5 LAND USE

The process of planned development for Kanpur city was started way back in 1943 when Kanpur Development Board has prepared the first development plan. With the change in socio-economic situation over a period of time, the need was felt to make changes in the old master plan. In 1962, responsibility of preparation of new master plan has been assigned to Town and Country Planning Department, Uttar Pradesh for Kanpur development area falling under Kanpur Development board and Kanpur Development Parishad area which was declared planned area as per the government order of U.P. (Regulations of Building Operation) Act 1958 (U.P. Act No. 34 of 1958). This Master Plan of Kanpur recognized the functional characteristic of Kanpur as an industrial and commercial town of Uttar Pradesh.

Kanpur city has grown from an area of 8236 hectare in 1946 to 29670 hectare in 1962 which includes the cantonment area too. In 1962, it was spread from Beri Akbarpur in west to Ruma in east and from Ganga River in north to Pandu River in south. As per Master plan 1991, in 1962 out of total 29,670 hectare, 8863.5 hectare (29.9%) was developed land and rest 18235.7 hectare (61.5%) was agricultural land, 2570.8 hectare (8.6%) was open land. In 1997-98, total metropolitan region area has increased to 89131.15 hectare out of which 4,743.9 hectare (5.31 %) was non-defined (prohibited area) and rest 29,683 hectare and 54,704 hectare (61.39%) was urban and rural area respectively.

Over a period of time, Kanpur has developed linearly from east to west along Ganga River and G.T road. The Central Business District (inner city) is located in the north central part. It is heavily built up and characterized by mixed commercial and transport related activities. The public, semi-public, residential and other land use activities have been mostly concentrated in the west. Due to physical constraints of river in the north and cantonment in the east, industrial concentration followed western/ southern expansion.

5.1 LAND USE STRUCTURE

The land use structure has been explained on the basis of Master Plan. From 1961 to 1998, area covered under residential and commercial land use has almost doubled from 31.77 to 62.93 and 1.86 to 3.28 respectively. The area under industries has increased marginally (6.42% to 6.93%). This is due to closure of many large scale industries in recent times. The area under public utilities has increased marginally from 6.59% to 6.90% (Table 5.1). It has been observed that there has been enormous increase in the mixed-landuse and marginal increase in the industrial and public utility land-use. This is only indicative and to know the actual extent detailed field survey is required. The spatial growth pattern reveals that high growth has taken place in the core area and steps to decongest the inner core are required.



Table 5.1: Land Use of Kanpur City (1961–1998)								
Sl.	Land Use	1961		1998				
No.		Area	%	Area	%			
		(hectare)		(Hectare)				
1	Residential	2815.9	31.77	8813.38	62.93			
2	Commercial	164.6	1.86	460.35	3.28			
3	Industrial	569.4	6.42	970.42	6.93			
4	Parks and Playground/	105.1	1.19	959.08	6.84			
	Recreational							
5	Public Utilities and Services	584.0	6.59	966.55	6.90			
6	Government	148.4	1.67	298.62	2.13			
7	Traffic and Transportation	771.7	8.71	1452.85	10.37			
8	Railway Land	817.4	9.22	-				
9	Defence Establishments	2689.2	30.34	-				
10	Water bodies/ River & Drains	197.8	2.23	82.60	0.60			
	Total	8863.5	100%	14003.85	100%			
11	Open Area	2570.8	-					
12	Agriculture Green belt	18235.7		15679.15				
				29683.00				
13	Rural Area		-	54704.25				
14	Non-defined area			4743.90	5.31			
	Grand Total	29670.0		89131.00				

Table 5.1: Land Use of Kanpur City (1961–1998)

Source: Kanpur Master Plan 1970, Draft Master Plan 2021

5.2 DEVELOPMENT/ MASTER PLAN INITIATIVES FOR KANPUR CITY

5.2.1 Development Plan of 1943

Development Plan has been prepared by Kanpur Development Board in 1943. Due to change in socio-economic condition, the need is felt to revise this master plan.

5.2.2 Kanpur Master Plan 1991

Kanpur Master Plan (1968-91) has been prepared by Town and Country Planning Department, Uttar Pradesh for 21 lakh population and has been passed in 1970. After the establishment of Kanpur Development Authority in 1974, planning as per master plan has started taking place. The Master Plan was prepared for 29670 hectare to cater the population of 10 lakhs. The plan has proposed the strengthening of existing commercial centre, shifting of nonconfirming industries towards the eastern and western parts of the city, higher education facilities in the western side, provision for big recreational centres near the Pandu River and on open spaces near Ganga River, dairy farming on green belt and rural areas, construction of new roads as well as widening of existing road network, construction of bypass to ease traffic movement in the city, construction of bridges across the river Ganga and planned development of identified few ring towns, higher density of residential development within



the municipal boundary and arrangements of services like water supply, sewerage, drainage, etc.

