

# CHAPTER 9

## Building Code

### 9.1 Regulatory Framework, Policies and Strategies

The National Building Code of India (Code) provides guidelines for regulating the building construction activities across the country. It serves as a Model Code for adoption by all agencies involved in building and construction works, be it Public Works Departments, other Government construction departments, local bodies or private construction agencies. The Code mainly contains administrative regulations, development control rules and general building requirements including materials, structural design, construction (including safety) and plumbing services.

The Code was first published in 1970 at the instance of Planning Commission. The Code was revised as National Building Code of India (NBC), 2005. Clause 1.3 of the building bye-laws, 2008 of UP provides that building construction activities should be done as per provisions enacted therein and items not covered under it would be executed as per the provisions of NBC of India 2005.

The Lucknow Development Authority was established in September 1974 under the UP Urban Planning and Development Act, 1973 (Act). It prepared (March 2005) a Master Plan 2021 (MP-2021) for the Lucknow Development Area. LDA is responsible for regulating all developmental activities within its jurisdiction. Lucknow Development Area is divided into 22 Zones. LDA is responsible for enforcing provisions of the Act, MP-2021, Zoning Regulations and Building bye-laws.

### 9.2 Operational Management

Audit observations on the working of LDA were as under:

#### 9.2.1 Non-adoption of building code

According to the information furnished by LDA (July 2010), the clauses of MP-2021 and Building bye-laws relating to the provisions of vacant areas/spaces in seven colonies<sup>21</sup> developed by private builders under independent schemes were not adhered to. On this being pointed out in audit, LDA stated (July 2010) that action was proposed to be taken against these private builders.

<sup>21</sup> (i) Alisha Nagar Colony (ii) Ashok Kumar Shukla Colony (iii) *Awadh Sahkari Awas Sangh* (iv) *Saath foot Road Jankipuram Vistar Yojna* (v) Shivalik Vihar Colony (vi) United City Society and (vii) *Volta Sahkari Karmchhari Samiti*.

The Government replied (August 2011) that LDA had admitted non-compliance to the norms of open space in all the seven colonies developed by private builders due to non-regularisation of these unauthorized colonies.

### **9.2.2 Construction without environmental clearance**

Under the Environment Protection Act, 1986, GoI notified (September 2006) that specific projects required environment clearance from the State level Environment Impact Assessment Authority (SEIAA) before the issue of 'No Objection Certificate' (NOC) by UPPCB.

Scrutiny of records (July 2010) of the SEIAA and further information collected (July-August 2010) from the other agencies<sup>22</sup> revealed that five works (Estimated cost: ₹ 2381.86 crore) were allowed to be started by the UPPCB either without prior environment clearance or SEIAA's clearance as given in *Appendix-VII*.

The Government replied (August 2011) that environment clearance has been taken except for *Dr. B R Ambedkar Samajik Parivartan Sthal* because SEIAA informed that this project was not covered under Environment Impact Assessment Notification, 2006.

The reply was not correct as NOC was required from UPPCB for built-up area of less than 20,000 square meter and the *Dr. B R Ambedkar Samajik Parivartan Sthal*<sup>23</sup> falls under this category. Further, the Government did not offer (August 2011) any comment on allowing the construction without prior environment clearance from UPPCB and/or SEIAA.

Thus, UPPCB failed to implement the provisions of the Environment Protection Act, 1986 resulting in commencement of the construction works without the requisite prior environment clearance.

### **9.2.3 Non-Construction of Sewage Treatment Plant (STP) and garbage disposal places**

As per Government order (November 1999) regarding model costing plan for housing development by Development Authorities and Housing boards, cost will include external development including construction of STP and Garbage Disposal Places (GDP). Again

<sup>22</sup> Uttar Pradesh Rajkiya Nirman Nigam and Directorate of Environment.

<sup>23</sup> As per the statement of UPRNN, Lucknow, the covered area is 8836.14 square meter.

in September 2005, while issuing development housing policy, the Government not only reiterated the above provision but also fixed the cost at the rate of ₹ 18 and ₹ 24 per square meter respectively of gross area of the plot.

Scrutiny revealed (July 2010) that LDA and UP Housing Board (UPHB) developed many housing colonies but neither constructed STP and GDP nor reserved any land for their construction in colonies developed by them. As a result, most of the untreated sewage waste was disposed through drainage system into the river Gomti and garbage generated by these colonies was littered on surrounding roads and pavements.

The Government replied (August 2011) that the construction works of Sewerage Pumping Station (SPS) was in process under Kanpur Road Scheme and design work for STP was also in progress. It was further stated that tender had been accepted for construction of STP under Hardoi Road Scheme but work was not started due to agitation of farmers.

No reply was furnished by UPHB.

Thus, housing colonies were developed overlooking the environmental aspects and despite provisions in the plan and availability of funds. The failure of UPHB and LDA to construct STP and GDP in the colonies developed by them led to augmentation of pollutants in the river Gomti.

#### **9.2.4 Absence of rain water harvesting system**

Clause 2.1.2.5(ch) of the Building bye-laws made installation of Rain Water Harvesting (RWH) System compulsory in all housing schemes developed by Government agencies/private builders/cooperative societies. For plots less than 300 square meter area, a common RWH system was required whereas for 300 square meter or more, owners were required to make arrangements of their own in the absence of a common RWH system.

Scrutiny (July 2010) revealed that LDA had not developed a common RWH system in any of its housing schemes. LDA replied (August 2010) that a survey was being done to verify the installation of RWH system in the plots of more than 300 square meter.

The Government replied (August 2011) that during 2005-10 LDA constructed RWH system in 176 Government and semi-Government buildings and in 724 buildings with more than 300 square meter area but the Government was silent about the construction of common RWH system which was required for plots of less than 300 square meter area.

### **9.2.5 Unverified Plantation by LDA**

According to Clause 2.2.3 of Building Bye Laws of UP, 2008, actual plantation, as per approved layout plans, is required to be ensured at the time of issuance of Completion Certificate by LDA.

The area under LDA was divided into 11 zones, where plantations were to be carried out in accordance with the Building Bye-laws. According to the information provided (July 2010) by LDA, zone-wise plantation was as under:

- In Zone-I, plantation was carried out in the parks only;
- In Zone-II,V,VI,VII and IX, no plantation was taken up;
- In Gomti Nagar Extension Yojna of Zone III, plantations in parks and in the green belt at the embankment of roads were carried out; and
- In Sharda Nagar Yojna of Zone-IV, out of a total number of 25132 trees planted during 2005-10, 10,926 trees, constituting 43 *per cent*, were reported dead by LDA.

In reply, the Government stated (August 2011) that LDA planted 4.44 lakh plants during 2005-10 which included 2.27 lakh plants during 2005-08. But the Forest Department in its reply intimated (August 2011) that LDA had planted only 1.23 lakh plants during 2005-08.

Thus, information provided by the LDA and Forest Department to the Government as well as to audit was inconsistent. Besides, no specific reply regarding zonewise plantation and their survival was provided.

### **9.3 Recommendations**

- *Land should be earmarked for construction of garbage disposal and STP for the colonies developed by LDA and private builders; and*
- *Construction should not be allowed without the prior stipulated environment clearance.*