40,814.85
			AARANYAK (PRCI)	523.17
			AARANYAK (PRCI) HDFC	31,318.59
			AARANYAK (RRCI) YES BANK	9,321.16
			Punjab National Bank	1,50,463.44
			SBI (TRCI) Account)	5,766.83
			AARANYAK (ARCI) HDFC	3,050.00
			AARANYAK (WGP) HDFC	371.53
			AARANYAK (TRCI 2) SBI	57,811.60
			AARANYAK (TRCI 2 S/A) SBI	1,000.00
			AARANYAK (WATCH) IDBI	1,640.00
			STATE BANK OF INDIA, DISPUR	7,930.44
			UTI	6,00,000.00
			AARANYAK (LIVELIHOOD-2)	504.34
			INDUSLAND BANK	30,033.16
			UNION BANK OF INDIA	7,35,105.30
			AARANYAK (WATCH) HDFC	54.72
			Fixed Deposit (TTMP)	11,56,644.00
			Bank of Baroda (TTMP)	6,12,765.00
			HDFC (TTMP)	957.46
			Mans Traditional Dress Cluster	10,80,000.00
		8,74,63,200.08		8,74,63,200.08

Place: Guwahati
Date : 22.09.2016

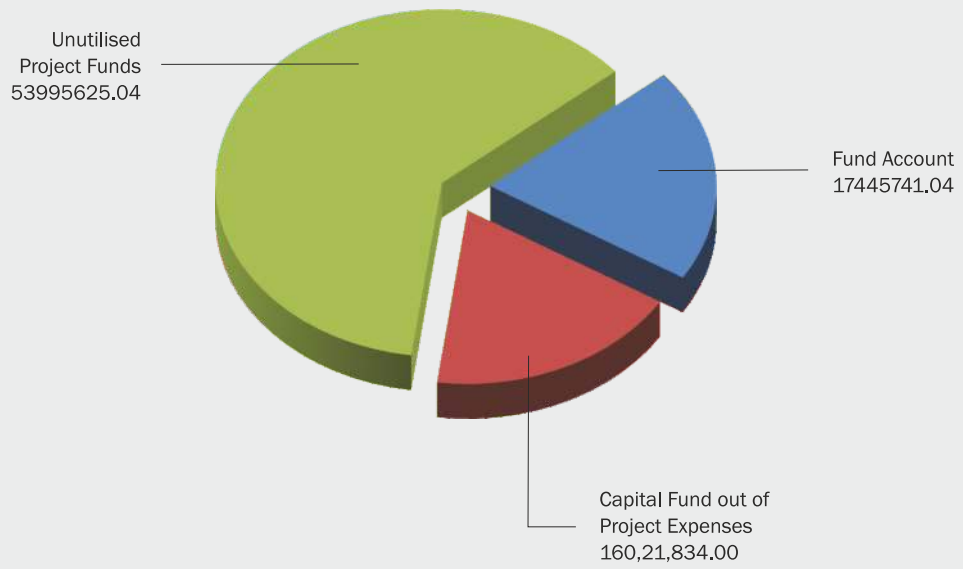
For & Behalf of
AARANYAK

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

Sd-
(Ranjan Bhuyan)
PRESIDENT, AARANYAK

Sd-
(CA. BISWAJIT BARUAH)
- M. No. 063538

LIABILITIES



ASSETS

AMOUNT (₹)

