

Chapter II

Audit approach

2.1 Audit objectives

The performance audit was conducted with the objectives of ascertaining:

- whether the existing institutional mechanism and legal framework ensure effective and efficient long term environmental sustainability of lakes;
- whether the survey and demarcation of lakes were effectively carried out and action to prevent encroachments and diversions were effective; and
- whether the agencies undertook effective sustainable initiatives to restore water quality and maintain ecological health of the lakes.

2.2 Audit scope and sample

The performance audit for the period 2009-14 covered the activities relating to conservation and restoration of lakes in Revenue Department, Forest Department, Urban Development Department (UDD), and Fisheries Department. The role of various implementing agencies under these departments namely, LDA, Bruhat Bengaluru Mahanagara Palike (BBMP), Bengaluru Development Authority (BDA), two City Corporations (CCs) (Belagavi and Hubballi-Dharwad), Karnataka State Pollution Control Board (KSPCB) and Bengaluru Water Supply and Sewerage Board (BWSSB) has also been covered in the performance audit.

The performance audit covered 56 lakes selected by adopting simple random sampling method. The test-checked lakes include 13 lakes of BBMP; 19 lakes of BDA, three lakes of Belagavi and 10 lakes of Hubballi-Dharwad CCs. Besides, lakes under National Lake Conservation Plan (NLCP)³ (six lakes including two in Bengaluru) and National Wetland Conservation Programme (NWCP)⁴ (two lakes) and three lakes (out of State grants) under the control of LDA were also selected. Names of the lakes selected and the selection methodology has been elaborated in **Appendix 3**.

2.3 Audit methodology

The performance audit commenced in May 2014 by checking records related to protection, conservation, regeneration and restoration of lakes of the implementing agencies. An Entry Conference was held on 6 June 2014 with the Additional Chief Secretary to the Government of Karnataka, Forest, Ecology and Environment Department and Chief Executive Officer, LDA,

³ A Centrally Sponsored Scheme exclusively aimed at restoring the water quality and ecology of lakes in urban and semi-urban areas

⁴ Government of India Scheme for conservation of wetlands to benefit the local communities and biodiversity

Member Secretary of KSPCB and officers representing UDD, BBMP, BDA, BWSSB and other departmental officers.

Records relating to satellite images of selected lakes were collected from Karnataka State Remote Sensing Applications Centre (KSRSAC). Inputs were also taken from Indian Institute of Science while planning for the performance audit and subsequently for seeking clarifications during Audit. Joint Physical Verification (JPV) of 56 selected lakes was conducted by audit officials in association with the officials of departments and agencies concerned.

The Exit Conference was held on 2 February 2015 and the details of discussion have been appropriately incorporated wherever applicable.

2.4 Audit criteria

The audit criteria for the performance audit were derived from the following sources:

- Guidelines of NLCP and NWCP
- Shri Lakshman Rau Committee Report and Hon'ble Justice N.K. Patil Committee Report
- Government orders, notifications, circulars, instructions, proceedings, Action Plans issued from time to time by State/Central Government, monitoring committee reports, *etc.*
- Karnataka Financial Code, 1958; Karnataka Land Revenue Act, 1964; Karnataka Land Revenue Rules; 1966, Karnataka Town and Country Planning Act, 1961
- Karnataka Transparency in Public Procurements Act and Rules
- Karnataka Public Works Accounts and Departmental Code
- Water (Prevention & Control of Pollution) Act, 1974
- Reports on monitoring of level of pollution in lakes by KSPCB
- National Water Policy, 2002
- Environment (Protection) Act, 1986
- Memorandum of Association and Bye-Laws of LDA.

2.5 Acknowledgement

We acknowledge the cooperation extended by the departments/agencies concerned of the Government of Karnataka in the conduct of performance audit including JPV of lakes.

We also acknowledge the enactment (March 2015) of the Karnataka Lake Conservation and Development Authority Act, 2014 which would address various concerns expressed in this report. The Act has incorporated the definition of a “Lake” and empowered the Karnataka Lake Conservation and Development Authority with vast powers, functions and authority to levy penalties, *etc.* The salient features of this Act are detailed in **Appendix 4**.

2.6 Organisation of audit findings

The audit findings have been organised into three sections which are aligned to the three audit objectives set for the performance audit. An additional section has been devoted to lake specific findings of 12 lakes. The sections are as under:

Section I - Effectiveness of institutional mechanism and legal framework for long-term environmental sustainability of lakes

Section II - Effectiveness of survey and demarcation of lakes

Section III - Effectiveness of the initiatives to restore water quality and maintain ecological health of the lakes

Section IV – Lake specific findings of 12 test-checked lakes