

## Chapter 3 Study of the land-use plan in

### MPD

Master Planning as a tool to develop the newly anointed capital city of independent India came into being in 1962. The DD Act, 1957 stipulates that “there shall be a master plan for Delhi”. In legal terms, therefore, it is the same master plan launched in 1962, which was further modified in 1990(with 2001 as its perspective year), and further again in 2007(with 2021 as its perspective year). Therefore there is an obvious continuity in the basic policies and framework of successive MPDs. In spite of this, it is also true that each of the three plans has had some distinctive features which shaped the city. While MPD 1962 was the “mother” document, the two subsequent MPDs have introduced several changes and modifications in the existing scheme of things based on the changed realities and exigencies of the times they were drafted in.

In this chapter, it is proposed to list out the salient features of the three MPDs and follow it up by analyzing some of the important provisions to see whether any changes occurred therein,

and also whether these changes are reflective of the realities prevailing at that time. These include-

- i) Growth of the MPD- 1962 “ Ring Towns”,
- ii) Availability of Urbanisable Land in Delhi,
- iii) Zone-wise estimated Holding Capacity and Area,
- iv) The concept of use zones, &
- v) Government offices;

In addition to this, it is also proposed to study a few select provisions of the MPDs which have a bearing on how facilities were planned and provided. These sample cases include those of- i) Wholesale Markets; and ii) Development Control Norms for flatted industries and also for Residential Plot – Group Housing. It is reiterated here that examining the entire list of facilities/ infrastructure in the MPD is not within the scope of this study.

### **3.1 Highlights of MPD 1962**

Notified on 1<sup>st</sup> September, 1962, MPD-1962 had the perspective of the year 1981. In terms of the land use plan, it divided the plan in two parts-one for the Delhi Metropolitan Area (DMA) and the other for the urban Delhi. It aimed at positive development of the six Ring Towns identified within the DMA, which “ has a good deal of homogeneity and physical, socio-

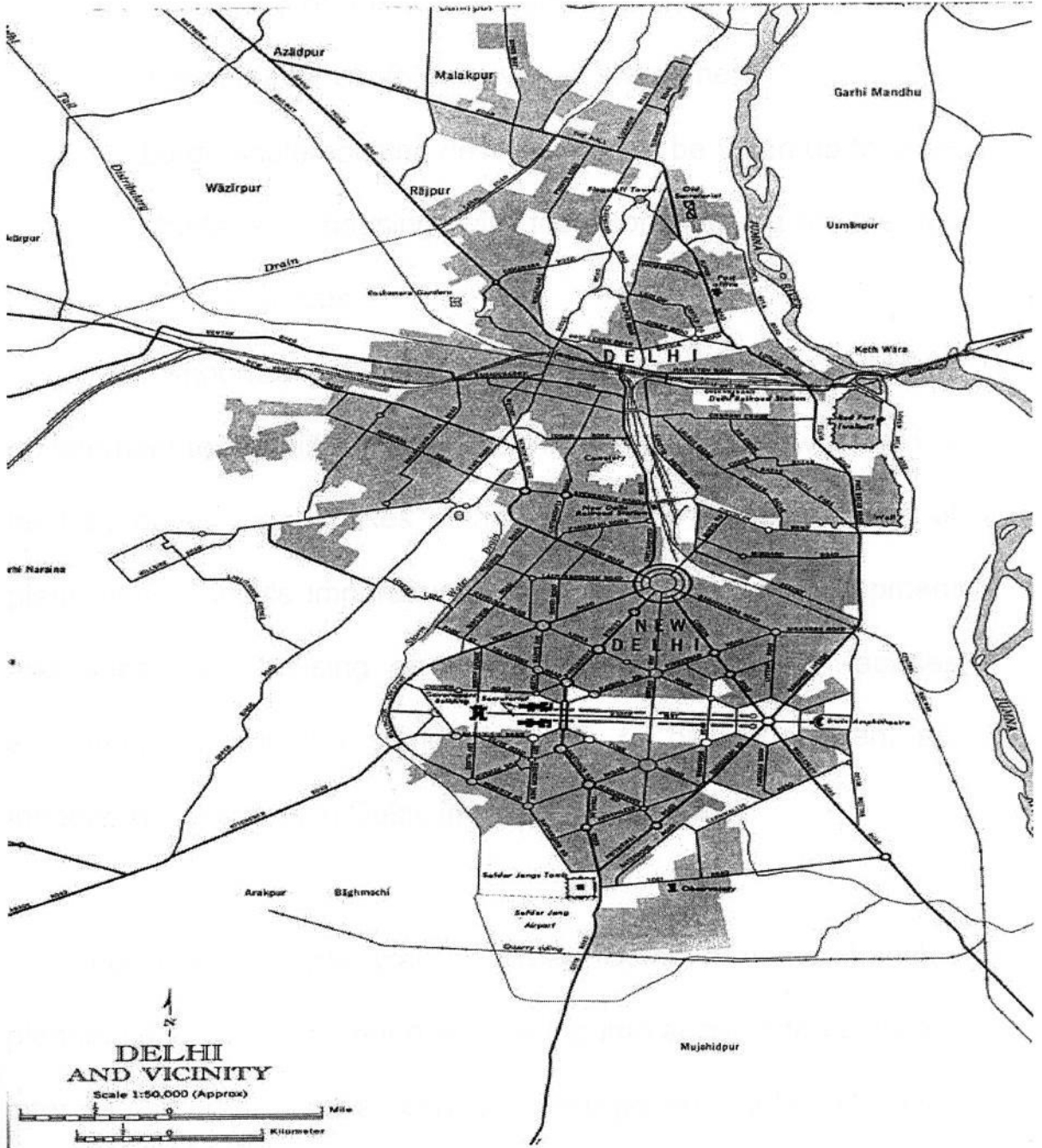
economic and cultural unity".<sup>1</sup> MPD-62 further stated that "this factor makes planning less difficult in spite of political and administrative hurdles."<sup>2</sup>

The salient policies of MPD-1962 were:

- Emphasis on additional government office and residential accommodation within reasonable distance;
- Encouragement to development of permissible industries, but discourage heavy or large industries as an industrial bias is undesirable in the national capital;
- Emphasis on meeting the land requirements for increasing financial, commercial, and distribution activities;

# MAP II DELHI AROUND INDEPENDENCE

( source: [www.cs.jhu.edu/~bagchi/delhi/pics/Delhi1.html](http://www.cs.jhu.edu/~bagchi/delhi/pics/Delhi1.html) )



- Large-scale clearance and reconstruction in the old city ruled out.
- Stress on provision of basic minimum community facilities and services and transport.
- Relocation of noxious industries, and setting up of flatted industries for conforming, small scale ones;
- Large-scale housing development to be taken up to meet shortage of housing, with focus on housing for the low income groups.

Most importantly, the plan stated that all the land acquired by government to remain under public ownership since "ownership of land by government makes planning and the implementation of plans easier and is imperative if slum clearance, redevelopment and subsidized housing and provision of community facilities according to accepted standards have to be undertaken, as, indeed, they must be in Delhi, in a determined way."<sup>3</sup>

For the land use plan of urban Delhi, a comprehensive planning exercise was undertaken taking into account the complex inter-related urban - social, economic and governmental problems. The land use plan had the following features:

- i) It was general;
- ii) It embodied the zoning regulations ( a practice continued in the future MPDs);
- iii) It provided space standards for community facilities and services;

It advocated complete control of land by the government. In fact, this approach of the plan was so profound in its impact on the future of the city, that it took over 40 years to even consider the review of this policy. The plate below explains what exactly the plan had to say on this fundamental issue.

