



STATE ACTION PLAN FOR CONSERVATION OF AVIAN DIVERSITY, THEIR ECOSYSTEMS, HABITATS & LANDSCAPES IN THE COUNTRY



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STATE ACTION PLAN
FOR CONSERVATION OF AVIAN DIVERSITY,
THEIR ECOSYSTEMS, HABITATS & LANDSCAPES IN THE COUNTRY
NAGALAND 2023



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MESSAGE

India is endowed with a diversity that is unparalleled despite being a developing country with several projects being undertaken across the length and breadth of the country. The country is committed to protect and preserve its diversity and has an impressive network of protected areas comprising of 106 National Parks, 573 wildlife sanctuaries, 115 conservation reserves and 220 community reserves. However, alterations in land use patterns, environmental and climatic conditions directly reflect on the biodiversity and impact the local livelihoods. Hence understanding and preserving the diversity, habitats and landscape is of utmost importance.

Nagaland a state that is rich in culture, tradition and biodiversity is one of the ecological hotspots of the country. The land with undulating terrain is rich in natural resources and wildlife, globally the state is known as 'The Falcon Capital of the world' due to the aggregation of the migratory Amur Falcon that uses the resources during its stopover on its way to South East Africa. The state has recorded over 2450 species of flora and 1150 species of fauna with around 500 species of birds.

Recognising the importance of conserving in the country the Ministry of Environment, Forest and Climate Change (MoEFCC) delegated Salim Ali Centre for Ornithology and Natural History (SACON) to prepare the Visionary Perspective Plan (VPP) for conservation of avian diversity. The objective of the VPP was to strategize a plan for the next decade (2020-2030), prioritising the preservation of avifaunal variety, ecosystems, and landscapes. The obvious next step was to prepare the State Action Plan (SAP) for execution of the VPP.

Here I extend my heartfelt gratitude to the Nagaland Forest Department, headed by Shri Dharmendra Prakash IFS, PCCF & HoFF; Shri Ved Pal Singh IFS, PCCF & CWLW and the team members for extending their support in developing the SAP. I hope this document serves as an important reference for the conservation of avifauna in the state.

**Signed by Virendra
Rambahal Tiwari**
Date: 06-12-2023 18:16:02
Reason: Approved

V.R. Tiwari

Acknowledgement

At the onset, we take this opportunity to thank the Wetlands Division, MoEF&CC for sanctioning the project to prepare the State Action Plan for conservation of avifauna in the state of Nagaland. Further, we acknowledge the support and encouragement provided by former Director in-charge SACON Dr. S. Muralidharan towards developing this report. At Nagaland we were fortunate to have exceptional cooperation from the PCCF & HoFF Mr. Dharmendra Prakash IFS; Shri Ved Pal Singh IFS, PCCF & CWLW, DFO Wokha Div, CF Southren Territorial Circle Ms Zuthunglo Patton IFS, Member Secretary - Wetlands Dr. Y. Atsiase Thongtsar IFS, Mr. Suman Shivacher IFS, DFO Kiphire Division Mr.Chisayi IFS and Forester Mr. Lansothong Lotha. They fascilitated several of our meetings across the department and helped in collecting maximum information possible.

Further the Nagaland State Biodiversity Board headed by Chairman Shri Satya Prakash Tripathi IFS, Member Secretary Mr. Supongnukshi Ao IFS and the other members gave valuable inputs to regarding the concerns on avifauna conservation and the management priorities. We are grateful for their inputs and the time spared for us. The Pollution Control Board and the Nagaland ENVIS team were exceptionally helpful in contributing to data and deciding on local logistics. We also thank the several forest departments and the heads of the Wildlife Division, the Wetland Division, Zoo Director and several District Wildlife Wardens for the information that contributed to the SAP.

The Nagaland State University faculty from the departments of Zoology, Botany, Life Sciences, Geology, Environmental Science, Anthropology, Forest science and Geography spared immense time in understanding the importance of the SAP and gave their opinions towards the functional administration. Their concerns have been well addressed and we thank them for their guidance. We also had the opportunity of meeting with several NGOs and community conservation reserve leaders. The information that they shared was invaluable and has helped shape the SAP. I would specially name Ms. Bano Haralo, Mr. Onen Jungshi, Steve Odyou among others who were are compassionate towards conserving birds their habitats for the future.

There are several individuals at Nagaland who contributed in immense ways that helped shape the document. Though we have not listed everyone here but we sincerely acknowledge their care, warmth and assistance.

We also express our gratitude to the Director, WII for the encouragement in completing this task for better management of resources. We also thank the administrative and the finance section of SACON for helping us with the logistics support during field work and managing the accounts.