Mans Traditional Dress Cluster	1080000.00	
HDFC (TTMP)	957.46	
Bank of Baroda (TTMP)	612765.00	
Fixed Deposit (TTMP)	1156644.00	
AARANYAK (WATCH) HDFC	54.72	
UNION BANK OF INDIA	735105.30	
INDUSLAND BANK	30033.16	
AARANYAK (LIVELIHOOD-2)	504.34	
UTI	600000.00	
STATE BANK OF INDIA, DISPUR	7930.44	
AARANYAK (WATCH) IDBI	1640.00	
AARANYAK (TRCI 2 S/A) SBI	1000.00	
AARANYAK (TRCI 2) SBI	57811.60	
AARANYAK (WGP) HDFC	371.53	
AARANYAK (ARCI) HDFC	3050.00	
SBI (TRCI) Account)	5766.83	
Punjab National Bank	150463.44	
AARANYAK (RRCI) YES BANK	9321.16	
AARANYAK (PRCI) HDFC	31318.59	
AARANYAK (PRCI)	523.17	
AARANYAK (LIVELIHOOD)	40814.85	
AARANYAK (GDRCI)	1002.39	
AARANYAK (ERCI-3)	20507.05	
AARANYAK (ERCI-2)	337.95	
AARANYAK (ERCI-1)	97800.27	
Balance with Bank of Baroda, Dispur Branch in Savings Account	1936108.91	
Cash	4053.00	
LIC	1048811.00	
Fixed Deposit with Bank of Baroda, Dispur Branch	53527257.00	
Loan to Employee	15000.00	
IOC	23001.98	
Advance for Project Expenses	1157358.94	
Tax Deducted at Source	1008705.00	
Fixed Assets	24097181.00	

FIND AARANYAK

REGISTERED ADDRESS:

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

ADMINISTRATIVE OFFICE:

Aaranyak,
13 Tayab Ali Bylane, Bishnu Rabha Path
Beltola Tiniali, Bhetapara Link Road,
P.O. Beltola, Guwahati, India
E-mail: 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
Barpeta Road

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 - 785612

Eastern Assam Landscape:

Aaranyak,
C/o: Bipin Chandra Datta
Itabhata, Near Digboi College,
Digboi – 786171

Gibbon Wildlife Sanctuary and Jorhat District:

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

Dhemaji Landscape:

Aaranyak,
C/O- Prafulla Saikia, Near BRO Gate
Village – Nagaon PO- Gogamukh
Dist- Dhemaji PIN: 787034, Assam

STAFF OF AARANYAK DURING 2015-16

Administration and Accounts

Dr. Bibhab Kumar Talukdar,
CEO & Head, (RRCD & LAD)

**Mr. Manas Kumar
Bhattacharjya,**
Manager (Operations)

Mr. Ranjan Jyoti Khound,
Manager Finance (Accounts)

Mr. Bhaskar Sarkar,
Manager (Accounts)

Mr. Rajib Das,
Assistant (Accounts)

Ms. Lidiya Daisy Tirki,
Assistant (Accounts)

Ms. Binita Subba,
Assistant (Accounts)

Ms. Kongseng Konwar,
Office Executive

Mr. Nripen Kumar Nath,
Assistant Office Executive

Mr. Gauranga Mandal,
Office Assistant

Ms. Kabita Bezbaruah,
Office Supporting Staff
(Administration)

Mr. Tridip Saikia,
Watchman cum office Assistant

Mr. Arun Basfor,
Office Cleaner(Administration)

Avifauna Research and Conservation Division (ARCD)

Ms. Purnima Devi Barman,
Project Officer (GACP/ARCD)
cum Environmental Educator

Conservation and Livelihood Division (CLD)

Dr. Namita Brahma,
Manager, CLD

Mr. Shyamal Datta,
Project Manager

Mr. Bipul Das,
Project Coordinator

Dr. Animesh Talukdar,
Veterinary officer

Mr. Silash Basumatary,
Project Coordinator

Mr. Sanjeev Daimary,
Senior project Officer

Mr. Manjit Basumatary,
Project Officer

Mr. Bijay Basumatary,
Assistant project Officer

Mr. Kripananda Roy,
Field Assistant

Mr. Kumar Brahma,
Field Assistant

Mr. Ananta Bagh,
Field Assistant

Mr. Bidinta Basumatary,
Field Assistant

Mr. Pradeep Barman,
Driver

Elephant Research and Conservation Division (ERCD)

