



Indian Institute of Science Education and Research (IISER) Pune



Founded by the Ministry of Education, Government of India, in 2006 and declared an Institute of National Importance by an Act of Parliament in 2012

An autonomous public university, IISER Pune is dedicated to research and training in the basic sciences. It envisions being a scientific institution of the highest calibre where undergraduate education is integrated with state-of-the-art research. It aims to make the learning of basic sciences accessible and exciting through integrative teaching driven by curiosity and creativity. Enabled and mentored by one of IISER Pune's faculty members, the Singchung Bugun Village Community Reserve won the India Biodiversity Award 2018, and seeks to protect the rich biodiversity of the region in Arunachal Pradesh through a community conservation programme.

Opening up the spectacular diversity of Eaglenest to school children and tourists
Following pages (52–53): *Preserving the rich biodiversity of the cloud forest zone of Eaglenest*

IN 2006, RAMANA ATHREYA, currently an Associate Professor of Physics and Biology from the Indian Institute of Science Education and Research (IISER) Pune, discovered a new bird species in the Eaglenest Wildlife Sanctuary in Arunachal Pradesh. He named it the Bugun Liocichla after the tribe which lived in the area. Prof. Athreya then began a pilot project with the Bugun community to map bird diversity in Eaglenest and promote bird tourism by the tribal community by training the youth as eco-guides and in tourism hospitality. The local people took over the project in 2010 and have sustained it successfully for over a decade, generating revenue and employment and establishing ownership as well as international acclaim. The 10 years of a profitable eco-tourism enterprise encouraged the community to voluntarily donate a large tract of its community-owned forest land to conserve the natural habitat of the rare bird. The combined use of the land for conservation and livelihoods shows a unique way forward for such models across the country, giving the community a chance to fulfil their socio-





A world of hidden splendour in Eaglenest
 Top: Bugun Liocichla – the first bird species discovered and described by an Indian
 Bottom Left: Tree frog Rhacophorus rhodopus Bottom right: Leopard cat



Locally relevant educational resources developed using biodiversity research
 Following pages (56–57): Local youth are naturalists, collecting data for academic and ecotourism purposes, like from these UV screens which attract over 200 species of moths

economic aspirations without unsustainable exploitation of their precious forest.

This remarkable project, the first of its kind in north-east India and perhaps in the country, resulted in the formation of the legally protected Singchung Bugun Village Community Reserve. Young people from the community now safeguard the rich biodiversity they have inherited. They patrol the forests looking for signs of intruders, take photos of diverse rare species, and conduct workshops and hikes with children and trainee forest officers. Shaleena Phinya, a member of the team, has even made a film, *The Bugun and the Liocichla*, highlighting conservation efforts.

Prof. Athreya worked with the villagers, believing that conservation can only succeed if the needs and concerns of the local community are part of the solution. 'As a

strategy, we are bringing tribal livelihoods, academic research and conservation together in such a manner that each component supports and enhances the other two, leading to socio-economic development, increased understanding of the ecosystem and biodiversity conservation,' says Prof. Athreya.

HCL Grant Project Approach: Generating biodiversity knowledge and local capacity for ecotourism which will itself fund conservation, in perpetuity

HCL Grant Project Title: Self-sustaining biodiversity conservation through tribal livelihoods in Arunachal Pradesh

Beneficiaries: 400 sq. km of pristine habitats across 3200 m of elevation, hosting over 3000 species (recorded so far), and 2500 tribals

Location: 2 villages in West Kameng district of Arunachal Pradesh