At SACON we were helped by several individuals in various components of the project. Ms. Julffia A. Begam - Program Officer and Ms. Devika M.- IT officer SACON ENVIS contributed by providing the literature available; Further we also thank Mr. M Manoharan Librarian-in-charge for providing the resources available at the SACON Library.Finally, we take this opportunity and acknowledge with gratitude the faculty, support staff and researchers from SACON for their encouragement and interest shown in our work.

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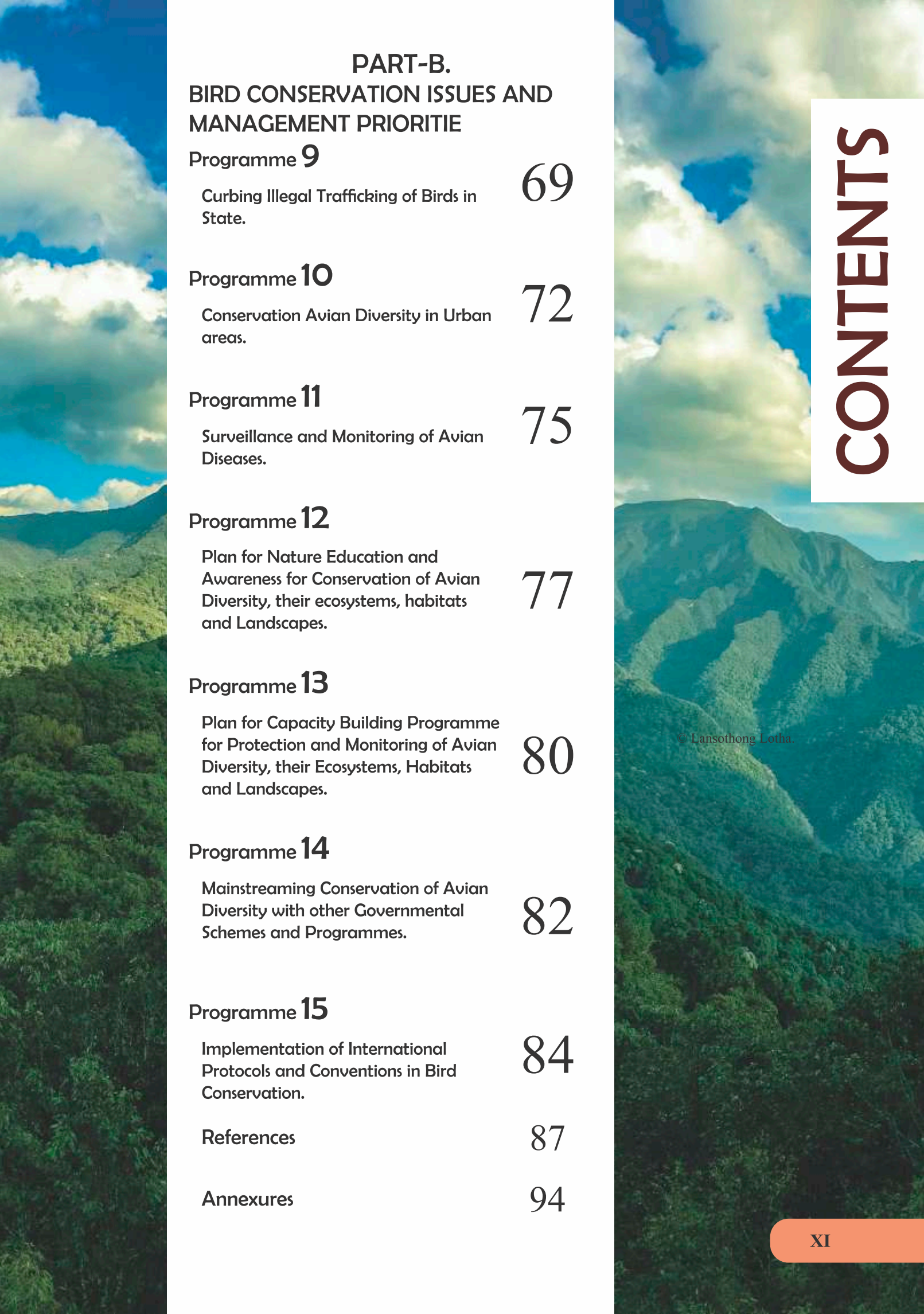
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BACKGROUND

Any alterations in land use patterns, environmental and climatic conditions is directly reflected on by the birds. India is a developing country with several projects being undertaken throughout the country, comprehending and conserving the diversity and habitats of avifauna is of utmost importance. The Ministry of Environment Forest and Climate Change (MoEFCC), Government of India, recognising the urgency to protect the country's avifauna and their habitats, released the Visionary Perspective Plan for the conservation of avian diversity, their ecosystems, habitats & landscapes in the country (VPP) in 2020 that envisions a comprehensive strategy for the conservation of birds in India over the next ten years. Sálim Ali Center for Ornithology and Natural History (SACON) as the nodal agency, prepared this policy document in consultation with several stakeholders. The objective of the VPP was to develop a strategic plan for the next decade (2020-2030), prioritising the preservation of avifaunal variety, ecosystems, and landscapes. To address the various concerns related to avifaunal conservation, 15 significant programs were identified in the VPP document. These programs include a wide range of conservation efforts, including the preservation of Rare, endangered and threatened (RET) bird species.