Dr. Bibhuti Prasad Lahkar,
Head ERCD &
Landscape Coordinator
Manas National Park

Dr. Jyoti Prasad Das,
Manager

Ms. Alolika Sinha,
Research Scholar

Mr. Sandhi Mitra,
Research Scholar

Mr. Abhijit Baruah,
Research Scholar

Mr. Niranjan Bhuyan,
Community Coordinator

Mr. Pranjit Sarmah,
Project Coordinator

Mr. Manjit Konwar,
Project Assistant

Environment Education and Capacity Building Division (EECBD)

Mr. Jayanta Kumar Pathak,
Education and Training Officer,
EECBD

Gangetic Dolphin Research and Conservation Division (GDRCD)

Dr. Abdul Wakid,
Head, GDRCD

Ms. Sunny Deuri,
Senior Research Fellow

Ms. Anumitra Phukan,
Senior Research Fellow

Md. Zakir Islam Bora,
Coordinator

Mr. Bikash Sonowal,
Project Assistant

Mr. Gobardhan Mallah,
Boat Pilot

Mr. Kedar Mallah,
Boat Driver

Mr. Sonay Mallah,
Boat Man

Mr. Iswar Prasanna Saikia,
Boat Assistant

Geospatial Technology and Application Division (GTAD)

Mr. Arup Kumar Das,
Manager, GTAD

Ms. Madhumita Borthakur,
Spatial Database Officer

Ms. Angana Phukan,
Research Assistant

Legal and Advocacy Division (LAD)

Mr. Ajay Das,
Associate Lawyer, LAD

PUBLICITY

Ms. Drishana Kalita,
PR and Communication Officer

Rhino Research and Conservation Division (RRCD)

Ms. Rashna Sarmah,
OSD to SG & Project Executive

Mr. Anil Kumar Das,
K-9 Dog squad handler cum
Office Assistant

Mr. Gaura Baidya,
K-9 Dog squad handler

Mr. Mantu Boro,
Animal Keeper

Tiger Research and Conservation Division (TRCD)

Md. Firoz Ahmed,
Head HRCD & TRCD and
Landscape Coordinator,
Kaziranga National Park

Mr. Dipankar Lahkar,
Manager Research.

Dr. Sudip Kanta Basistha,
Deputy Project Manager

Mr. Jayanta Kumar Roy,
Wildlife Researcher

Mr. Debashis Buragohain,
Project Coordinator,
Conservation & Protection

Md. Arif Hussain,
Senior project Officer,
Conservation

Ms. Nisha Borah,
Senior project Officer,
Communication

Mr. Michal Islary,
Senior Project Officer

Mr. Detsung Basumatary,
Project Officer

Mr. Kamal Kumar Machary,
Project Officer

**Mr. Sushanta Kashyap
Borthakur,**
Trainee Project Officer

Mr. Bhaskar Barukial,
Senior Research Assistant

Mr. Ranjit Orang,
Field Assistant

Mr. Ratul Das,
Field Assistant

Water, Climate and Hazards Division (WATCH)

Dr. Partha Jyoti Das,
Head, WATCH

Md. Mosfique Alam Hazarika,
Research Assistant

Mr. Jintu Kalita,
Research Assistant

Mr. Nayan Das,
Project Assistant

Mr. Mani Kumar Haloi,
Field Assistant cum Watchman

Mr. Deepmani Nath,
Driver cum care taker

Wildlife Genetics Division (WGD)

Mr. Udayan Borthakur,
Head, WGD

Mr. Pranjal Kumar Das,
Laboratory Manager

Mr. Dipul Saikia,
Lab Assistant

Regional Coordinators

Eastern Assam Zone-

Sailendra Mohan Das,

Sanjay Das
(Asst)

Western Assam Zone-

Ashoke Kumar Das,

Kushal Choudhury
(Asst)

