

# CHAPTER 1

## Understanding Environment and Its Audit

### 1.1 Introduction

The term 'Environment' denotes the land we live on, the air that we breathe, the surroundings that we enjoy, the plants and animals that share the space on the earth with us and the atmosphere that provides us our sustenance. The Environment (Protection) Act, 1986 sets out that 'environment includes water, air and land and the inter-relationship which exists among and between water, air and land, human beings, other living creatures, plants, micro-organisms and property'.

Sustainable development embraces integration of social, environmental and economic objectives. Ideally, any human activity should bring about a harmonious improvement in all three objectives. However, progress on one front may be achieved at the cost of damage to another. The focus of policies and programmes should, therefore, be to achieve an integrated balance amongst the three objectives and to preclude/prevent the destruction or degradation of environmentally relevant features and characteristics that impact future generations. The need for sustainable development presupposes protection of the environment.

The focus of the Performance Audit conducted (May-August 2010) and information collected (January 2012) has essentially been on compliance with Environmental Laws and Building Bye-laws in Lucknow City, the capital of the State of Uttar Pradesh in regard to :

- Water Pollution ;
- Air Pollution;
- Waste Management including Municipal Solid Waste (MSW) and Bio Medical Waste (BMW);
- Plastics Manufacture and Usages;
- Management of Batteries; and
- Building Bye-laws.

The population of Lucknow City had been projected<sup>1</sup> as 24.90 lakh and 28.17 lakh<sup>2</sup> in the years 2006 and 2011 respectively. The rapid growth of population of Lucknow City

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<sup>1</sup> Projected population as per Detailed Project Report of Municipal Solid Waste prepared by Regional Centre for Urban and Environment Studies, Lucknow.

<sup>2</sup> Actual population was 29.01 lakh as per Census, 2011.

(City) has impacted its environment and various resources including land, water and bio-diversity.

## **1.2 International Convention/Conference on Environment, Indian Legislative Enactments- both Central and State**

Audit studied the international conventions and conferences that propounded in international best practices with respect to water pollution, air pollution, waste management and building code. A comparative analysis on international convention/conference on environment, Indian Legislative Enactments- both Central and State Governments (GoI and GoUP respectively) given in *Appendix-I*.

As would be evident from *Appendix-I*, the State Government has adopted most of the international best practices. However, audit examination disclosed certain deficiencies in the implementation of these enactments as discussed in the report.

## **1.3 Audit Objectives**

Environmental audit is a systematic process of obtaining and evaluating information about various environmental aspects. In view of growing importance assigned to environmental issues and sustainable development, both at the national and international level, environmental audit has assumed greater significance. The objectives of this performance audit were to evaluate mainly:

- the measures taken and adequacy thereof for compliance to Environment Acts and Rules made thereunder for checking Water and Air Pollution, Solid Waste Management including MSW and BMW, Plastics Manufacture and Usage and Management of Batteries;
- timely release of funds and their economical, efficient and effective utilisation;
- Effectiveness of implementation of the provisions of Master Plan, Building Bye-laws, Zoning regulations and National Building Code, 2005; and
- Providing independent, credible and objective evaluation of the information provided by various Government agencies with regards to environment.

