

2024



REPORT: EXCHANGE VISIT TO INDIA AND MYANMAR

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1. Background

To exchange conservation knowledge and practices, and further enhance the partnership and collaboration among three range countries of White-bellied Heron (WBH), Bhutan, India and Myanmar, the team from Bhutan, consisting of officials from the Department of Forest and Park Services (DoFPS) and the staff of Royal Society for Protection of Nature (RSPN) visited India and Myanmar. The team visited India from 22nd to 27th August 2024 and Myanmar from 1st to 8th November 2024.

The WBH historically known from the Eastern Himalayan foothills, is no more reported from many of its home range. In 2015, about 60 individual birds were reported from three range countries, Bhutan, Myanmar and Northeast India. Currently, the population trend is further worsening. In Bhutan, through the dedicated conservation effort of the RSPN in collaboration with relevant stakeholders have been able to sustain the WBH population. Based on the annual population surveys over the last two decades, 14 -30 individuals of WBH are known to occur in Bhutan, which is an equivalent of 45 – 50 per cent of the global population.

Towards enhancing the conservation effort of the WBH across the landscape in western and south-central Bhutan that are currently known breeding habitats, RSPN through the generous support of the German government under the funding window of the International Climate Initiative (IKI) is currently implementing the project “Developing ecosystem-based solutions for managing biodiversity landscapes” with the special objective to establish approaches and tools for protecting and managing WBH habitats. The project has introduced the Ecosystem and Socio-economic Resilience analysis and mapping (ESRAM) approach to biodiversity conservation and management in Bhutan. The project intervention includes restoring degraded habitats of WBH through plantation, exploring and surveying new nesting sites, engaging local communities through capacity-building program, conducting coordination meetings with relevant conservation stakeholders, supporting communities with climate-smart agriculture activities, enhancing community-based ecotourism, and building capacity of communities on diverse areas to enhance ecosystem-based approaches. In addition, the project documents new knowledge and approaches gained in managing natural resources, ecosystem services and climate-resilient livelihood options that result in the improvement of managing biodiversity and enhancing livelihoods of the communities living in WBH landscapes. This project implementation by RSPN is in the middle of a five-year project period.

The knowledge and experiences gained thus far for this project are found to be crucial in sharing with neighbouring WBH range countries to support similar planning and conservation efforts. Therefore, an exchange visit to India and Myanmar was coordinated as a significant pathway in sharing conservation knowledge and discussing the means to collaborate among conservation organizations in saving WBH in the region.

2.Objectives

This exchange visit to India and Myanmar focused on sharing the knowledge and experiences gained from the conservation of WBH through the implementation of various conservation projects including the current IKI project by RSPN, and also conducting a meeting with relevant conservation partners in India and Myanmar to enhance the partnership mechanisms in the conservation of WBH at the regional level.

The specific objectives were:

- Knowledge sharing on Ecosystem-based biodiversity conservation approach adopted in saving White-bellied Heron
- Gain insights on conservation practices in India and Myanmar
- Initiate a regional effort to save White-bellied Heron among the conservation partners of three range countries.

3.White-belled Heron Conservation in Bhutan

RSPN's engagement in the conservation of WBH started as early as 2003 with the first sighting of Heron's nest in Zawa (under Wangdue Phodrang District) by a local resident. Since then, consistent research and surveys of nesting sites, feeding, threats, distribution, movement and habitat needs have been conducted along with documentation of socio-cultural information. Besides research, RSPN has also been making some major efforts to recover the bird population through habitat protection and restoration. In 2011, RSPN in collaboration with San Diego Zoo undertook the first ever captive rearing of WBH with eggs collected from a wild nest. The team managed to artificially incubate and rear the chick in the lab for the first time.

In 2016, two juveniles from a nest in Burichu were tagged with satellite transmitters - T1 and T2, with the help of Synchronicity Earth, United Kingdom, to monitor their movement. However, the information from the transmitter could be received only for a short period, (both in the case of 2011 and 2016) as the type of satellite transmitter used was not appropriate for WBH.

To garner community support and engagement in WBH conservation, activities offering alternative livelihood opportunities for the communities in the WBH range were also implemented. Awareness, education and advocacy have been carried out consistently as an integral part of WBH conservation.