Legal Advisors

Gautam Uzir
Advocate- Gauhati High Court

Bhaben Narzary,
Advocate- Gauhati High Court

Research Advisory Board

Prof. S. K Dutta

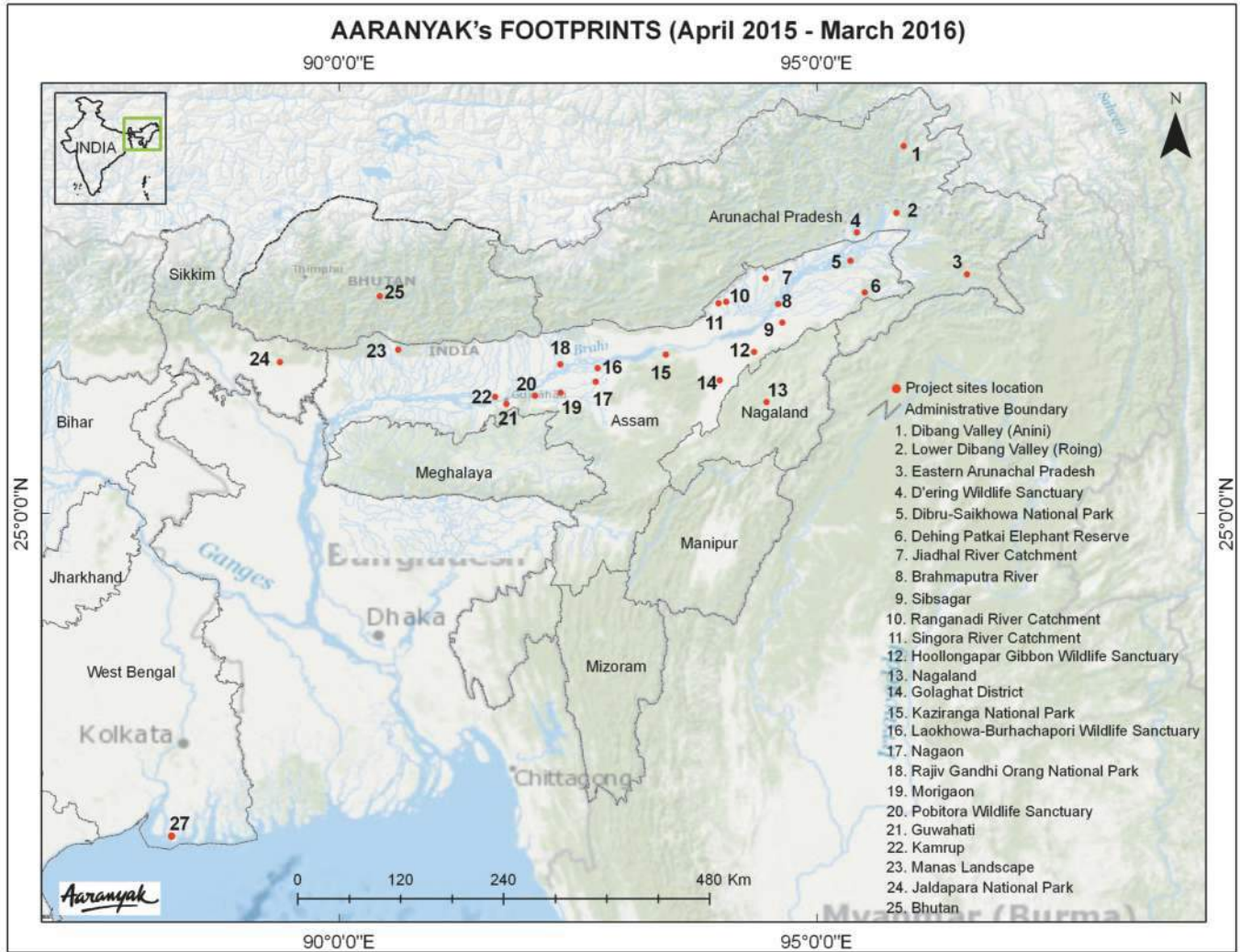
Prof. Qamar Qureshi

Prof. D. C Goswami

Dr. Anwaruddin Choudhury,
D.SC.

Chief Wildlife Warden
of Assam

Secretary General of Aaranyak
as, member Secretary of RAB



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 28th 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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