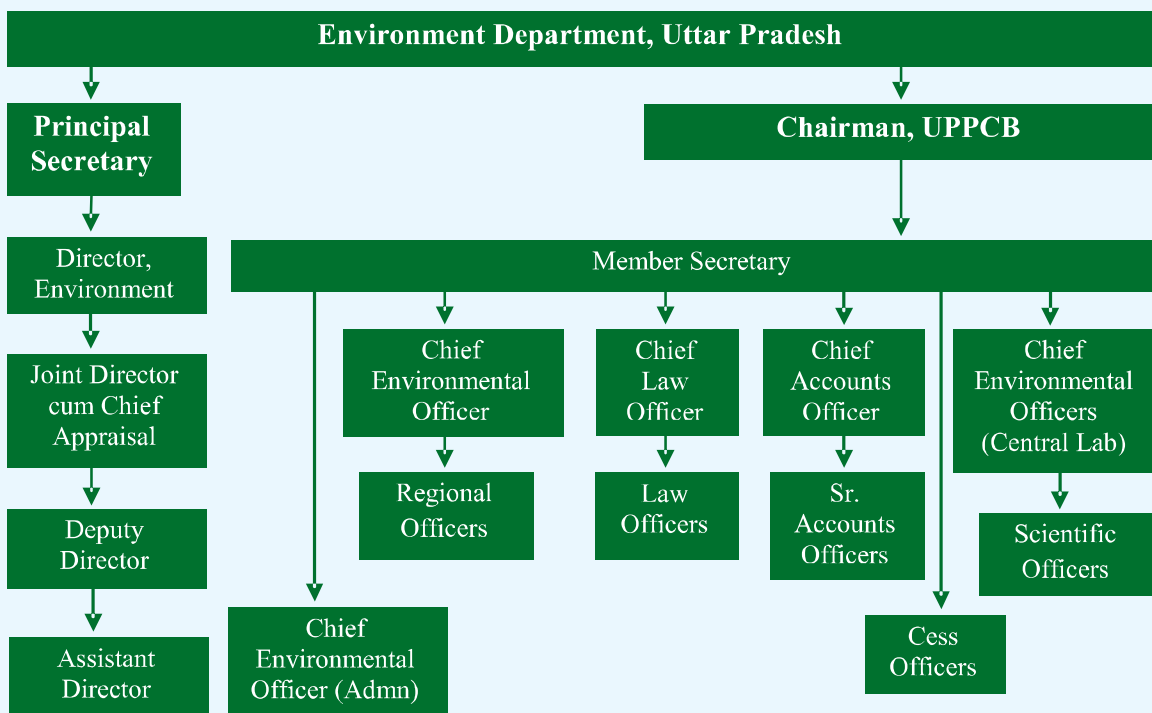
### 1.4 Audit Criteria

The following audit criteria were adopted for performance audit to assess the compliance with environmental laws:

1. The Water (Prevention and Control of Pollution) Act, 1974 and Water Cess Act, 1977;
2. The Air (Prevention and Control of Pollution) Act, 1981, National Ambient Air Standards fixed time to time;
3. The Environment (Protection) Act, 1986; and various rules made thereunder as indicated below:
  - i. The Municipal Solid Waste (Management and Handling) Rules, 2000;
  - ii. The Bio Medical Waste (Management & Handling) Rules, 1998;
  - iii. The Hazardous Waste Management & Handling Rules, 1989;
  - iv. The Plastics Manufacture, Sale and Usage Rules, 1999;
  - v. Batteries (Management and Handling) Rules, 2001; and
4. Master Plan 2021 of Lucknow and National Building Code.

### 1.5 Institutional Mechanism

The organisational setup of Environment Department is detailed below:-



The Principal Secretary, Environment and Urban Development Department is responsible for overall co-ordination of various activities related to ecology and environment including the prevention, control, abatement and monitoring of pollution in the State.

### **1.5.1 The Directorate of Environment**

The Directorate of Environment (DOE) works under the administrative control of the Environment Department and performs multifarious inter-disciplinary activities relating to Policy Planning, Coordination, Conservation, Environmental Education, Training, Awareness Promotion, Eco-development and Restoration of degraded and vulnerable Eco-systems.

### **1.5.2 Uttar Pradesh Pollution Control Board**

Uttar Pradesh Pollution Control Board (UPPCB), constituted in 1975, is the main agency for the administration of enforcement of Environmental Acts and Rules in the State and responsible for formulation of policy regarding environment protection. The main responsibilities are inspection of industries, hospitals, monitoring water bodies, wastewater, air quality and coordination with various agencies, initiation of action as per law in respect of any other matter pertaining to pollution.

The Regional Office, Lucknow of UPPCB headed by the Environmental Officer is responsible for monitoring and taking preventive action relating to environment in City.

### **1.5.3 Functions of other agencies**

The *Lucknow Nagar Nigam* (LNN) is responsible for management of solid and bio medical waste in addition to management of use of plastics in accordance with the Bio Medical Waste Management Act and UP Plastic and other Non-biodegradable Waste Act, 2000. The *Lucknow Jal Sansthan* (LJS) was constituted under Water Supply and Sewerage Act, 1975 by the State Government for providing safe drinking water and sewerage system. The Transport and Forest departments enforce the provisions of the Motor Vehicle Act, 1989 and Forest Conservation Act, 1980 respectively, while the Police Department looks after traffic management and prevention of encroachment.

The Vice-Chairman, Lucknow Development Authority (LDA) is responsible for ensuring compliance with the provisions of Master Plan, Building Bye-laws and Zoning Regulations.

## **1.6 Scope of Audit and Methodology**

Performance audit on compliance with various environment Acts in Lucknow City for the period 2005-10 was conducted between May and August 2010. Records were examined at the Offices of the Directorate of Environment (DOE), UPPCB, LNN, LJS, RTO, LDA, Chief Medical Officer (CMO), UP State Housing Board (UPSHB), *UP Jal Nigam* (JN), *UP Rajkiya Nirman Nigam* (UPRNN), Sr. Superintendent of Police (SSP) Traffic, UP State Bridge Corporation (UPSBC), Divisional Forest Officer (DFO), District Industries Centre (DIC) and Director of Local Bodies.

The entry conference was held on 28 June 2010 with the Principal Secretary, Environment and Urban Development in which officers of various departments participated wherein the Audit objectives, criteria and scope were discussed.

The Audit methodology involved collection of data through document analysis, response to audit enquiries, questionnaires, joint physical verifications, photographic evidencing and examination of reports and records of various implementing agencies.

The exit conference was held on 25 January 2011 with the Principal Secretary, Environment and Urban Development in which officers of various departments participated. The Government agreed to the observations raised by audit and stated that the recommendations would be taken care of.

## **1.7 Acknowledgement**

The co-operation extended by the Principal Secretary, Environment and Urban Development, UPPCB and Director of Environment, Secretary, LJS and *Uppar Nagar Ayukt*, LNN is acknowledged.

### **1.7.1 Non-production of records by LDA**

While it was agreed during the entry conference that records as requisitioned by Audit would be provided, LDA failed to furnish the survey reports, files relating to land acquisition, costing of schemes and estimates relating to construction works carried out by LDA during 2005-10.