The State Level Action Plan (SAP) is the primary step in the execution of the VPP. During this phase, SACON, functioning as the nodal agency, formulated the State Action Plan (SAP) for 17 states and Union territories, including Nagaland. Nagaland is considered a biodiversity hotspot, land rich in natural resources and vibrant cultures. The undulating terrain and its water resources, serve as vital stopovers for migratory birds along the Central Asian Flyway, making Nagaland an obligatory link in international bird migration routes.

Despite the wealth of avian biodiversity, Nagaland experiences an array of threats that require immediate and sustained attention. Being a land of Natives Nagaland has over 80 % of the land owned by the local community or individuals. Habitat loss due to urbanisation, agriculture expansion, and infrastructure development is a major concern apart from hunting. Pollution, including water contamination and air pollution, is an emerging threat that affects both birds and their ecosystems. Additionally, climate change is altering the timing of migratory patterns and impacting the availability of resources for resident birds. Illegal wildlife trade and poaching remain persistent threats. Moreover, lack of public awareness and inadequate enforcement of existing conservation laws exacerbate these problems.

This document outlines a visionary roadmap for the conservation of birds in Nagaland over the next ten years. Our vision is built on the principles of sustainability, community engagement, and scientific research. The goals of this document include:

- 1.Habitat Conservation: Prioritising the protection and restoration of critical bird habitats, ensuring that they are ecologically resilient and can support a diverse range of species.
- 2.Community Involvement: Engaging local communities in bird conservation efforts, promoting sustainable livelihoods, and raising awareness about the importance of avian biodiversity.
- 3.Research and Monitoring: Investing in scientific research to better understand bird populations, their behaviour, and their ecological needs, which will guide conservation strategies.
- 4.Legislation and Enforcement: Strengthening and enforcing wildlife protection laws, implementing stringent measures against poaching, and promoting responsible tourism practices.
- 5.Climate Resilience: Developing strategies to mitigate the impact of climate change on birds and their habitats, ensuring their continued survival.

The VPP was used as a baseline for preparing Nagaland SAP, and all the programmes included in SAP are mentioned below:

1. Conservation of Rare, Endangered & Threatened (RET) Bird Species And Implementation Of Species Recovery Plans (SRPs).
2. Conservation of Important Bird & Biodiversity Areas (IBAs) Outside the PAs Network
3. Conservation of Protected Areas (PAs) With High Avian Diversity
4. Conservation of Avian Diversity at the Landscape Level
5. Conservation of Inland Aquatic Ecosystems with High Avian Diversity
6. Conservation of Coastal and Marine Ecosystems with High Avian Diversity
7. Conservation of Migratory Birds
8. Impacts of Developmental Projects and Other Anthropogenic Activities on Avian Diversity and Habitats
9. Curbing Illegal Trafficking of Birds
10. Conservation of Avian Diversity in Urban Areas
11. Surveillance and Monitoring of Avian Diseases
12. National Plan for Nature Education and Awareness for Conservation of Avian Diversity, Their Ecosystems, Habitats & Landscapes
13. National Capacity Building Programme for Protection and Monitoring of Avian Diversity, their Ecosystems, Habitats & Landscapes
14. Mainstreaming Conservation of Avian Diversity with Other Government of India Schemes and Programmes
15. Implementation of International Protocols and Conventions in Bird Conservation

Nagaland being a landlocked state does not have any coastal region hence the Program no 6 has not been addressed for the state.

The Nagaland SAP is not a Management Plan / Mitigation Plan / Species Recovery Plan / Habitat / Ecosystem Restoration Plan. The aim to comprehensively analyse the prevailing avian concerns inside the state. Additionally, it will serve as an outline for devising forthcoming strategies to mitigate these difficulties, ultimately contributing to preserving avian species and their respective habitats within the state. This document is a call to action, a commitment to the preservation of Nagaland's avifauna. It acknowledges that the conservation of birds is not just a responsibility but also an opportunity to protect the state's ecological balance, promote sustainable development, and celebrate the cultural significance of these feathered inhabitants.

The document has been partitioned into two distinct sections, namely Part A and Part B. Part A provides comprehensive details about the state's Geography, Physiography, Climate, Demography, Ecoregions, PAs, IBAs, Land Use Land Cover (LULC), Flora, Fauna, the historical context of ornithology within the state, as well as an extensive collection of literature on the subjects of ecology, conservation, and the management of avian species within the state. Part B focuses on various issues concerning Nagaland's avifauna and their habitats and the necessary measures to be implemented to preserve and manage the avian species within the state.



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