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# **FOREWORD**

It is with great pleasure that I present the Maharashtra State Action Plan for the Conservation of Avian Diversity, their Ecosystems, Habitats & Landscapes.

Maharashtra evokes images of economic prosperity, development, industrialisation and cultural diversity, and weaving this into a tapestry of ecological stability is challenging. With its astounding richness of landscapes, ecosystems and biodiversity, Maharashtra figures prominently in India's biodiversity conservation strategy. The State has 3.34% of its geographical area designated as Protected Areas. However, several unique habitats and spectacular biodiversity occur outside the PA network, where development takes precedence.

The State Action Plan suggests strategies to integrate the various priorities of State administration and civil society with bird conservation and meet the global goals of combating climate change effects and biodiversity loss. These strategies can be dovetailed into existing schemes and Action Plans in the State to synergise efforts and guide the path towards more ecologically meaningful policies in the country.

I thank all who contributed towards preparing this Action Plan and appeal to State government departments and civil society to cooperate, coordinate and implement it.

Virendra Rambahal Tiwari

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We thank the Ministry of Environment, Forest and Climate Change (MoEFCC) for funding SACON to develop the State Action Plan for the Conservation of Avian Diversity, their Ecosystems, Habitats & Landscapes in Maharashtra. We especially thank Dr. T. Chandini, former Advisor to SACON at the MoEFCC for initiating the process of preparing the State Action Plans as the first step towards implementing the Visionary Perspective Plan (VPP) for bird conservation in India.

We thank the former Director-in-Charge, SACON, Dr. Muralidharan and the current Director Wildlife Institute of India, Mr. Virendra R. Tiwari for support during the preparation of the report.

The Maharashtra Forest Department was extremely supportive all through the preparation of the Action Plan. Mr. Sunil Limaye was the PCCF & CWLW when the project was initiated, and we thank him sincerely for his valuable inputs and for facilitating meetings with forest officials in the State. We thank the current PCCF, Mr. Maheep Gupta & CWLW for continued support. We also thank Mr. Nitin Kakodkar, former PCCF and Chief Wildlife Warden, Maharashtra, for his insights. We had insightful consultative meetings with Mr. Praveen Srivastava, former PCCF and Member Secretary, Maharashtra State Biodiversity Board; Mr. Virendra R. Tiwari, Former APCCF and Head Mangrove Cell, Maharashtra (currently Director WII); Mr. G. Malikarjun, CCF and Director SGNP, Mumbai; Mr. Yuvraj S., CCF, (Planning and Management) Wildlife, PCCF Office, Nagpur; Ms. Kalpana Temgire, DFO, Maharashtra State Biodiversity Board and Mr. Narendra Shende, PCCF Office, Nagpur.

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We are very grateful to all photographers who contributed their photographs and enriched this document. We also sincerely thank Dr. Goldin Quadros, Dr. Pankaj Koparde, Mr. Nayan Khanolkar, Dr. Nima Manjrekar and Dr. Nita Shah for reviewing the document.

We wish to acknowledge Ashish Pittie's 'Bibliography of South Asian Ornithology' for the historical perspective on ornithological studies in Maharashtra. State of India's Birds (2020) provided much of the information on the key species and the issues related to their conservation. Land Use/Land Cover information for Maharashtra was obtained from the Natural Resources Census Project of National Remote Sensing Centre (NRSC), ISRO, Hyderabad, India.

At SACON, we are especially grateful to Dr. Jayapal Rajah, for guiding us through the entire process of drafting the Action Plan and for preparing the structure of the Plan and the formula for prioritising species for the State. Special thanks to Dr. Vidyadhar Atkore for help with Part-A of the SAP and Dr. Shirish Manchi and Dr. Aditi Mukherjee for discussions and suggestions. We are very grateful to Ms. Julffia Begam A and Dr. Aditi Mukherjee for designing the template. We thank all faculty, staff and students at SACON for discussions and for facilitating the preparation of the State Action Plan.

# PREAMBLE

State Action Plans for Conservation of Avian Diversity, their Ecosystems, Habitats & Landscapes (SAP), were visualised as an essential first step towards implementing the VPP (2020–2030) that was developed by MoEFCC, Government of India and SACON. Maharashtra, the third largest State in the country encompasses several ecoregions and biotic provinces identified as unique habitats for biodiversity. With around 596 species of birds residing or visiting the State, bird conservation in Maharashtra is significant to India. The SAP, Maharashtra, adds value and lends support to the various other existing Action Plans and programmes in the State including, the Maharashtra State Adaptation Action Plan on Climate Change, Maharashtra Genebank Programme and Wildlife Action Plan for Maharashtra (2021–2030). Besides, there are several other schemes in the State that cut across administrative departments and are in synergy with biodiversity conservation (e.g. CAMPA, AMRUT, Amrut Darohar, MISHTI, among others). However, there are several other policies and actions that are currently not in harmony with bird conservation. These have been highlighted in the 15 Programmes in this document, under strategic approaches required to address issues. Some issues to be addressed which are of great significance and urgency to meet international commitments to combat the effects of Climate Change, are repeated over programmes (e.g. Green Energy, Wastelands, Thane Creek issues, Tourism). A few species feature more often in examples because of greater information available on them e.g. Forest Owlet. This reiterates the importance of research and data in identifying threats and planning conservation.

This document relied considerably on SoIB (2020) for information related to bird species in the State. Since the preparation of this document, SoIB (2023) was released with updates and new species of key importance to the State. A staggering 39% of the 942 bird species from India assessed in the update, show population declines. Out of the 459 species assessed for Maharashtra, 350 have insufficient long-term data while 23 are of high conservation concern. This highlights the urgency of addressing the issues identified in this State Action Plan for bird conservation.

Part A of the SAP describes the biogeography and biodiversity of the State and Part-B highlights the major issues related to bird conservation in the State with strategic approaches and timelines (Short-term: 4 years, Medium-term: 4–7 years and Long-term: >10 years) to address these. The issues and strategies were identified after consultations with various stakeholders. Since the policies of several Line Departments in the State overlap with the identified issues, these Departments have also been listed as executing and financing agencies. The State Forest Department is identified as the chief executing agency to coordinate with other Line Departments that are identified under each issue in the SAP.



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