5.2.3 Draft Master Plan of 2021

Due to lack of desire to implement the proposed land use, changes in land use, unauthorised construction and encroachment of land, lack of importance to commercial places, offices and recreation places, master plan of 1991 could not be fully implemente d. The planned development has not taken place as per Master Plan of 1991 and targets kept under the plan have not been met. Due to growth in economic and industrial activities and physical spread, problems such as residence, transport, lack of community facilities, environment pollution, number of slum basties etc has increased manifolds. In order to correct the imbalances of the past development and to promote systematic and planned development of the city, it becomes imperative to revise the Master plan and the work was assigned to Town and Country Planning Department (TCPD). TCPD has prepared a revised Master Plan for 2021 taking into consideration the requirements of revised population of 45.0 Lac projected for 2021.

The master plan added 33700 hectare land for future growth of the city. It proposed to reserve 14043 hectares of land, which is 41.67 percentage of proposed area, for accommodating about 45.0 lakh population projected for 2021. A gross residential density of 300 persons per hectares is prescribed in the master plan. The entire city was divided into Planning Districts in order to provide all types of facilities to the proposed population assigned to each District. The Master Plan proposed integration of all the schemes under the housing board with the schemes already under the KDA, provision for inner and outer ring road for improved circulation, provision for new truck and bus terminals, grain and vegetable markets, new colonies proposed in close proximity to commercial hub to decongest the inner core city. The proposed landuse for Kanpur is given in table 5.2.

Sl. No.	Use	Area in Hectares	%	UDPFI
1	Residential	14043.00	41.67	45-50
2	Commercial	879.99	2.61	4-5
3	Public and semi-public	2074.00	6.14	12-15
4	Utilities	461.00	1.37	-
5	Industrial	1871.00	5.55	5-7
6.	Government and	4668.00	13.85	-
	Semi-government			
7.	Recreational	3221.00	9.56	16-20
8.	Traffic and Transportation	3362.00	9.98	6-8
9.	Others	3124.00	9.27	8-10
	Total	33703.99	100.00	

 Table 5.2: Land Use as per Master Plan 2021

Source: Proposed Land Use under Draft Master Plan 2021, table-8, Revised Master Plan (Draft) of 2021



In comparison to UDPFI guidelines for million plus cities proposed by the Ministry of Urban Development, G.O.I., the land use proposed is not adequate for many activities. For example, it should be 45-50% for residential, 4 to 5% for commercial, 12-15% for public & semi-public and 16-20% for recreational activities whereas it is 41.6, 2.6, 6 and 9.56 percentage for residential, commercial, public-semi public and recreational activities respectively. Thus in all these sectors the land use component has been less than the required norms.

5.3 EMERGING CONCERNS

- Increase in population has induced a great pressure on existing services and facilities like schools, colleges, health centre, etc.
- There is a shortage of opens spaces, parking areas, loading and unloading platforms in most of the commercial and industrial areas.
- There is an acute shortage of open spaces in high density built up areas, especially inner city.
- Small-scale industries, nursing homes, commercial offices are functioning in the area allocated for residential land use.
- > Encroachments on road lead to chaos and reduce the effective road area.
- Reduction in area under traffic and transportation in proposed master plan will further increase the traffic load on the existing over strained transport network.
- Need is felt to proportionately increase the area covered under road vis -àvis traffic volume so that it will be commensurate with the increased traffic Volume.
- Steps should be taken to speed up the shifting of industries from nonconfirming area to confirming area.
- Need is to speedily approve the master plan which has gone for state government approval and implement it.
- The time taken in the preparation of master plans should be reduced. In the present case, the master plan preparation has taken more than 7 years and still it has not been notified.
- There should be good connectivity to new markets and terminals to ensure its success.
- Making affordable houses available for urban poor.
- The road connectivity to south city is currently in bad state and it need to be four lane.
- Steps should be taken to identify the existing cattle rearing areas and in the outskirts land should be identified and developed for shifting of cattle colonies.
- Sites in different wards/zones, where organised weekly markets can be put up, needs to be identified and provisions for different facilities such as parking, community toilets etc. should be made.