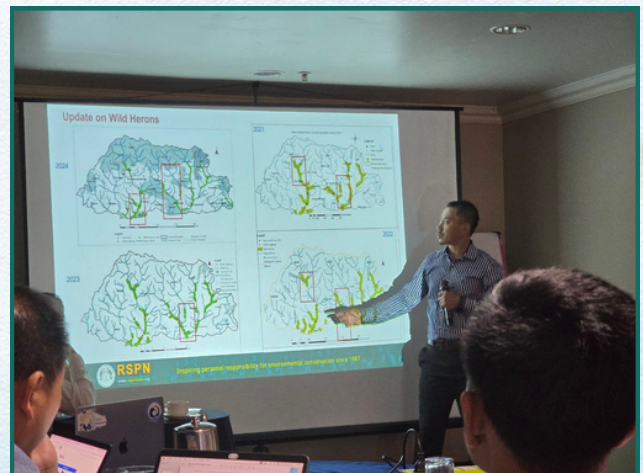
RSPN in collaboration with various stakeholders, both national and international, have been putting in efforts to conserve the population and habitats. From the in-situ conservation mainly focused on restoration and conservation of the wild herons and habitats, to now RSPN is equally taking up the ex-situ conservation initiative to save the species from extinction with the establishment of the Conservation Centre at Chachey Dovan, Tsirang which was funded by Hydropower projects.

To further enhance the species knowledge, RSPN in collaboration with academic institutions in the country has been conducting numerous studies on the behaviour, diet, habitat preferences, and threats to WBH in the country.

Globally, WBH is classified as Critically Endangered for having an extremely small and rapidly declining population. A further decline is projected in the near future as a result of the loss and degradation of lowland forests and wetlands and through direct exploitation and disturbance. Many of the range countries where the species occurs are undergoing a rapid development that involves the exploitation of wetlands or riverine landscapes and forested areas. These activities will further aggravate the low population size. So, proper mitigation measures are highly solicited in minimizing the threats to WBH and their habitats.

The WBH is currently distributed in isolated places in Bhutan, northeast India, and northwest Myanmar. The areas where the species presently occur are also important biodiversity sites having a high diversity of both flora and fauna in the region. The cultural diversity of many indigenous practices that depict a close association with nature is still in practice in the area. Saving the WBH in the region has therefore a global value.

In Bhutan, WBH is a rare resident species that is found mostly in major fast-flowing rivers. Its preference for riverine habitat is mainly because of its foraging nature and piscivorous diet. For nesting, it prefers forested areas near the rivers where the nests are usually built on an open branch of tall trees.



4. The overall goal of WBH conservation in Bhutan

Saving the WBH requires urgent action in the field and captivity. In collaboration with the IUCN task force, international experts, a range countries and national partners, the RSPN has set itself the goal of restoring and stabilizing the population of WBH over the next two decades.

The priorities are:

- Establish a conservation breeding centre and secure the gene pool for breeding and reintroduction.
- Scale up conservation and research in the field, including monitoring populations and nests, restoring and protecting critical habitats, mitigating major threats, and understanding its ecology and biology.
- Improve inter-agency collaboration in infrastructure planning and development within critical habitats, strengthen regional and global networks, conservation coordination and cooperation.

5. Ongoing Conservation project for WBH

The WBH habitats in Bhutan are located mainly in the Punatsangchhu Wangchhu and Mangdichhu river basins, and they lie outside the gazetted Protected Areas. The area mainly comprises the subtropical riparian and wetland ecosystems between 100-1200 meters above sea level. These resources are now mostly fragmented and scattered due to the construction of massive infrastructure and hydropower plants, roads, sand mining, recreation centres and other economic activities along these river basins. The riparian ecosystem and heron habitats are transforming at an alarming pace with the increasing number of hydropower projects and the fast-growing infrastructure development. Loss of feeding and nesting habitat due to land use change, disruption of flyways and increased disturbances are potentially the dominant factors driving the heron population decline. It is severely affecting resource availability and isolating one micro population from others due to interruption (electricity transmission lines) of flyways.

Recognizing hydropower construction and establishment can have an ill impact on the environment, the Bhutan Sustainable Hydropower Development Policy 2008, has a provision of making available a minimum of 1% royalty energy revenue on an annual basis to the Ministry of Agriculture and Forests (MoAF) to support catchment protection and environment conservation, to “ensure hydropower development is in accordance with the sustainable development policy of keeping the fragile mountain ecosystem”.