PLATE:

Extract from MPD 1962<sup>4</sup>

Planned growth in the past has been very much hampered by lack of developed land and speculation in land. The stock of land built up by Government when New Delhi was planned proved to be a great stand-by, particularly in settling the large number of displaced people. Very little of that is left now. As a result the prices of developed land have soared up in recent years and the low and middle income groups have resorted to unauthorized house construction in the absence of developed land within their means. Recognising this and also as a matter of major policy, the Government of India has notified for acquisition about 35,000 acres of land all around the present built up area, which will be sufficient for the growth of Delhi according to plan for the next 10 years or so. Steps are also being taken to develop land for industry, commerce, residential uses and community facilities. All this land will remain under public ownership and developed plots or undeveloped land will be leased out to individuals and co-operative societies on an equitable basis, so that the benefit of planned growth accrues to the common man and the Government can also have a share of the future rise in the price of such land. The ownership of land by Government makes planning and the implementation of plans easier and is imperative if slum clearance, redevelopment and subsidised housing and provision of community facilities according to accepted standards have to be undertaken, as, indeed, they must be in Delhi, in a determined way.

# MAP III

## MPD – 1962 : Land use



(source: available at [dda.org.in](http://dda.org.in))



There are several criticisms of the first plan such as inaccurate population projections, increase and proliferation of mixed land use in residential areas, faulty planning of densities resulting in overuse of land, lack of attention to the informal sector, and failure of the proposal for shifting of non-conforming industrial units.<sup>5</sup> However, it must be kept in view that MPD-1962 was the first effort of its kind in bringing the capital under a proper urban planning regime. So far, the city had been allowed to grow as per the exigencies of time over several centuries, and hence, its contribution towards modernization of the city cannot be overlooked.

It was in MPD-1962 that modern urban planning in a regional context was introduced with many path-breaking concepts for Delhi: Ring towns (in present NCR context), comprehensive planning for rural and urban areas, segregated land-use for appropriate built environment, elaborate zoning and sub-divisional regulations, poly-nodal hierarchical development, with neighbourhood as the main unit of planning, performance - based industrial development like extensive, light and flatted factories, appropriate transportation network such as the ring road, radial

pattern and rail linkages , a green belt on the periphery of the proposed urban area, extensive organised planned open spaces (20%).<sup>6</sup>

### **3.2 Highlights of MPD 2001**

MPD-1962 was prepared with a perspective of 20 years i.e. upto 1981. Based on the experience of that plan, extensive modifications to MPD-1962 were made under Section 11-A of the Act and the MPD- 2001 was notified on 1<sup>st</sup> August, 1990, albeit with a delay of about 9 years.

The preamble to MPD 2001 states that it “ensures an appropriate balance between the spatial allocations for the distribution of housing, employment, social infrastructure, shopping centres, public and individual transport and so on and adequate arrangements and reservations to accommodate different kinds of physical infrastructure and public utility systems.”

The following were the important concepts of the MPD-2001<sup>7</sup>:

- i) Planning for Delhi in its regional context, including for a transportation network *"through legal and fiscal measures to operate at inter-state level"*.
- ii) Ecological balance to be maintained- with special reference to the two distinct natural features, i.e. the ridge and the river Yamuna.
- iii) Introduction of the term "special area" for the Walled City and its extension, and Karol Bagh, and the acknowledgment that this area *"cannot be developed on the basis of "normal planning policies or controls"*.
- iv) Decentralization of the city centre; development of district centre for each planned district and directional freight complex *"to create a completely new pattern and city foci"*.
- v) Introduction of the concept of multi-modal mass transport system, including that of Ring Rail. The land use along Ring Rail to be restructured, and Mass Rapid Transit System (MRTS) to be introduced on higher capacity corridors.

Two very important principles of planning<sup>8</sup> were introduced in detail in this plan. These were-

- i) That the urban development to be “low rise high density”, &
  - ii) The urban development to be hierarchical with nuclei to contain essential facilities and services at different levels.
- The five-tier hierarchy was- housing cluster, housing area, neighbourhood, community and district.

The other new features included-

- i) Introduction of the concept of zonal plans, for which the city was divided into 15 zones. Of these, zones A to H existed from the earlier MPD as “planning divisions”. MPD-2001 mandated that the zonal plans for the new zones (J to P) were to be prepared as per development needs.
- ii) Introduction of the concept of Mixed land Use, with certain stipulations. This is important in the context of the issue becoming extremely central to the city post-2006 when innumerable establishments were sealed on court orders during the “sealing drive”.
- iii) This plan went on to acknowledge the realities of unauthorized colonies (600 at that time), urban villages, and the widespread growth of the informal sector in the city.
- iv) It laid extensive emphasis on development of social infrastructure such as schools and hospitals etc.

- v) New concepts such as pedestrianization & Urban Design were introduced along with policy on Tall Buildings, Environment and Heritage Conservation.
- vi) The special nature of the Lutyens' Bungalow area was also mentioned in this plan and stated that due care should be taken at the time of formulating the redevelopment plans of this area to ensure that its basic character is maintained.
- vii) Apart from all the above, this plan also introduced the concept of periodic review of the plan- to account for its achievements and failures.

MPD-2001 was a comprehensive plan, and its achievements<sup>9</sup>

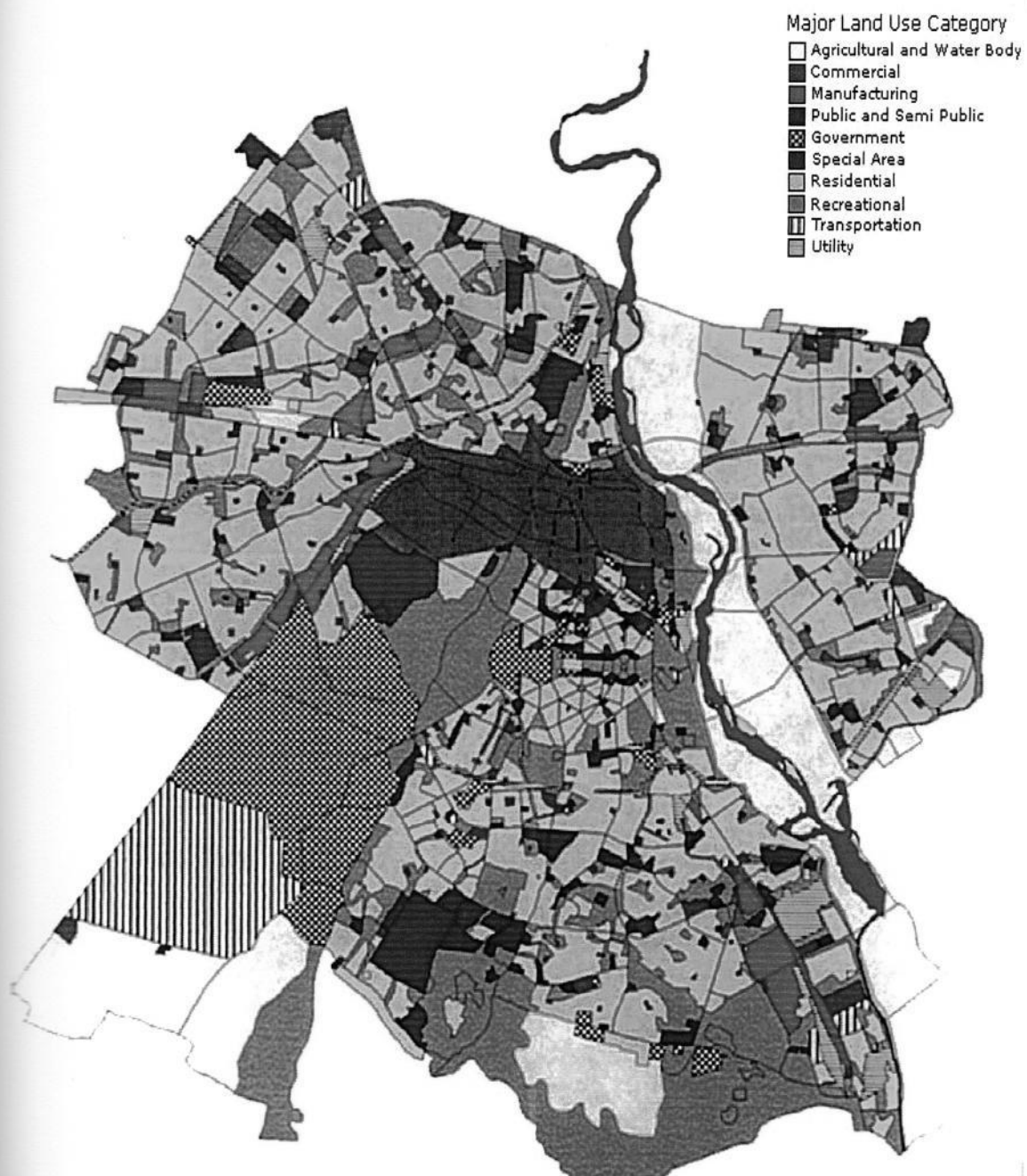
include-

1. Wider variety of housing types, including for the lower strata such as squatters;
2. Development of new areas such as Rohini, Dwarka and Narela;
3. Planning of new district centres, industrial area, greens at various levels, sports centres etc;
4. Plan for MRTS network etc.

In terms of the shortcomings of the plan, it was by the end of MPD-2001 that the ills of large areas of unauthorized development in terms of unauthorized colonies, slums and squatter settlements and non-conforming use of premises had also set in. These factors were compounded by an ever-increasing shortage of housing, resulting in a crisis of credibility for urban planning for the capital city. Since MPD-2001 was still in force till the next MPD-2021 (which came with a delay of about 06 years), as reported by the Tejendra Khanna Committee, almost 60-70% of the residential units and buildings were in violation of permissible use. Over 55% of the city's residents were living in areas other than regularised colonies. In her critique, S. Dewal says, "the figures are rather surprising and yet true, and it is in them that the sheer out-datedness of the plan provisions is reflected. It seems that the city has moved ahead even as the policies have failed to do so. Any regulations that declare the vast majority of people to be offenders indicate that it is the regulations themselves that need review."<sup>10</sup> It was at this juncture that the sealing crisis erupted, resulting in unforeseen law and order problems due to citizen protests.

## MAP IV

### MPD-2001 : Land Use Plan



(source: available at [dda.org.in](http://dda.org.in))

### 3.3 Highlights of MPD -2021

MPD-2001, was notified in 1990. However, the process of review and modification to that plan took some time and the draft of MPD-2021 came into the public domain for receiving objections and suggestions in only in 2005. Before the process could be completed for finalization of the plan, the issue of sealing of non-conforming use of residential premises erupted in Delhi on a scale unimagined in its impact on the civic life. Hence, MPD-2021 was published in the wake of the ongoing case in the courts, especially in the apex court, in February 2007, with the perspective of the year 2021. The government also took several other steps to mitigate the problems arising out of this sealing drive. However, as stated in the introductory chapter, the focus of this study is not on the issue of sealing.

Regarding the issue of land, this MPD makes a very important statement in its preamble which has profound implications for the future:

“The MPD-62 set out the broad vision for the development of Delhi ....At that early stage, the process of planned development was envisaged as a public sector led process with very little private participation in terms of development of both,



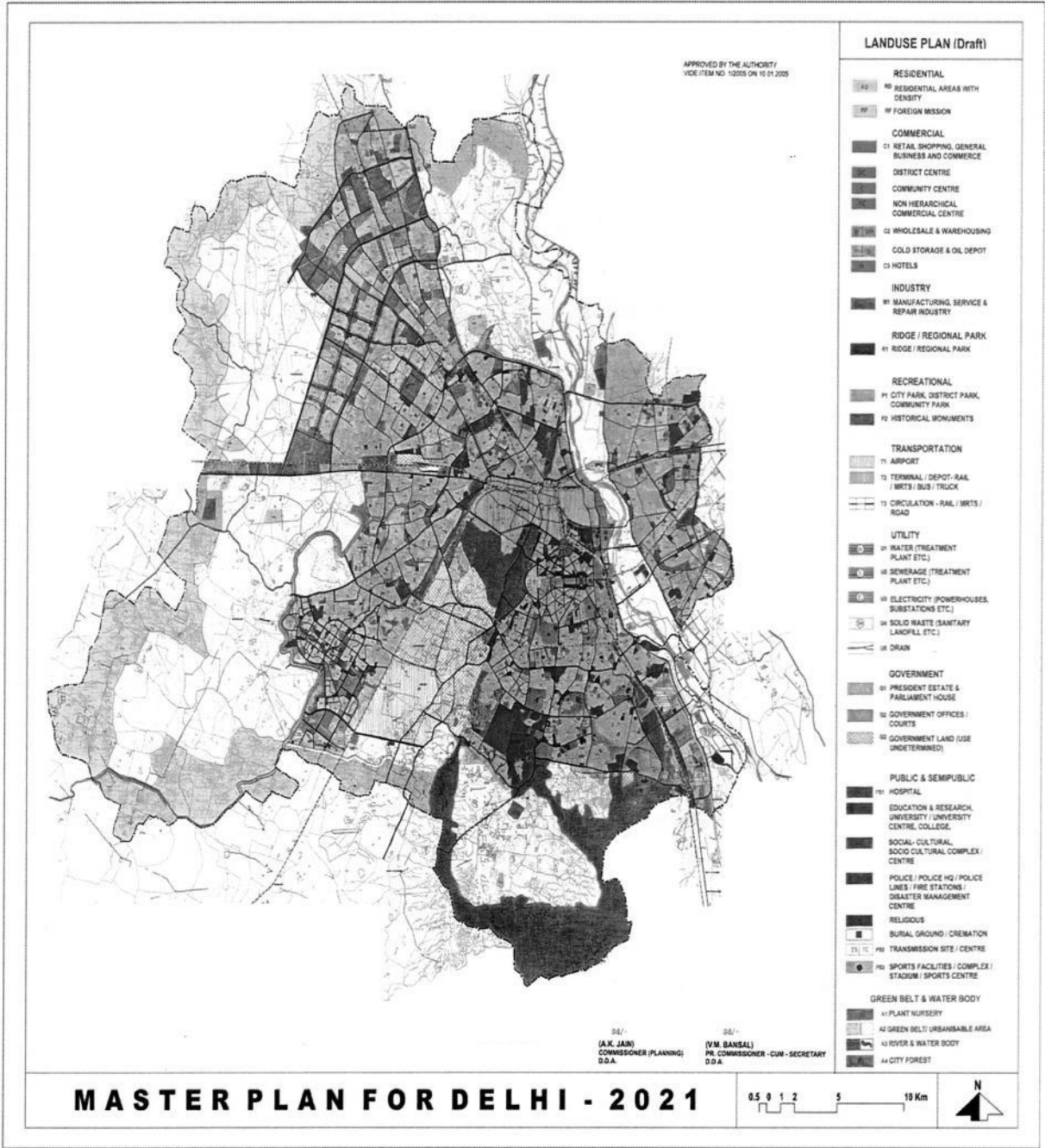
shelter and infrastructure services. The philosophy of public sector led growth and development process continued in general till the process of economic reforms was initiated in the early nineties. Therefore, the Master Plan for Delhi 2001 (MPD-2001) also substantially reiterated the planning process, which had been outlined in MPD-62. These plans could be seen mainly as land use plans with a three level hierarchy i.e. Master Plan, Zonal Plans and Layout Plans for specific development schemes within each zone.”

Thus the new plan acknowledges that so far, the entire planning and development process was government driven with very little private participation in either housing or infrastructure services. This comes in the wake of the changes brought about in the 90's with liberalisation of the economy. It also implies that private participation is now recognised as a key element in success of urban planning. Further, the preamble of MPD-2021 also discusses the scheme of large scale acquisition and development of land which was formulated in line with the vision of the MPD-1962, so as “to ensure that the spatial pattern of development and use of land could conform to the development

plan and infrastructure and services could be laid out to match the same.”

### MAP V - LAND USE PLAN : MPD-2021

(Source: available at [dda.org.in](http://dda.org.in))



Acknowledging the inaccurate projections of population and other indicators in MPD-2001, MPD-2021 makes a departure from the government-driven approach and lists out the following major policy issues for consideration

- “(i) Review of the scheme of large scale development and acquisition and its relevance in the present context;
- (ii) Alternative options for development of areas identified for urbanization in MPD-2021;
- (iii) Evolving a system under which planning for, and provision of basic infrastructure could take place simultaneously with reference to (i) and (ii) above; and
- (iv) Involving the private sector in the assembly and development of land and provision of infrastructure services.”

Thus, the fundamental change which is visible in MPD-2021 at the policy level is indicated in the above, i.e. involvement of the private sector to augment city infrastructure.

MPD-2021 lists the following among the focal points of the Plan: i) A land policy to be based on the optimum utilisation of

available resources, both, public and private in land assembly, development and housing, public participation and Plan Implementation, decentralised local area planning by participatory approach, and performance oriented planning and development, with focus on implementation and monitoring; ii) Incentivised Redevelopment with additional FAR envisaged as a major element of city development covering all the areas; along with densification, iii)Planned Areas: Influence Zone along MRTS and Major Transport Corridor; underutilised/low-density areas; Special Area; shopping/commercial centres; Industrial areas/clusters and resettlement colonies; iv)Unplanned Areas: Villages; unauthorised colonies and JJ Clusters. Accordingly, the MPD-2021 Land Use Plan-2021 has been prepared based on the policies enunciated for different urban activities, the requirement of additional social and physical infrastructure, transportation and work centres, and already approved Zonal Development Plans and land use modifications. A major innovation is that the Plan contemplates a mechanism for the restructuring of the city based on mass transport.

Before concluding this part of the chapter, it is important to remember that Delhi has belied the population estimates of the planners in every MPD. This is one factor which cannot be viewed in a city-centric manner. In fact, the conditions prevailing in the other parts of the country have had a bearing on the population flocking to the national capital. In his classic paper on the subject of "primate" and "parasite" cities, B. Hoselitz<sup>11</sup> rightly attributes the migration to cities to the pulls exerted by urban conditions. He states that the relatively strong pull of superior consumption patterns and the very low living standards prevailing in most rural areas of under-developed countries, coupled with the drabness and the hardships of agricultural labour under conditions of backward technology makes life in the city appear attractive. He, therefore, draws the conclusion that the prospective socio-economic development of the cities in underdeveloped countries, may, therefore, not follow the pattern of development exhibited by cities in advanced western countries. This is something the westward looking citizens of Delhi need to keep in mind.

### **3.4 Comparative study of select provisions in the three MPDs**

In this section, it is proposed to examine some of the select provisions of the three MPDs and to analyze changes, if any, occurred therein. This is expected to shed some light on whether these changes are reflective of the realities prevailing at that time.

These include-

1. Growth of the MPD-1962 " Ring Towns",
2. Availability of urbanisable land in Delhi,
3. Zone-wise estimated holding capacity and area,
4. The concept of use zones, &
5. Government offices.

In addition to this, it is also proposed to study two specific cases which have a bearing on how facilities were planned and provided which include i) Wholesale Markets, and, ii) Development Control Norms for flatted industries and for Residential Plot – Group Housing.

### 3.4.1 Growth of the MPD-1962 “Ring Towns”

As stated earlier in this chapter, MPD-1962 had proposed development of what it termed as “Delhi Metropolitan Area” comprising seven “Ring Towns” of Ghaziabad, Loni, Faridabad, Ballabgarh, Bahadurgarh, Gurgaon and Narela. MPD-1962 had detailed out an area of about 800 sq. miles (a little over 2000 sq.km) for the DMA. This concept was later on overtaken by the larger concept of the National Capital Region, (now comprising 33,578 sq. km) formalised through the NCR Planning Board Act, 1985 and notification of the Regional Plan-2001 under this Act in 1988.

The table below gives details of the population growth of the Ring Towns over the MPDs.

**Table 2 Population of the 7 Ring Towns proposed in MPD-1962**

S.No.	Ring Towns	Population in 1000's				
		1951	1981 (projection of MPD 1962)	1981 (actual)	1991	2001
1.	Ghaziabad-Loni	48	380	297	320	1090
2.	Faridabad-	31	285	331	617	1056
4.	Ballabgarh	6	29	29	144	187
5.	Gurgaon	19	48	100	136	229
6.	Bahadurgarh	11	29	37	57	132
7.	Narela	10	71	15	NA	120

Source: MPD1962 and Regional Plan 2021

The vision in 1962 for each town is as given below :

- (i) Ghaziabad had a draft master plan in 1962 itself, and was envisaged as an industrial town, with some government offices.
- (ii) Loni had just 4000 people in 1962 and also had a master plan. It was also envisaged as an industrial town.
- (iii) Faridabad-Ballabgarh were envisaged as an integrated industrial township with good water potential.
- (iv) Gurgaon was not placed on a high growth trajectory because of its water shortages, and" only a modest growth was contemplated".<sup>12</sup>
- (v) Bahadurgarh also had water shortage and was expected to grow modestly.
- (vi) Narela in Delhi with good groundwater was expected to become a growth centre, with industries, government offices, and institutional areas.

i) However, by MPD-2001, the vision of the plan was belied by growth of certain other centres not envisaged therein, especially Noida. The highest order settlements identified in the Regional Plan-2001 of the NCR were six Central NCR



(CNCR), which were earlier termed as the DMA towns of Ghaziabad – Loni, Noida, Gurgaon-Manesar, Faridabad-Ballabgarh, Bahadurgarh and Sonapat-Kundli. The CNCR towns were envisaged to grow to 37 lakh against which they actually grew to 28.11 lakh as per the Census 2001. Of these six towns, the towns of Ghaziabad and Faridabad reached their targetted population, but the rest of the CNCR towns could not achieve their target. In fact, Kundli, which was proposed to be developed into a town of 1.5 lakh, had hardly taken off.

- ii) Now in the Regional Plan-2021, the following Metro Centres are proposed: Faridabad-Ballabgarh, Gurgaon-Manesar, Ghaziabad-Loni , Noida, Sonapat-Kundli, Greater Noida and Meerut , to finally accommodate a total population of 127.69 lakh in 2021.

The above analysis shows that while Delhi has continued to grow in spite of curbs prescribed in MPD-1962 and subsequent plans. With the actual population overshooting the assigned or targeted population every time, the NCR has also developed.

However, there is a spatial distortion in that only some of the DMA towns adjoining Delhi (Ghaziabad, Noida, Faridabad and Gurgaon) and some of other towns such as Meerut and Rewari got developed. The success of Noida is particularly significant, as it found no place in the MPD-1962, but has now emerged as a planned, integrated, modern industrial city spread over 20,316 hectares, well connected to Delhi. Noida was constituted under the U.P. Industrial Area Development Act, 1976, and is now one of the largest industrial townships of Asia.<sup>13</sup> Similarly, equally impressive is the emergence of Gurgaon as one of the most prominent outsourcing and offshoring hubs in the world and also as major hub of telecom companies, automobile manufacturing, garment manufacturing, world-class real estate and shopping malls, which MPD-1962 had not envisaged.

### **3.4.2 Availability of urbanizable land in NCT-Delhi for 2021**

As of now, NCT Delhi which is a land-locked territory, has a finite area of 1483 sq. km. Out of this, about half of the area is already urbanized. In 1962, the area under urban Delhi was merely 173 km. In 1990, this went up 448 sq km, and increased to about 702 sq km, in 2007 which is reflected in MPD-2021. The city has

been struggling to meet the need to accommodate the ever-increasing population of the city. The table below gives a picture of how the Delhi urban area has expanded over the three Plans.

**Table 3 Availability of urbanisable land in NCT-Delhi**

	MPD 1962			MPD 2001			MPD 2021		
	Area in acre	Area in ha	Area in sq km	Area in acre	Area in ha	Area in sq km	Area in acre	Area in ha	Area in sq km
Actual Urbanised Area at the time of formulation of plan	42700	17287	173	110599	44777	448	173464	70228	702
Projected Urbanisable Area at the end of plan	110500	44737	447	169903	68787	688	227804	92228	922
Existing Population at the time of formulation of plan (in lakh)	21			54.5*			138		
Projected Population at the end of plan(in lakh)	46			128			220-230		

\* population in urbanisable limits. The balance of urban population resides in 17 settlements, & Najafgarh and Narela.

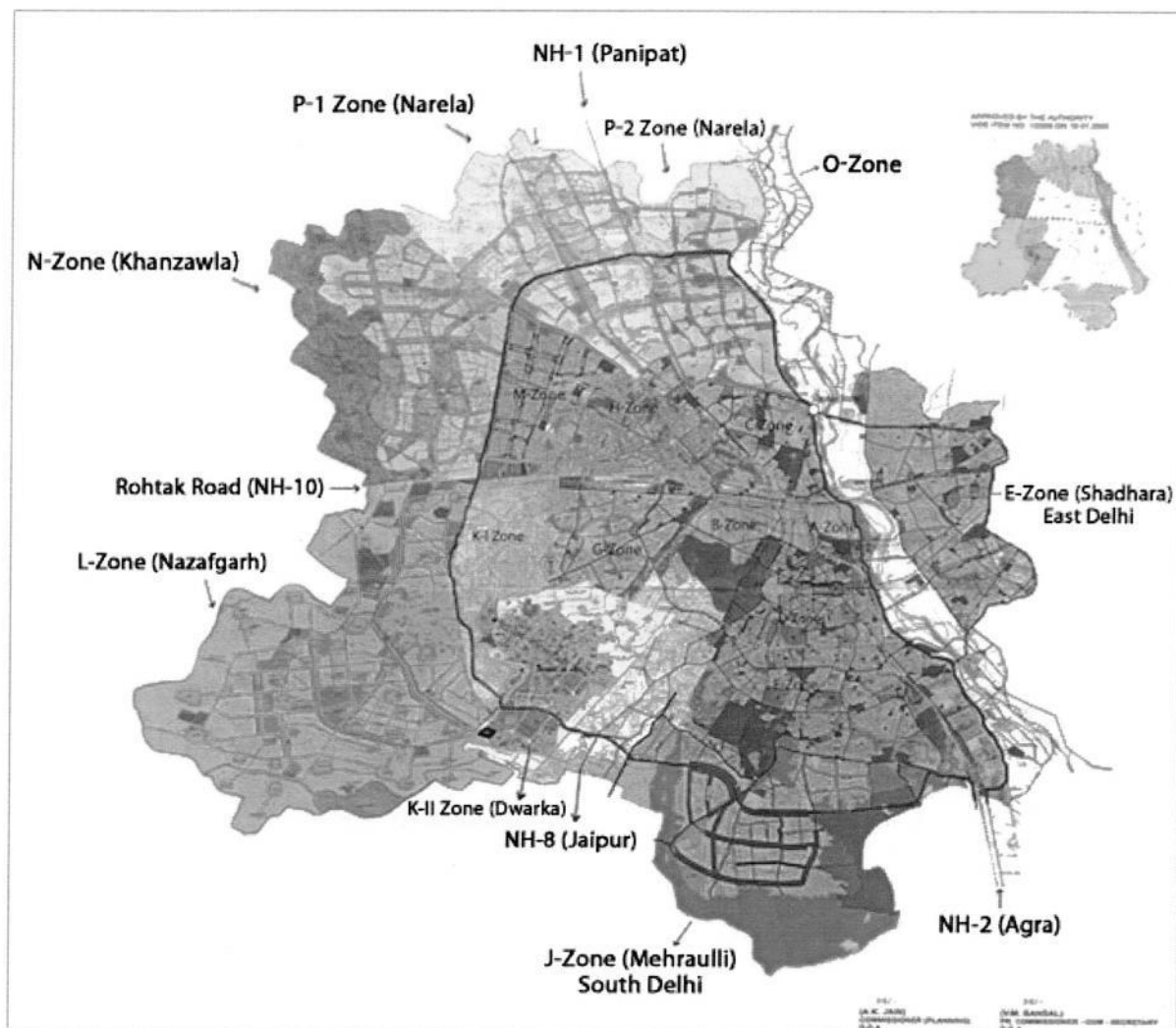
**( Source: MPD 1962, 2001 and 2021)**

The table shows that the urbanised area at the time of formulation of the earlier two plans has been more or less close to projection. MPD-1962 projected 447 sq. km, and MPD-2001 started with an area of 448 sq km. The projected area of 688 sq km from MPD-2001 had reached 702 sq km at the launch of the current MPD. It is noteworthy that the master plans 2001 and 2021 have been notified with some delay. A pertinent point here is

also that as per the estimation of MPD-2021, a total of 29 lakh people live in villages, census towns, unauthorised colonies and JJ clusters in the present rural areas. Hence, even if the city has reached an expanse of 702 sq km by 2001, it includes a large portion of unplanned growth also. Similarly, about half the housing in the city at the start of the current plan is unplanned or non-institutional.

The target before the current plan is to achieve an area of about 922 sq km by 2021 to accommodate the projected population of 230 lakh. This calls for careful planning and optimum utilization of remaining area. An important feature of the new plan is that all the land in NCTD, except the green belt proviso, has been declared Urbanisable. It is also a fact that the proviso of for retention of Green Belt upto one revenue village depth on the periphery has not been maintained and a considerable part has already been utilised for both, planned and unplanned developments.

## MAP VI - PLANNING ZONES of DELHI



(source: <http://www.masterplandelhi.com/map.html>)

### **3.4.3 Zone-wise Area and Estimated Holding**

#### **Capacity.**

MPD-62 divided the entire urbanisable area by 1981(DUA-81) into 8 (A to H) planning divisions for planning purposes. They were further subdivided into 136 Development Zones in order to have workable areas for purposes of detailed planning. In 1968 One more planning division (outer Delhi ) with 3 development Zones- Narela and Najafgarh Town zones and Rural Delhi Zone was created. However it was not operationalised.

MPD- 2001 redesignated the Planning Divisions as Zones. It also added 4000 ha to the DUA-81 urban limits and created 07 more zones ( J to P). Thus by MPD-2001, there were 15 zones (A-H and J-P).

MPD-2021 sub divided K zone (West Delhi –II) of MPD 2001 into K-I (West Delhi-II) and K-II (Dwarka). The boundaries of M, N, O and P have been modified and the modified P zone has been subdivided into P-I (Narela) and P-II (North Delhi).

**Table 4 Zone-wise Area and Estimated Holding Capacity.  
(Population in '000/area in hectares)**

Sr. no.	Zone (Planning Divisions in MPD-62)	Area As per MPD-62	Projected Holding Capacity for 1981 as Per MPD 62 <sup>1</sup>	Actual Population in 1981 <sup>2</sup>	Area as per MPD 2001 <sup>3</sup>	Projected Holding Capacity for 2001 as Per MPD 2001 <sup>4</sup>	Actual Population in 2001 <sup>5</sup>	Area as per MPD-2021 <sup>6</sup>	Projected Holding Capacity for 2001 as Per MPD 2021 <sup>7</sup>
a	b	c		d	E	f	g	h	i
1	A (Old City)	1159	322	622	1159	420	570	1159	570
2	B (Walled City Extension)	2304	398	567	2304	630	624	2304	630
3	C (Civil Lines)	3959	355	530	3959	751	679	3959	788
4	D (New Delhi)	6855	634	496	6855	755	587	6855	813
5	E (Trans Yamuna)	8797	744	1028	8797	1789	2798	8797	2800
6	F (South Delhi - I)	11958	781	822	11958	1278	1717	11958	1975
7	G (West Delhi - I)	11865	744	868	11865	1490	1629	11865	1955
8	H (North West Delhi - I)	5677	606	517	5677	1865	1226	5677	1865
9	Sub Total (1-8)	52574	4585	5450	52574	8978	9830	52574	11400
10	J (South Delhi - II)	Not in DUA-81	Not in DUA-81	NA	15178	NA	NA	15178	NA
11	K (In two Parts)	Not in DUA-81	Not in DUA-81	NA	12056	NA	597	12190	1300
12	K-I (West Delhi - II)	Not in DUA-81	Not in DUA-81	NA	Not in MPD-2001	Not in MPD-2001	NA	5782	NA
13	K-II (Dwarka)	Not in DUA-81	Not in DUA-81	NA	Not in MPD-2001	Not in MPD-2001	NA	6408	NA
14	L (West Delhi - III)	Not in DUA-81	Not in DUA-81	NA	22979	NA	96	22840	160
15	M (North West Delhi - II)	Not in DUA-81	Not in DUA-81	NA	8213	NA	198	5073	820
16	N (North West Delhi - III)	Not in DUA-81	Not in DUA-81	NA	15851	NA	NA	13975	1620
17	O (River Yamuna)	Not in DUA-81	Not in DUA-81	NA	6081	NA	NA	8070	NA
18	P (North Delhi)	Not in DUA-81	Not in DUA-81	NA	15707	NA	NA	18400	NA
19	P - I (Narela)	Not in DUA-81	Not in DUA-81	100	Not in MPD-2001	NA	179	9866	1620
20	P - II (North Delhi)	Not in DUA-81	Not in DUA-81	NA	Not in MPD2001	NA	NA	8534	NA
21	Subtotal (11+14+15+19)					3222	1070		3900
22	Total	52574	4585	5550	148639	122 00	10900	148300	15300

<sup>1</sup> and <sup>2</sup> page 26 of MPD-1962    <sup>3</sup> page 49 of MPD-2001    <sup>2</sup> and <sup>4</sup> page 04 of MPD-2001.    <sup>5</sup> and <sup>7</sup> page 10 of MPD-2021.    <sup>6</sup> page 121 of MPD 2021.

Though the exact data is not available for zones A to H, the projections and plans of MPD-1962 went awry which is acknowledged in annexure IV, to MPD-2001 which states that "The MPD-62 made low medium and high projections for the population for Perspective 1981 ranging from 4.4 to 6.1 million. The average of these projections, i.e., 5.5 million was accepted, for the plan. This projection was based on 3.7 percent annual growth. The idea of accepting average projection was based on Capital Region and developments envisaged by the Plan shall restrict the population. However, actions and non-actions during the implementation period of the Master Plan and the figures of 1981 census have belied the projections. During the period 1961 to 1981 all along the population growth has been set the rate of about 4.3 percent per annum."<sup>14</sup>

- i) In the case of MPD-2001 itself, as seen from the table above, the projected population of all the zones either overshoot the projection or remained less. For zones B and C, it was close to the projections, but in case of zones A(significant increase), E and F(increase beyond reasonable estimations),and H(reduced beyond reasonable estimations), the inaccuracies are quite glaring. Hence, we have a



situation where the overall population projection of MPD-2001 has become one of its primary failures.

- ii) There are projections in MPD-2021 for the year 2021. The projections for zones A and B remain the same as actual population of 2001, but whether this will hold good is to be seen.
- iii) It is interesting to note that MPD-2021 has projected the same approximate figures for zones C, D, and H as the projected figures of MPD-2001, and disregarded the actuals for 2001. This is not explained in view of the overall failure of MPD-2001 in terms of population projections.
- iv) However, it is equally interesting to note that for zone E, MPD-2021 has stuck to the actual population of 2001, and for zones F, G, K, L, M, N, and O the estimates are significantly higher than the actual of 2001.
- v) For zone J, there are no projections either in the MPD-2001 or in MPD-2021, which is probably because of the ongoing litigation regarding large-scale land acquisition in that zone, and its resultant problems. However, MPD-2021 does state that the projected additional population would be

accommodated in the immediate urban extension in the zones of J to L, N & P (I & II).

For the MPD, projection of future population is the cornerstone of all other planning. The previous two MPDs have proved to be lacking in the accuracy of their population projections, and this has been the primary criticism against the plans. This has implications for the success of the current MPD-2021. It is similar to putting all the eggs in one basket, and if the projections fail, the plan does not stand a chance of being successful. This apprehension remains for the current plan also. The census 2011 is underway, and the figures will show how far the mid-term projections of MPD-2021 are correct. Also, the mid-term review of MPD-2021 is to be done in 2011 itself, so it can be hoped that course correction would happen if required.

#### **3.4.4 The concept of use zones**

MPD-1962 introduced modern planning concepts, one of which was "use zones". A use zone is defined as an area for any one of the Specified Use Category of the urban functions as provided in the Development code of the MPD.<sup>15</sup> This concept is the next level after the larger land use plan of the city, and is

further divided into "Use Premises", which means one of the many sub divisions of a Use Zone, designated in an approved layout plan, for a specific Use. Land use of a premise has to be determined on the basis of an approved layout plan. The use zones and use premises together determine the land use policy in the city.<sup>16</sup>

In its review of MPD-1962, MPD 2001 states as follows:

"The land use control and land use permissibility was one of the major stipulations of MPD, 1962. However, it underwent very serious aberrations during implementation. For the purpose of regulation, MPD 62 divided the Union Territory of Delhi into 24 use zones and each use zone give a list of permitted uses, uses permissible if allowed by Competent Authority after special appeal, and prohibited uses. Also, as per MPD 62, all non-conforming uses were to be shifted in stages to the conforming areas, earmarked in the Master Plan. Establishment of new uses in any case was to be allowed only in conforming areas. Study of the mixed land use has indicated that there is appreciable occurrence of mixed use units in the residential areas requiring attention."

MPD-2021 states that each use zone may have one or more than one Layout Plan (a Plan indicating configuration and sizes of all Use Premises), “depending upon the extensiveness of the area under the specific Use Zones and vice-versa & will indicate the location of all proposed and existing roads with their widths, dimensions of plots along with building lines and setbacks, location of drains, public facilities and services and electric lines etc, statement indicating the total area of the site, area under roads, open spaces for parks, playground, recreational spaces and other public places, as required by specific sections of the development code.”<sup>17</sup>

The use zones were increased in MPD-2001 from 24 in MPD-1962 to 37, and brought down to 26 in MPD-2021. It is seen from the three respective plans that the number of use zones had increased to 37 because of the manner in which they were classified, and the same has been reduced in the current plan by rationalizing the groups once again.

However, the underlying fact of the matter is that the concepts have largely remained confined to the plan while the requirements of preparing extensive layout plans, local area plans,

zonal development plans, etc. have not been met in the successive MPDs. This has led to the proliferation of mixed or non-conforming use of premises at a very large scale in the city, which reached crisis-proportions in the wake of the sealing drive in 2006.

MPD-2021 has brought out elaborate regulations for mixed use, keeping in view this problem .It states that the provision of various types of mixed use is required in view of “a large diversity in the typology of residential areas and also due to the extent of non-residential activity seen as being necessary or desirable by the residents themselves varies from area to area based on the socio-economic status of the residents as well as the past pattern of development in that area”.<sup>18</sup>

On the whole, while it can be seen from the crisis of sealing that the elaborate system of planning concepts such as that of use zones has failed to achieve its desirable end, and perhaps it is time to move on to newer concepts. There are trends world over to allow more mixed use of land. Hence, a fixed regime of mixed-use as laid down in MPD-2021 may not prove adequate to meet the needs. But it must also be kept in mind that in the absence of any

regulation, any planned growth is unthinkable. Regulations in the earlier plans have definitely played a crucial role in promoting a better quality of life.

### **3.4.5 Government offices**

Delhi is the national capital and seat of government of India. Since 1911, Delhi has seen the birth and growth of a vast apparatus of the government. The setting up of a large number of foreign embassies, foreign missions, research and cultural organisations has also had its distinct impact on the growth of the city. The employment in the various types of the government and quasi-government offices has been constantly increasing ever since 1921. The employment in Government undertakings increased by leaps and bounds in the 80's, and that in Delhi Administration and local bodies largely grew with the size and enhanced responsibilities of the Administration and the local bodies with increasing overheads of servicing of metropolitan city. The table below refers:

**Table 5 : Employment in Govt. and Quasi Govt. Sector (in lakh)**

S. No.	Category	1981	1991	2000	2003
1.	Central Government	2.25 (6.64)	2.15 (-4.44)	2.13 (-0.93)	2.14
2.	Government of NCTD	0.58 (9.43)	1.04 (9.31)	1.13 (8.65)	1.21
3.	Quasi Government (Central + State)	1.41 (151.79)	2.14 (51.77)	2.04 (-4.67)	1.96
4.	Local Bodies	1.17 (30)	0.83 (-29.06)	0.95 (14.46)	0.93
	<b>TOTAL</b>	5.33 (30)	6.16 (15.57)	6.25 (1.46)	6.24

Figures in brackets indicate decadal growth rate in percentage. ( Source: MPD-2021)

MPDs have successively taken note of this special requirement of the city and provided for it. An attempt has been made in this section to examine the approach of the MPDs to government offices and to see whether the policies have been effective .

1. MPD-1962, while acknowledging the fact of the city being a major governmental centre, stated that it would be undesirable to have an increase in the proportion of government employees to the total employees in all sectors. It provided for 912 acres of land for new government offices by 1981.
2. MPD-2001 stated that in 1981, there were a total of 5.42 lakh government employees, which constituted 28% of the workforce. It catered to more office space at INA (04 ha), Safdarjung (54) ha, and Saket (20 ha), apart from land for district courts at various places. It also spoke of conserving the old secretariat etc as these are heritage properties.
3. In the current MPD, the policy of decentralization of offices as per the Regional Plan-2021 has been reiterated. Hence, no new Central Government and Public Sector Undertaking offices are to be located in Delhi. It also states that the issue of shifting existing Government / PSU offices from Delhi as well as restricting the setting up of new offices would only be possible after a time bound action plan is prepared together with suitable incentives and disincentives. In terms of land requirements, the plan lays down the strategy of:



- (i) Intensive utilization of existing government offices/land,
- (ii) Utilization of surplus land by the government for residential development,
- (iii) Utilization of 10% of total FAR for commercial uses to make the restructuring process financially feasible.
- (iv) Conservation of Old Secretariat as it is a historical building, and redevelopment of Barracks area adjacent to the Old Secretariat to accommodate additional Govt. Of NCTD Offices.
- (v) Government offices to be provided along the MRTS corridor in the Urban Extension as far as possible.
- (vi) Major employment of the local bodies and GNCTD such as health facilities, education etc, to be accommodated in the public and semi-public facility areas.
- (vii) Land has also been earmarked in Saket (07 ha), Narela sub-city (03ha) , and Dwarka sub-city(03 ha) accommodate new district courts.

At the same time, the policy laid down in the Regional plan-2001<sup>19</sup> states that-

- i) The main criterion for location of offices in the Capital should be that they perform ministerial functions, protocol functions or liaison functions, which, by their nature, cannot be performed anywhere else except in the national Capital.
- ii) The existing offices, which do not perform any of the above functions, should be identified and shifted from NCT-Delhi.
- iii) Similarly, the public sector offices should be allowed to retain only very small establishments to cater for ministerial and liaison functions. The rest of the establishments should be shifted out of NCT-Delhi.
- iv) No new office spaces should be created in newly developed community, district or sub-city and city centres. Their role should be limited to providing all levels of shopping facilities.
- v) The Central Government and any other organization, body or authority requiring additional space should be allowed to do so only outside NCT Delhi in NCR and beyond in Counter Magnet Areas (CMAs).

In terms of actual achievements, in its reply on the subject to the Third Report of the Standing Committee on Urban Development (2009-2010) of Fifteenth Lok Sabha<sup>20</sup> on NCRPB, the Ministry of Urban Development has stated that from 1986 onwards, a total of 36 identified offices of PSUs were identified to be shifted out of Delhi out of which 20 have already been shifted, 02 have been permitted to continue in Delhi and 14 are yet to be shifted from Delhi. As for government offices, there has been no case of shifting outside Delhi yet, which the Committee has expressed dissatisfaction with.

#### **3.4.6. Wholesale markets and Integrated Freight Complexes**

Since the medieval age, by virtue of its geographical location and other historical factors, Delhi has been a thriving commercial centre. The advent of railways in the later half of the 19<sup>th</sup> century gave a huge boost to its trade and commerce. Over the last two hundred years, Delhi has evolved as the biggest consumption and distribution centre in North India. According to RP-2021 of the NCR, it is expected that the number of enterprises in wholesale trade may increase to about 66,000 by 2021 leading to increase in employment to about 2.85 lakh persons.

MPD-1962 dealt extensively with this aspect of city life, and recommended-

- i. to decongest and clean up the Walled city area, separating retail from wholesale
- ii. to shift the wholesale trade in some items like iron and steel should to places outside Delhi; to create suitable sites in proposed industrial zones for iron and steel wholesale.
- iii. to streamline and create new wholesale trade locations across the city.

However, even MPD-1962 did not foresee the enormous growth of trade in the city which happened by the time MPD-2001 came about. By then, there were about 25,000 wholesale establishments and trade in 27 commodities, with textiles, fruit and vegetables, hardware and building material at the top of the list. The plan in MPD-1962 to decongest the walled city did not meet with much success, and MPD-2001 laid down that there would be no more growth permitted in the area. In spite of these policies, as per a recent survey, around 20% of the total wholesale trade enterprises of urban Delhi are located in the walled city, accounting for around 12% of the employment.

However, as a successfully planned market from MPD-1962, the Azadpur fruit and vegetable market is the biggest fruit and vegetable market in Asia and one of the biggest in the world. The market was planned and established in 1977 and acts as the national distribution centre for some fruits and vegetables. Planned markets were also developed at other places such as Naraina, Okhla, Narela, Keshopur, Sanjay Gandhi Transport Centre Rohtak Road Transport Centre, and Najafgarh etc. Continuing the tradition, MPD-2021 aims that in addition to above, the following wholesale markets should be developed:

- (i) Loni Road
- (ii) Rohini Ph-IV/V
- (iii) Dwarka Sub-City
- (iv) Narela Sub-City

The concept of Integrated Freight Complex (IFC) was introduced in MPD-2001. IFC have been recommended for the integration of goods movement by road and rail. These would consist of wholesale market, warehousing, road for trucks and rail transport terminals so as to curtail the movement of heavy vehicles within the complex. The freight complexes are to be located in the places where they intercept the maximum possible regional goods

traffic entering Delhi. The following four sites for IFC were initiated in MPD-2001 and as per the current plan, are presently at various stages of planning and/ or development:

- i. Madanpur Khadar on NH-2,
- ii. Gazipur (earlier Patparganj) on NH-24,
- iii. Narela (earlier GT road) on NH-1, &
- iv. Dwarka ( Bharthal) NH-8.

In addition, a fifth new site in Urban Extension (Rohtak Road) at Tikri Kalan, has been proposed in MPD-2021.

The overall achievement in setting up of planned wholesale markets has been noteworthy, but the upcoming IFC pose a challenge of successful execution. While the concept is very modern, the issues of land availability and timely completion are the most critical ones.

### **3.4.7 Development Control Norms**

#### **3.4.7.1 For group housing**

As we examine the MPDs in 2011, lakhs of apartment blocks are being constructed all over the country, including the NCR. This

is the preferred mode of shelter for millions of people, especially the middle and lower income groups. It is the only way in which the aspirations of the masses for a decent shelter could be fulfilled, given the overall land constraints.

In MPD-1962 and even in MPD-2001, there was a stress on horizontal expansion of Delhi, with plotted housing as the preferred option. One of the basic principles of MPD-2001 was "low rise, high density". However, this policy was not successful in the long run, as a result of which, today, according to official reports, 50% of housing in Delhi is not of decent standards. Acknowledging that acute shortage of shelter is one of the most critical areas of the new plan, MPD-2021 lays down these targets for shelter: i) Shift from plotted housing to group housing for optimal utilization of land, ii) private sector participation for development / redevelopment of housing, and iii) removing unnecessary controls (like height) for optimum utilization of land.

It is in view of the fact that today group housing remains the only suitable option for housing such a large population that the following table has been taken up for review.

**Table 6 Residential Plot – Group Housing**

	MPD-1962	MPD-2001	MPD-2021
Minimum size of plot	1 acre *	4000 sqm	3000 sqm
Maximum Ground Coverage	35%	33.3%	33.3%
Maximum FAR	175	133	200
Height	No limit	26m	NR (Subject to clearance from AAI/Fire Department and other statutory bodies.
Parking	NA	1.33 ECS	2.0 ECS/100 sqm built up area

\*Gross residential density (persons per acre) 250 (50 DUs)

( source : MPD 1962, 2001 and 2021)

It is observed that MPD-1962 set a relaxed pace by marking minimum area for a project of group housing to be one acre, with only 35% ground coverage. In tune with liberal regime of FAR of the plan as such, 175 was the FAR allocated. Parking standards were also not seen necessary, given the pre-maruti days, when hardly anyone owned a vehicle. The failure of the first plan to project future population perhaps resulted in some rationalisation in



terms of a smaller size of plot in the next plan, i.e 4000 sqm. MPD-2001 had brought down the FARs for various categories, in this case too (from 175 to 133), and fixed the maximum height of the projects at 26m. Parking norms were prescribed for the first time. Given that even MPD-2001 projections were found wanting, the new plan -2021 has become more pro-group housing, allowing minimum area of 3000 sqm, removing height restrictions, and adding more parking as mandatory. It will not be incorrect to state that it is in fact this category of housing which is expected to save the city from a shelter disaster. The indicative distribution of housing types in MPD-2021 expects that a whopping 42% of the total housing component will be met through group housing created by public, private and co-operative societies, of which 14% is earmarked for EWS / LIG categories and 28% for others.

#### **3.4.7.2 For flatted industries**

This particular type of structure, i.e. flatted factories, has been taken up given that the issue of industries in Delhi, numbering in lakh, has been a subject of extensive debate, controversy and concern over the past decade. Issues of the

propensity of the industries for pollution and negative environmental impact figure prominently in several litigations in the courts. There are deep-rooted problems associated with the existence and continued growth and proliferation of industries in non-conforming areas in contravention of Master Plan provisions and the issue of classification and permissibility with reference to household industries which the city has to struggle with.

A Flatted factory is defined as a premise having a group of small industrial units having upto 20 workers with common services and facilities of non-hazardous, non-polluting nature.<sup>21</sup> In other words, it is an industrial building of more than one storey, usually with two or more goods lifts, and constructed or converted for multiple occupation. The building is subdivided into small, separately occupied units which are used for manufacturing, assembly and associated storage.<sup>22</sup>

MPD-1962 introduced the concept of flatted factories for light and service industries to accommodate 30,000 to 40,000 units of 50 square metres each. The flatted factories were proposed at a high density of about 500 to 625 workers per ha. However, it is a

reality that none of these flatted factories came up as proposed in 1962, and not much progress was achieved again in 1990. As has been reported in MPD-2001<sup>23</sup>, no flatted factory areas could be fully developed in the implementation period, the only area developed for flatted factories was at Jhandewalan which too was not occupied by 1990. It can be seen from the table below that the provisions have been liberalized over time, with the plot size and ground coverage getting substantially reduced, the FAR at 150, the height getting increased, and additional facilities also getting increased. The recognition that MPD-1962 was overestimating the availability of space is also there in terms of reduced plot size in 2001, and the reality of further diminishing space in the city is also seen in the latest MPD. The aim of the liberalization is to attract people to take up this type of development, and the results remain to be seen for the upcoming mid-term MPD-2021 review in 2011.

**Table 7**

**Comparison of Development Control Norms for flatted industries in the  
MPDs**

MPD	Basis/ area	MGC *	FAR	Height restrictions/ max. Height	Other conditions
<b>1962</b>	Basis 200 to 300 workers per acre/ average 150 sq. ft. per employee	40%	150	Should not exceed six storeys	65% building efficiency. The rest of the area is available for parking, loading, unloading and for landscaping the site. The structures should not exceed six storeys. Basements will be permitted for parking, servicing and storage only.
<b>2001</b>	Minimum plot size – 2000sqm.	30%	120	15m	Other controls :  Basement upto the building envelope line to the maximum extent of 50% of plot area shall be allowed and if used for parking and services should not be counted in FAR.
<b>2021</b>	Minimum plot size – 400 sqm.	30%	150	26m	Industrial units; administrative office, watch and ward, maximum upto 5% of floor area or 20 sqm. whichever is less, storage related to the manufacturing activity, commercial activity as per footnote (vi)..

(Source: MPD 1962, 2001 and 2021)

Even at the time of writing this paper, there is no data available on the exact number of flattened factories which have come up ever since. Whatever the number, it does not do justice to the concept *per se*, of creating more in less space.

At the end of the discussion, it is clear that many sound ideas and concepts went into the planning for the city over the years, but at the same time, there have also been significant planning failures insofar as population projection, provision of the right kind of housing and other infrastructure are concerned. While there is no doubt about these issues, it will be incorrect to say that all the problems that ail the city today are because of faulty planning alone. The larger picture in terms of what are the various contributory factors to the problems faced by the city shall be discussed in the subsequent part of this paper.

**Notes:**

<sup>1</sup> MPD-1962: *chapter I(1)*

<sup>2</sup> *ibid.*

<sup>3</sup> *ibid*: chapter I(2) (a)

<sup>4</sup> *ibid.*

<sup>5</sup> MPD-2001: *Annexure VI*

<sup>6</sup> source: accessed at [http://dda.org.in/planning/master\\_plans.html](http://dda.org.in/planning/master_plans.html)

<sup>7</sup> MPD-2001:*preamble : I to V*

<sup>8</sup> *ibid* :VI

<sup>9</sup> source: accessed at [http://dda.org.in/planning/master\\_plans.html](http://dda.org.in/planning/master_plans.html)

<sup>10</sup> CCS Working Paper No. 160 - Dewal, S. *Master Plan for Delhi: 2021, A Critical Analysis*

( *section V*). accessed at [www.ccs.in](http://www.ccs.in).

<sup>11</sup> Pacione, Michael (Ed.) (2002) *The City- Critical Concepts in the Social Sciences-* volume V (B. Hoselitz -Economic Development and Cultural Change (1954) