

Annual Report 2021-2023





Healthy Ecology and a Healthy Economy— Two Sides of One Coin

Our last Baavan annual report covered a period up to the beginning of India's second – and worst – wave of Covid-19 infections. Baavan could not, therefore, be fully active during 2021-22. Also we took the opportunity of being able to travel in the summer of 2022, to spend in Ladakh, renewing our association with the area and people there. For these reasons we did not produce a report last year but are instead combining two years into one report. As the horrors of the pandemic years recede, we optimistically look forward to trying to catch up with our conservation plans. And Baavan has been busy. With Dileep Ahirwar now comfortably in control and sometimes ably helped by his brother Deepak, we have expanded in several new directions.

Our core work remains nature education with many schools around the Panna Tiger Reserve but we have been able to greatly expand these activities through a new association with Sanctuary Asia Foundation's Kids for Tigers programme. We are also happy to have moved into positive support and focus on women's issues. When the Forest Department took the step of enlisting women guides for the park, Baavan stepped in to organise a special training workshop for them. It was an education to meet these dynamic young women and to hear the stories of how they had to struggle to break traditions and step out into such positions. With the effort and eagerness they exhibited, we are sure they will soon become some of Panna's best guides. Not all the women who came for the training became guides so Baavan (and the Sarai at Toria) has enlisted some of the others for various projects. With collaboration with other organisations and with their help, we have been able to move towards gender and women's health issue discussions also in our target villages. Such topics are not readily accepted, but Baavan has entered the foray and will be pursuing this area more in the coming years. Such collaborations are always beneficial and help a small organisation like Baavan to spread its reach. With the pandemic in abeyance, we were also able to resume collaborative activities with Daly College whose enthusiasm continues unbounding for health camps student/village interactions.

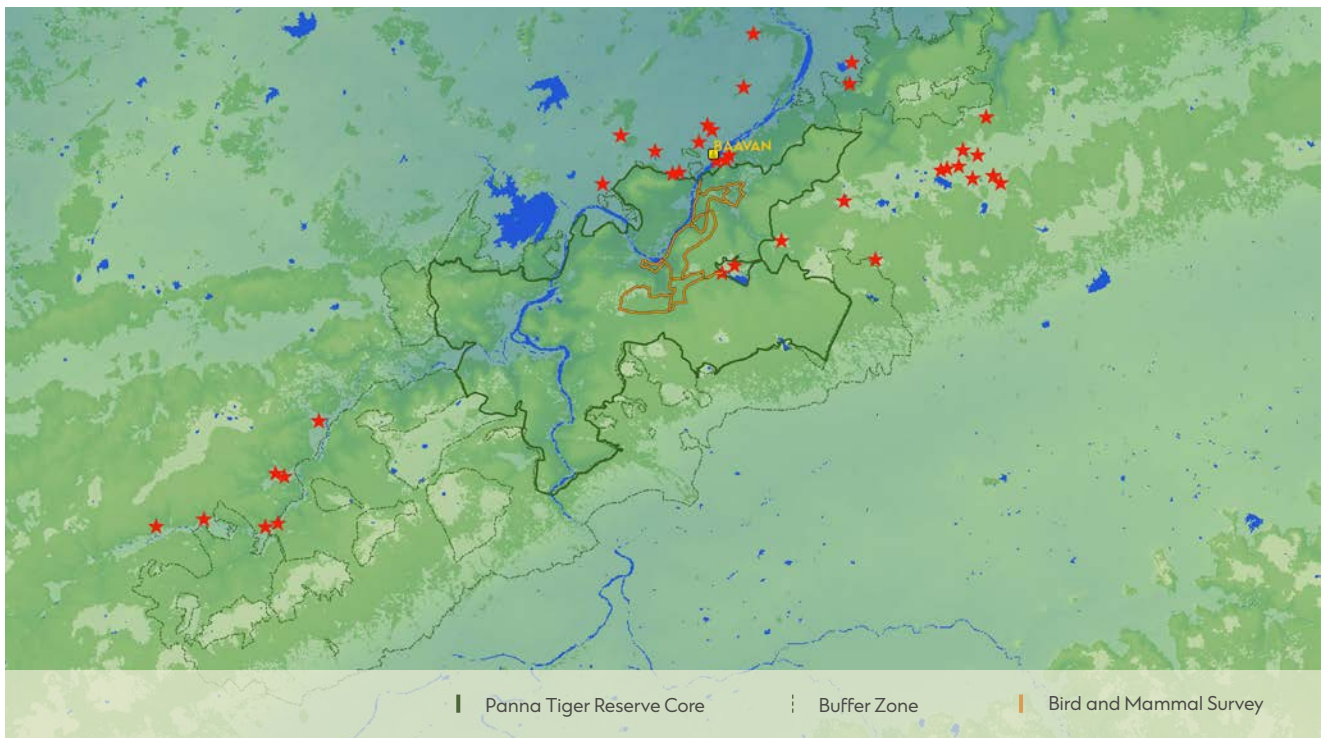
While **Baavan—bagh aap aur van** was specifically set up with the objectives of furthering our knowledge of the natural world and improving our relationship with it, once you interact with communities whose support for conservation is some of the most crucial, one realises that Baavan’s target involves covering all aspects of human development. These remote communities are especially crucial to the necessary extension of conservation beyond Protected Area boundaries but their livelihood status is often such that their survival and the long-term conservation of the forests and wildlife around them, may be at variance. Baavan aims to enhance livelihood options, improve education and living standards in ways that allow individuals to develop and prosper within a conservation framework – to bring the conflict to a harmony where both prosper. We believe this is entirely possible and indeed that the mainstream ideas of “development” such as multiplex cinemas, shopping malls and natural resource-expensive industries are completely antithetical to long-term prosperity for all. We are all dependent on the continuation of proper functioning of the natural ecosystem and those still living in more natural rural conditions probably understand this the best. This is not something that can happen overnight but we hope that our small steps in this direction may eventually bring change and in the meantime improve standards at least by some margin.

Raghu Chundawat
President

Joanna Van Gruisen
Managing Trustee



Executive Summary



A map illustrating the locations of schools visited by the BAAVAN team. The Panna Tiger Reserve core is depicted by a dark green line, while its buffer zone is represented by a thin green line. The brown line represents the transect routes for bird and mammal survey conducted in the park.

The initial months following our last report saw intermittent activity as the pandemic wave returned. However, Baavan resumed activities gradually and we have now expanded our scope of reach to a greater number of schools for our nature education programme. From teacher training and classroom sessions to nature trails, camps, litter clean-up programmes, theatre, AVs and festivals, Baavan now impacts over 50 schools. A vibrant and committed young conservation community is being nurtured by the Baavan staff and volunteers.

In large part the extended reach is as a result of our joining hands with a conservation partner, Sanctuary Asia Foundation and their programme Kids For Tigers. Initiated in 1999, "Kids for Tigers is an educational outreach programme that touches the lives of rural kids living right next to the tiger and urban kids across the country. The tiger, a metaphor for all of nature, is a rallying point for children working to safeguard their own future. Going way beyond conservation education, the programme is dedicated to 'leaving kids with a better planet and leaving the planet with better kids'". Last year was the first year we collaborated with them and ran KFT activities in our area. With that experience we are now better prepared and this year have extended our reach to over 50 schools and thousands

of school kids. While earlier concentrating on the rural establishments around the Panna Tiger Reserve, this year we also included schools in the nearby urban centres like Panna and Chhatarpur. Kids for Tiger activities include one-day workshops for teachers of the school where the KFT objectives and activities that are planned for kids are introduced. District authorities were very cooperative and provided every support we asked for. The highlight and culmination of the KFT programme here is the holding of a Tiger Fest. This festival combines all the schools to one location and a full day programme of artistic activities is conducted with the conservation theme. In 2023 we were very fortunate to have KFT founders, Bittu and Madhu Sahgal with us for the occasion and also Lord Nicholas Stern and Lady Susan Stern. The entire Baavan team and local community felt proud to have such eminent conservation leaders joining our activities.

An aspect of the nature education programme is education about plastic and waste in general. Apart from the educative plays performed concerning plastic, Baavan has organised several litter collection clean-ups with school students from around the area. A couple of these involved young students cleaning a 2km stretch of highway 39 that runs through the National Park. It was horrifying to see the amount and

kind of litter thrown into the jungle, from the ubiquitous plastic bottles and food packaging waste to chemist items, like out-of-date medicines. Many bags were filled and faster than anticipated, but we had also invited forest officials from the Gangau and Madla ranges and they provided transport to take this to Panna for disposal.

In 2021 the previous male bastion of park guides was diluted a fraction when the Panna authorities appointed a small number of women guides. Baavan organised a three-day training workshop for them at the beginning of the 2022 safari season. The highly experienced Ms Ratna Singh came to run this for us, adding 8 more to the thousands of guides, including hundreds of women, she has trained in rural India. These girls are stepping out of their traditional roles, not an easy move for rural women here, and embarking on interactions with a host of new and foreign individuals. Ratna eased this passage for them and after three days it was inspiring to see how their confidence had grown. Baavan has also begun interactions with women in Banki and other villages raising issues of gender equality and exploring women's health issues. These are not subjects easily broached and it will take time to encourage enough trust for women to open and feel comfortable discussing such subjects. Baavan enlisted the assistance of Neelam Kushwaha for this. A local health worker, Neelam has had many years' experience working with Darshna Mahila Kalyan Samiti and with Key Education Foundation. We are also involving Neha Prajapati, a young woman from Madla who had been part of Ratna's training but not included in the park guide system for these activities and looking to others with experience to collaborate and help conduct and continue activities in this field.

In March 2023 we were finally able to welcome back Daly College students and teachers. Pre covid they had wonderfully supported Baavan's work bringing students and optometrists to help paint and upgrade some village schools and bring eye-testing and spectacles to remote villages here. This time over 60 students and teachers participated from Daly College and seven other sister colleges in Indore, Delhi, Mumbai, Bhopal, Jodhpur and Varanasi. Dubbed the Baavan/Daly College/Round Square Wildlife Awareness and Community Service project, a combined eye, teeth and health camp was organised in one of the local villages and almost 600 people came and were fitted with spectacles and/or given medical advice and medicines.

Baavan's livestock improvement work met a hiccup as the artificial insemination programme was tried but not appreciated as felt to be too cruel to the animals. Nevertheless, we continue discussions and organise outings and film shows / discussion sessions to explore ways forward to improve the breeds, so milk production is enhanced and livelihoods improved. Thanks to a guest at the Sarai at Toria, we are also exploring the introduction of household poultry rearing in collaboration with Keggs who work in tribal areas for this. This ties in well with our aim towards women empowerment as generally it is the women who take care and benefit from this.

Apart from these activities, Baavan continues monitoring of vultures and other wildlife with the help and mentorship of Raghu and Dr Rashid Raza. Baavan was also happy that the Satpura Landscape Tiger Project annual meeting could take place again as we greatly value our association with this organisation assisted by the UK-based Born Free Foundation.

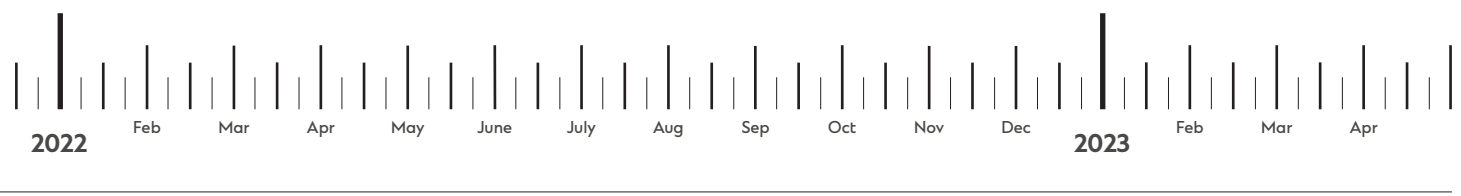


Long-tailed Shrike, a common bird in the landscape we work.

A Year in Review

Baavan Work Timeline







A young boy in a red long-sleeved shirt is crouching in a lush, green forest. He is holding a black smartphone in his right hand, pointing it towards the ground. The forest is filled with tall trees and dense undergrowth. The text "Nature Education" is overlaid on the right side of the image.

Nature Education



The BAAVAN team consistently endeavours to engage school teachers in their nature education initiatives, empowering them to independently carry out similar activities. In this instance, a teacher is seen facilitating wildlife puzzle games with children. Such activities represent a fraction of the comprehensive nature education efforts conducted by BAAVAN in the vicinity of the Panna Tiger Reserve.

2022-23 was the first year after the Covid-19 pandemic, during which BAAVAN could conduct activities without interruption. Nature Education is one of BAAVAN's core projects and despite the lockdown, this was an activity to which we remained committed and in fact the field team even managed to interact with the students in small batches through the pandemic. As soon as the lockdown was lifted, the BAAVAN team was delighted to resume its activities with the school children on a regular basis.

There is no better way to understand the need to protect our environment, than by connecting to nature directly and closely; we therefore aimed to provide such experiences to the students, introducing them to different aspects of nature with different perspectives while making activities as interesting as possible. This year we expanded our reach and we now work with 18 middle schools, 52 teachers, and over 1800 children from different villages in rural areas. This year we engaged students in interactive activities because such first-hand experience helps children comprehend the most complicated message easily. We try to regularly add new activities and this year we introduced a couple of new ones that encouraged students to conduct research. Such activities build a temperament to think rationally and address issues selected to

work on. This year children selected environment and pollution-related issues. A scientific temper is needed to complete this project. We were very impressed with their comprehensive project report. In fact, it was very encouraging and we will build on this next and will continue with the activity.

This year the BAAVAN team, for their weekly engagement with the children, introduced a few new games to inculcate a better appreciation for nature and wildlife around them. Children do go out to forest areas regularly but their knowledge is mostly limited to things that are important to them and animals that they know are mostly those that are usually in conflict with them. To create more positive sentiments about the forest and its animal we take them to their natural surrounding and try to connect them to it with a different perspective. Children in these rural environments are not used to sitting indoors in the classroom for long hours and they get bored with classroom-based studies very quickly so we concentrate on games and outdoor activities that prove far more engaging for them. Baavan connected with children on a regular basis, giving them a break from their regular classroom education by playing our educative games. Our emphasis is on constant engagement with children rather than an occasional

engagement with a higher number of students.

The BAAVAN team visit two to three schools every week over several months. Every time we visit we go with a new activity to keep excitement among the children at a high level. We try not to repeat a game unless there is a popular demand for it. In 2022-23 we covered ten schools on a regular basis and other schools as time permitted.

This year Baavan also collaborated with other organizations active in the region in similar fields. Some of the school project work was done in conjunction with Sunil Prajapati of the Bhopal based Samavesh - Society for Development and Governance. Baavan joined them and participated with them in their activities and they also shared their expertise with our team to help conduct many of our activities. We really appreciate and thank them for their kind gesture and it is heartening to see many organizations coming together in a collaborative spirit.

Learning through Games

Bingo and Koodu

Using animal images, these are perfect games suited to strengthen our core principle of “know your wild neighbours”. Since children do not have equipment such as binoculars or telescopes to see their wild and shy neighbours up close, the photographs used for these games are a great way to introduce many species, especially of birds that they see but whose names they do not know. For the first time, they were able to view many animals in detail. A small write-up also provides additional information for all the students who participated in the game.

Web of life

This game shares how all lifeforms are interconnected and when one connection is lost it has ripple effects on many different lifeforms.

Bujho to Jane

A card is stuck on the back and he/she must try to identify who is he or she by framing the right question to get the correct answers in order to correctly identify the name of the card. It helps children reason thinking about what kind question to ask to get correct answers to her or to solve the riddle.

Origami

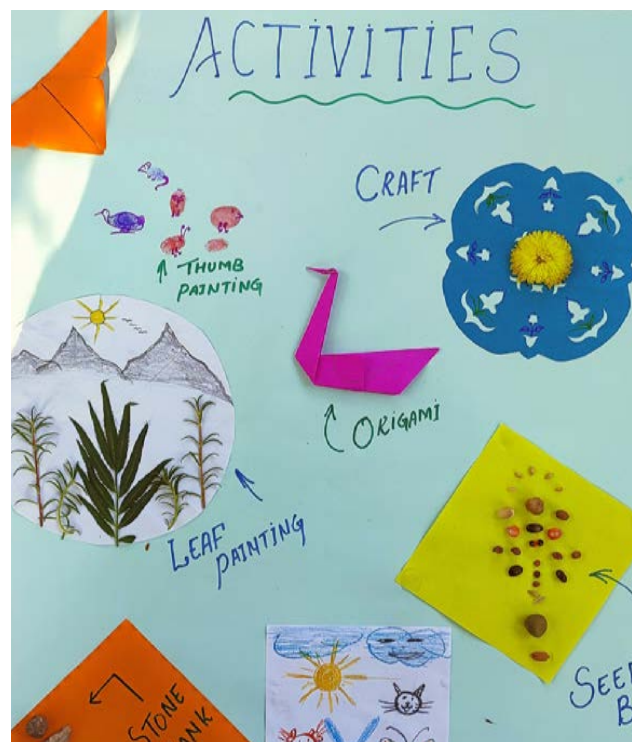
A regular for the past several years origami is a very popular activity among the children, so we continued with it this year too. It is easy to repeat as every time a new form can be created and is an excellent game for improving hand and eye co-ordination. Some children learn quickly and help others and play leadership roles

by sharing their newly acquired skills. This game is useful also for teaching food competition among wild animals and their habitat need.

Art, like Origami, is another very popular pursuit among children. The Baavan team repeat this activity with different mediums, painting and drawing but also using items collected from their neighbourhood. Children used leaves to create different life forms like birds and turtles. The results were lovely and were greatly appreciated by themselves and others. It was one of the most enjoyed activities of the year.

Puzzles

Solving puzzles is always challenging and an exciting activity among children. The BAAVAN team used match sticks as a teaching learning material to solve mathematical puzzles. Maths puzzle games are popular activities for primary school children as they promote critical thinking and problem-solving skills. These games engage students in fun and interactive manner, helping them develop mathematical concepts while enjoying the process. Through puzzles, students enhance their logical reasoning abilities, numerical fluency and spatial awareness. This ultimately fosters a positive attitude towards mathematics and nurtures a love for learning.



A promotional poster for Winter Wildlife Week, an initiative by BAAVAN. This event was introduced in multiple schools, featuring a range of exciting and enjoyable activities for children. The week included creative endeavours such as thumbprint painting, Origami crafts and crafting figures using natural materials like leaves and stones.

Celebration of Wildlife Week

In the first week of October, India celebrated its 68th Wildlife Week in 2022, Wildlife Week is celebrated every year, with the aim of promoting wildlife conservation and the protection of the environment. Baavan also celebrated the week by organizing special activities in different schools every day.

Collaborative Activities

To expand our nature education scope, the Baavan field team collaborated with other organizations active in similar fields and conducted two separate field projects jointly. Projects are intense but important activities and encourage children to read about a particular subject in detail and formulate questions. To answer these questions students are guided to develop methodologies through further reading, discussions with teachers and our collaborative team and find answers from their observations. This hands-on experience is always an invaluable experience for the children. With our collaborative partners, the Baavan team developed guided two field projects with the help of children and successfully completed these. For these two projects, we worked with Samavesh – Society for Development and Governance, Bhopal.



An exuberant group of schoolchildren enjoying a nature trail. BAAVAN organized a total of fifteen nature trails, which have proven to be highly popular outdoor activities among kids.

Project 1—Waste Management

Baavan ran an introductory three-month project-based learning activity on waste management. The object was to raise awareness among students about waste, emphasising the significance and importance of waste segregation and how to distinguish between biodegradable and non-biodegradable materials. Our target audience were students from Middle Schools and for this project, two schools, Baharpura and Madla middle schools, both located at the periphery of the Panna Tiger Reserve were selected. In Baharpura school, seven groups, and in Madla school 5 groups, each consisting of five students participated.

The activities encompassed the following key areas:

1. **Understanding Waste:** The initial phase of the project focused on introducing students to the concept of waste and its various forms. Through interactive sessions, games, and presentations, students acquired basic knowledge about different types of waste, including household waste, industrial waste, and electronic waste.
2. **Importance of Waste Segregation:** Students learned about the importance of waste segregation in order to minimize the negative environmental impacts of waste. They were educated on the practice of separating waste into different categories, such as dry, wet, electronic, medical, organic, and non-recyclable, promoting efficient management.
3. **Biodegradable and Non-Biodegradable Materials:** The project aimed to familiarize students with the distinction between biodegradable and non-biodegradable materials. Through practical demonstrations, discussions, and hands-on activities, students gained an understanding of how biodegradable materials can decompose naturally, while non-biodegradable materials remain in the environment for longer periods, causing pollution and harm to ecosystems. Students collected various types of waste from their neighbourhood, identified and placed them in two different categories- A. organic and biodegradable and B. non-biodegradable waste. These wastes were disposed of separately in a controlled environment to monitor the decomposition for over two months. Based on their observations on the collection of waste, various different types of waste they collected, and its decomposition after the disposal, the children wrote a very comprehensive and detailed report.
4. **Practical Implementation:** To ensure the project's effectiveness, students were encouraged to apply their learning in practical situations. They were tasked with organizing waste segregation drives within the school and their local communities. This allowed students to put their knowledge into practice, raising awareness among their peers and adults.

5. **Evaluation and Reflection:** Throughout the three-month period, regular assessments and feedback sessions were conducted to gauge students' understanding and progress. Open discussions and reflections encouraged students to share their views, difficulties, and insights gained during the project. This feedback informed adjustments to the project's approach and content, allowing for continuous improvement.

Conclusion—The three-month project-based learning activity on waste management successfully engaged middle school students in understanding waste, the importance of waste segregation, and the distinction between biodegradable and non-biodegradable materials. By providing students with practical experiences and fostering critical thinking, this project aimed to empower the younger generation to become responsible citizens, actively contributing to sustainable waste management practices. Through this project, students not only gained knowledge about waste management but also developed a sense of responsibility towards the environment. It is crucial to continue such initiatives to foster environmental consciousness among students, enabling them to become active advocates of sustainable practices in their communities. Through this project not only the students that participated but other children who shared the observation were also exposed to the environmental problem due to poor disposal of waste in their neighbourhood.



BAAVAN undertook a series of project-based activities, with one focusing on waste management. In this initiative, children were involved in segregating biodegradable and non-biodegradable waste. They closely monitored the decomposition process over several weeks, diligently recording their daily observations.

Project 2—Biodiversity

In a three-month project-based learning activity, middle school students engaged in a comprehensive exploration of biodiversity. Through a series of stimulating activities, they developed a deeper understanding of this crucial concept. Students began by observing vegetation plots (5x5ft), where they examined the diverse plant species, recorded the local names and learned the English and botanical nomenclatures. They compared numbers and types of species found in different plots and also learned about their interdependencies. Nature trails provided a first-hand experience with the local ecosystem, allowing students to identify different organisms and understand their habitats. Bird watching sessions sharpened their observation skills, enabling them to recognize unique avian species and comprehend their significance in maintaining ecological balance. They also began to identify the bird from their calls. Furthermore, students actively participated in presentations, allowing them to share

their knowledge and insights with their peers. Games and interactive sessions added an element of fun, fostering engagement and reinforcing biodiversity concepts. These activities not only expanded their knowledge base but also instilled in students a sense of responsibility towards environmental conservation. Overall, this project-based learning activity on biodiversity provided middle school students with an immersive educational experience that enhanced their understanding and appreciation of the natural world.

Children also conducted a butterfly survey on a different trail. Butterfly walks were repeated five times and they identified over 26 different butterflies. Butterfly survey was open to all the children and over 45 children from the Madla school participated in this exercise. Through these activities, children understood the meaning of biodiversity and observed birds and butterflies' different perspectives.



Another team of students completed a project on Biodiversity. They gathered information from the field, presented posters and wrote a detailed report.



Removing litter from either side of the road that cuts through the Panna Tiger Reserve.

Education through Participatory Activities

Most of our disposed waste is made from non-biodegradable materials and these are disposed of very carelessly. These non-biodegradable wastes accumulate over time and pollute our environment. These are clearly visible along most busy roads, and major drainages. National Highway 39, which runs through the Madla village and through the Panna Tiger Reserve, provides an opportunity to demonstrate the magnitude and impact of careless disposal of waste. We encourage students and the community to participate in plastic collection exercises along a portion of the Highway that runs through the Tiger Reserve. We collected all kinds of waste along the 5km length of the highway and 80-90 individuals participated on different days. We collected approximately 700kg of plastic and it included to everyone's shock a huge amount of medical waste (40%). The collection was always followed with group discussions, art craft workshops, and theatrical plays on pollution due to poor waste disposal. In a commendable effort to address environmental concerns, school students, local community volunteers, volunteers from urban area (Chhatarpur district) and forest officials collaborated for this garbage collection. This collaborative effort not only aimed at cleaning up the crucial forest area but also fostered a sense of community responsibility. The involvement of diverse stakeholders highlighted the significance of collective action in addressing environmental challenges and promoting sustainable practices in the region.



BAAVAN team collaborated with Tiger Reserve authorities and other NGOs for a number of plastic waste collections.

शासकीय एकी

संकुल शिक्षणगृह शिक्षा केंद्र वा



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Kids for Tigers





BAAVAN is a partner of Kids for Tigers, an initiative of the Sanctuary Asia Foundation.



The Kids for Tigers programme concludes with an annual tiger festival, where children from two to three schools participate. In March 2023 Madhu and Bittu Sahgal from the Sanctuary Asia Foundation were present during the fest.

In late 2022 Baavan was approached for collaboration by Sanctuary Foundation's pan-India Kids for Tigers programme. Thus we conducted our annual Balmela or school fair in association with them. This new initiative included a PowerPoint presentation developed by the Sanctuary Foundation, a day-long workshop on tiger conservation and climate change issues with teachers, also a three-day nature camp for a group of selected students who were joined by one parent/guardian and one teacher from the same schools. The Kids for The Tiger programme culminated with a Tiger Fest Balmela or Student Fair.

In the current school education system, especially in rural areas, there are almost no opportunities created where students, teachers and parents or guardians meet on one platform and try to build something. To bring together all the stakeholders in children's education, we organize an annual event where children, teachers, and the village community come together and participate and appreciate their children's creative work. In this annual event over 200 school children from different schools, along with their teachers, parents, and other organizations working in the education field, participate and help organize the event and activities. Baavan this year organized the annual Fair at the Baharpura School. Several stalls were established by the students on different aspects such as science, origami art, craft, food, environment games, and finally a theatrical play on plastic. The skit titled "Plastic, Plastic" was created by Shri Praveen Namdev who directed 15 students from the Baharpura school and after several days of rehearsals, it was performed for all the students, teachers, and the villagers. It was the highlight of the event and was greatly appreciated. Since then, this play has been played at different schools and venues. Kids for Tigers founder, Bittu Sahgal was also present at the mela, along with Susan Stern and Lord Nicholas Stern, author of the Stern Review on the Economics of Climate Change.







Health Camps with Daly College

Every year Baavan has been conducting eye and health camps for the village communities, where Baavan is active, in close cooperation with Daly College, Indore. But due to Covid-19 restrictions, we were not able to conduct these camps for two years consecutively. But this year we conducted an eye camp and included a dental and health check-up camp at Basata village within the Dhamna Panchayat. Villagers from four to five villages benefitted from these camps. Daly College helped organize and funded the camps. The entire operation was supervised and conducted by volunteering young students from Schools that are part of the Round Square group. District authorities supported the camps and doctors and nursing assistants conducted health check-ups. Over 800 villagers participated and benefitted from this camp and Daly College distributed prescribed spectacles to villagers after the eye check-up. Local farmers and communities also volunteered and supported where ever we needed support.

Baavan also conducted health camps specifically for women and ran workshops on personal hygiene. These were organised with the expertise of Ms. Neelima Kushwaha of Darshna Mahila Kalyan Samiti, Chhattarpur, who has been working in this field for the last eight years. In the day-long workshop and camp, 46 women participated from two villages, Toria and Basata.



A team of medical doctors consulting and providing treatments.



Student volunteers register villagers at the health camp.



Student weighing and measuring the participants.



Students use Landolt C charts to test the villagers' eyesight.



A group of seven people are standing in a circle on a dirt path in a wooded area. The path is lined with stone steps and surrounded by trees. The people are dressed in casual attire. One woman in the foreground is wearing a yellow top and blue pants, another is in a white top with a red shawl. A man in a blue plaid shirt and another in a white shirt are also visible. The scene is outdoors with sunlight filtering through the trees.

Capacity Building



Ratna Singh inspires confidence and knowledge in Panna Tiger Reserve's new batch of female guides, through classroom and outdoor training sessions.



Training for Female nature guides

Panna Tiger Reserve authority has recently recruited seven female nature guides. These young nature guides had no formal training on how to interact with tourist guests and other colleagues like drivers. We decided to conduct a one-week preliminary training for these newly recruited female wildlife guides of the Panna Tiger reserve. Three girls who had also applied but were not recruited were also invited to participate so that next time when an opportunity comes, they are better prepared. We invited well-known naturalist Ms. Ratna Singh to conduct this one-week-long training workshop for the lady guides. Ms Ratna Singh has conducted training for female guides in different Tiger Reserves. It was hugely successful and the change in confidence level of the participants was striking.

Training of Baavan Staff in Butterfly monitoring

Dileep participated in an extensive butterfly survey jointly conducted by the TINSA Ecological Foundation, Wild Warriors, and Ratapani Wildlife Sanctuary in October 2022. By participating in this survey Dileep learned the scientific approach to identify and count butterfly species and learned data collection methodology and how to do statistical analysis of the data. This participation immensely helped Dileep and he has used his new recently acquired skill to conduct small surveys with school children from Madla Middle School.





Baavan is actively working in a few villages on the periphery of the Tiger Reserve – Banke and Ghiroli. These lie outside the buffer area but within an important corridor. A few years ago Baavan had conducted a detailed socio-economic survey of these villages that revealed that dairy is the second largest source of income for them and that their livestock are mainly dependent on the forest for grazing. Dairy contributes 30-40% of the overall income for most of the households. But age-old ways of animal husbandry are outdated and result in poor milk production as well as negatively impacting on the forest ecosystem. As inflation impacts more poor-quality animals are added to compensate and this puts even more unnecessary pressure on the forest ecosystem.

Dairy and animal husbandry

To reduce the impact on the forest and simultaneously increase household income we decided to introduce villagers to better animal husbandry practices with productive local breeds that are available in India. We conducted education tours to Chitrakoot dairy farms for the villagers and saw breeds like Sahiwal, Gir, Lalsindhi, Tharparker, and Rathi. They also saw how additional income can be generated from better composting practices. In the first phase of the work, we took twenty-five households with the idea to work with these interested families and reduce the pressure on neighbouring forests. Baavan also sponsored artificial

insemination to improve the breed quality but was not very successful because villagers found this method very intrusive; hence it was dropped. But we used the remaining funds to inoculate the livestock against common diseases.

Backyard Poultry

Backyard poultry is a very effective way to add to household income and provide better nutrition for the family with little investment of time and money. Studies show that poultry contributes significantly to rural household income. It creates opportunities for self-employment and additional income especially for the women and provides alternate protein-rich diet. Backyard poultry farming is a new concept based on a traditional system of poultry keeping that is practiced in rural India but with newly developed breeds. It is a low-input business that can operate with a small number of birds raised on kitchen waste. Baavan conducted several tours for the villagers and looks forward to working with a few selected families interested in backyard poultry. The idea for this came from a fortuitous discussion with a Sarai at Toria Guest; the gentleman was from the Keggs egg company who have pioneered tribal poultry farming and developed a breed especially suited for this. We look forward hopefully to getting this up and running in the villages where Baavan is working.



BAAVAN aims to promote backyard poultry featuring breeds that don't require industrial farming methods and can thrive by being raised on kitchen waste.

A One-Day Workshop on Women's Health

We organised an education workshop on women's issues and personal hygiene for rural women from Toria and Basata villages with an expert Ms Neelima Kushwaha from Samridhhi Mahila Kalyan Samiti. She included topics such as gender equality, personal hygiene and women health and menstruation and more than fifty women participated in these workshops.



Adults from Banke and Ghiroli villages were taken on a education tour to Chitrakoot to show modern animal husbandry practices that can help them double their income if they follow the same practices and reduce pressure on the forest.





Wildlife Population Monitoring

Vulture nest monitoring—2022 and 2023

Year	Vulture Species	Number of Vultures and Chicks	Number of Nests	Number of Active Nests	Number of Inactive Nests	Under Construction	Number of Chicks
2021	White Rumped Vulture	53	22	18	4	0	9
2022	White Rumped Vulture	48	30	21	7	1	0
2023	White Rumped Vulture	56	31	17	14	0	5



Tiger prey and bird population monitoring— 2022 and 2023

We continue to do our vehicle-based distance sampling transects to monitor the tiger populations. We now have well trained team for conduct vehicle transects for mammal surveys. Last year we once again asked Dr. Rashid Raza to trained our field team to conduct point counts to monitor the bird surveys. We use the same roads transect that we have been using for mammalian surveys and have identified xxx number of points for counting birds on these transects. These are done during the winter months. We will be replicating both the surveys in the tiger forest outside the protected area to compare the impact of protection and conservation measure on bird communities.

Species	Mean Group Size	Length of Transect KM	Number of Individuals	Mean Group Size	Encounter rate (GRP)	Density (CV)
Chital	5.34	1037.6	1130	5.34	0.2	9.64 (4.7)
	4.4	211.8	971	4.4	1.08	51.5 (11.21)
	6.16	188.91	1134	6.16	1.01	60.93 (6.8)
	5.53	165.97	690	5.53	0.76	39.22 (10.16)
Sambar	3.37	1037.6	640	3.37	0.19	5.59 (5.81)
	2.28	211.8	440	2.28	0.92	19.48 (9.28)
	2.51	188.91	263	2.51	0.56	13.13 (11.63)
	2.59	165.97	174	2.59	0.4	7.39 (9.13)
Nilgai	3	1037.6	905	3	0.33	6.71 (4.94)
	2.52	211.8	163	2.52	0.3	8.95 (18.42)
	3.58	188.91	123	3.58	1.19	5.32 (15.87)
	2.6	165.97	54	2.6	0.13	2.16 (0.32)

Our Support

Many individuals continue to contribute and help Baavan develop its projects both materially and conceptually, and we would like to take this opportunity to express our gratitude to them all. We also wish to thank Sanctuary Asia Foundation, the Born Free Foundation and SLTP for believing in us and providing funds and support for our education projects. This year we are particularly grateful to the Sarai at Toria, TOFT, Saad Bin Jung of Bison Wilderness Resort and Emma Horne of Emma Horne Travel for actively supporting Baavan’s conservation endeavours. We also really value the interest and support of Daly college, Indore who initiated and who with their associates continue to sponsor, health camps, including dental and eye camps for the local communities. The Sarai at Toria provided support needed in terms of finances and logistical support, also hosting people and providing vehicles and personnel. We would like to especially thank the District education department authority, Tapsya Parihar CEO Zila Panchayat Chhatarpur, Neeraj Khare APC Chhatatpur; Sanghpriya CEO Zila Panchayat Panna, Ashish Khare CAC, Govind Tiwari APC, Panna for their support.

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Conservation partners that have supported Baavan’s activities.





The Baavan (Bagh Aap Aur Van) trust was set up, as its name suggests, to further the interests of wildlife, forests and people. The emphasis is on scientific research that can enhance understanding of India's flora and fauna and on promoting wildlife conservation in association with the communities living in and around protected areas. The trust was named after a key tigress that lived in Panna National Park in the 1990s and early 2000s, so-called for the markings above her eyes that could be read as '5' and '2'.

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