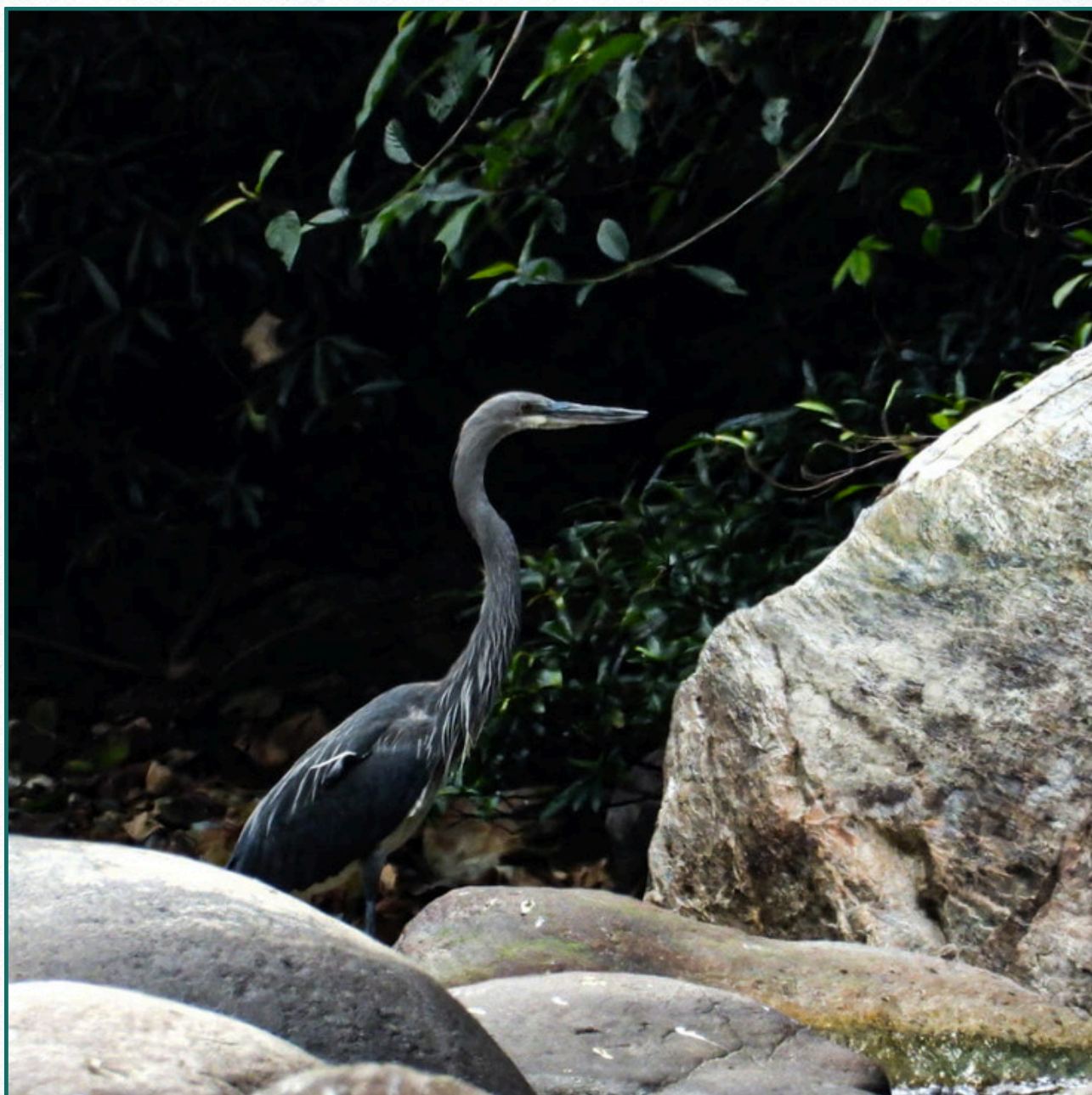
The Punatsangchu Hydropower project in 2018 has provided USD 705882 for the establishment of WBH Captive Breeding Centre, at Burichu, Tsirang. Through the IKI project, the degraded habitats brought about by hydropower construction are being restored in collaboration with hydropower projects and communities.

The communities living in the proposed project area are subsistence farmers depending on surrounding natural resources for living. Hence, the co-existence of WBH and local communities is largely dependent on keeping the natural resources intact along these two river basins. Current deteriorating natural resources from various anthropogenic pressures are a threat to the local community's livelihoods as their access to local resource use is restricted by forest rules and regulations to avoid over-utilization. To make a living, communities often resort to illegal timber/NWFP collection and fishing from forests and rivers which further damage the dwindling resource and WBH habitat. To provide alternative economic and employment opportunities and to earn support for WBH conservation activities (e.g. plantation, safeguarding/ monitoring WBH), the project takes a community incentive-based and participatory approach to project planning and implementation.

The project for the first time in Bhutan applied the ESRAM approach and methodology which assessed social, economic and biodiversity aspects in the light of climate change for ecosystem-based adaptation, planning and management. The project developed mechanisms and created platforms to bring about effective participation of communities and stakeholders such as the following:

- Participation in hydropower projects along with DoFPs and the local community in planning and restoration of damaged heron habitat.
- Formation of local conservation groups (LCSG) to safeguard heron, population monitoring and reporting, awareness creation, and participation in restoring damaged sites.
- Participation and involvement of local communities in the establishment of potential livelihood options including ecotourism using available space and opportunities within existing land use and land tenure to boost the local economy. Such incentive-based innovations are empowering communities to increase their ownership and participation towards heron conservation activities.
- This project also encompasses knowledge management as a means to generate and disseminate new knowledge based on ESRAM and WBH for sustainability and sharing at the national and international levels.
- The project is implementing a pilot program on Human Wildlife Conflict which has a mechanism at the local level to manage compensation and assessment of crop and livestock damage by wildlife. This scheme has a self-help and self-sustaining system integrating a revolving fund, and membership fee.

- The project takes holistic WBH conservation at the landscape level through coordination and integration of inter-sectoral interventions and actions. Communities living in heron areas are poor and largely dependent on natural resources for living. The negative change in the habitat due to the community's livelihood actions can pose a serious challenge to the survival of the heron. The project attempts to reduce the vulnerabilities of the communities and increase their support in heron conservation by adopting ecosystem-based adaptation. The interventions include a combination of poverty reduction, biodiversity conservation and community development.



6.Exchange visit to India

An exchange visit to India was held from 22nd to 27th August 2024. On 24 August 2024, a day-long knowledge-sharing workshop was held between officials from Bhutan and India at the Wildlife Institute of India (WII). The knowledge-sharing workshop was jointly hosted by the WII, India and RSPN, Bhutan. Relevant conservation organizations attended the workshop, the Department of Forest and Park Services (DoFPS) and RSPN staff from Bhutan, and participants from India include staff from Nature Conservation Foundation, Aaranyak, Ashoka Trust for Research in Ecology and the Environment(ATREE), WII, and researchers.



7. The key highlight of the discussion in India

- Bhutan presented the progress and results from its IKI-funded WBH conservation project.
- Participants discussed regional threats, habitat overlaps, and possible synergies for collaboration.
- Consensus emerged on the need to update the regional WBH Conservation Strategy (last developed in 2015) and formulate country-specific Conservation Action Plans.
- RSPN was recognized as a lead organization to coordinate this regional conservation effort, given its extensive in-situ and ex-situ experience.
- The WBH Conservation Centre in Bhutan was acknowledged as a regional hub for captive breeding, knowledge exchange, and genetic conservation.

The exchange program visit to India paved a significant pathway in sharing conservation knowledge and discussing the means to collaborate among conservation organizations in saving the WBH as a regional approach. Besides sharing the knowledge gained thus far from the conservation of WBH through the implementation of the current IKI project by RSPN, an elaborate discussion was held on scaling up a similar conservation approach at the regional level through the same project modality. It was found that considering the critical nature of WBH, there is huge scope for the distribution range countries of the species to collaborate in hosting landscape-level projects. The IKI project implemented by RSPN has already resulted in several output achievements and there is great potential and feasibility for the same approach to be replicated or scaled up to other WBH landscapes among the WBH distribution countries. There is also a need to update the WBH strategy document and formulate the Conservation Action Plan of WBH for each country. The strategy of WBH was last developed in 2015. Many of the activities outlined were either achieved or no actions taken. RSPN will coordinate in formulating the WBH strategy in collaboration with relevant stakeholders that will include WBH working group members, IUCN Heron specialist group and relevant organizations from the respective range countries of WBH. The target of publishing the strategy will be by 2025. Based on the strategy, respective countries will be encouraged to develop WBH Conservation Action Plan. For these programs, RSPN was identified as a lead organization to initiate and coordinate the overall conservation program of WBH in the region. RSPN with more than two decades of conservation experience of WBH, has taken both in-situ and ex-situ conservation efforts. The WBH Conservation Center established in Bhutan by RSPN is the only conservation center in the world to conserve WBH. The discussion also highlighted the greater role of the conservation center in the region. The center will serve as the main hub in the region to drive the conservation effort of WBH through captive breeding programs, research, information dissemination, and maintaining the genetic diversity of WBH in the region.

8. Exchange visit to Myanmar

In Myanmar, the team from Bhutan visited important cultural and biodiversity sites and attended a knowledge-sharing workshop with conservation organizations in Myanmar. The day-long knowledge-sharing workshop was jointly hosted by the country office of Fauna and Flora International (F&F) in Myanmar and RSPN. The participants from Myanmar attending the workshop included the WWF-Myanmar, Nature Conservation Society, Myanmar Biodiversity Fund, Biodiversity and Nature Conservation Society (BANCA), F&F, and researchers.



9. Key Highlights of the discussion in Myanmar

- Myanmar shared field-based conservation efforts in WBH habitats and ongoing monitoring of key river basins.
- Participants discussed challenges such as habitat loss due to sand mining, river pollution, and infrastructural development.
- Bhutan's ESRAM-based conservation planning and participatory approaches were well received.
- The importance of a regional strategy and common monitoring protocol was emphasized.
- Myanmar committed to actively engaging in the regional WBH Working Group, coordinated by RSPN.

It was a significant milestone for RSPN to conduct this exchange program visit to Myanmar with limited information and conservation efforts undertaken by WBH from the country. During the knowledge-sharing workshop, both the participants from the Bhutan and Myanmar sides presented the conservation works and way forward plans. RSPN shared the knowledge on various approaches used by Bhutan particularly through the implementation of projects to conserve WBH. From the Myanmar side, the conservation organizations presented their respective areas of work and the status of the WBH population in the country. As per the annotated checklist maintained by the researcher since 1999, it is estimated that around 29 WBH accounts of distribution records were made in Myanmar. However, the recent record, for the last five years accumulates to only around 5 WBH in the country. Though there are no systematic surveys, especially the population surveys conducted for WBH in Myanmar and India, the estimated population based on the sighting records indicates a very low number of population occurring in the region.

The knowledge-sharing workshops held with joint partners of the respective countries of India and Myanmar, indicate the presence of 10-13 individuals of WBH in India and about 5 individuals in Myanmar if we account for the recent years' sightings. In Bhutan, the population survey of the year 2024 saw 25 individuals of WBH in the country. This makes the global population of this species only about 43 individuals. There is a great concern regarding the declining population of the species in the region.

Similar to some of the way forward mechanisms carried out in earlier workshops with Indian conservation partners, RSPN drives the discussion on building regional effort to conserve the WBH through diverse ways relying on the expertise and experience of conservation efforts undertaken by RSPN. A discussion was held on scaling up a similar conservation approach at the regional level. It was found that considering the critical nature of the WBH, there is huge scope for the distribution range countries to collaborate in saving the species. The WBH was declared extinct from Nepal and similarly, many of the historical distribution sites have no recent record of the species occurring. The key discussions were the need to update the WBH Strategy document, develop a country-specific Conservation Action Plan and implement landscape projects among WBH range countries as a means of holistic approach to save the species.

RSPN will leverage the conservation experiences of the WBH with more than two decades of experience in supporting the regional effort to conserve the species. As an immediate action, RSPN is planning to host training of researchers and staff of relevant conservation organizations from Myanmar and India in Bhutan for survey and monitoring of WBH, and initiate resource mobilizations required to support regional programs.





RSPN

*Inspiring personal responsibility for
environmental conservation since 1987*

Royal Society for Protection of Nature

P.O. Box: 325, Building No:25
Lhado Lam, Kawajangsa | Thimphu 11011, Bhutan
Phone:+975 2 326130 | Fax: +975 2 3231189
Website:www.rspnbhutan.org | Email:rspn@rspnbhutan.org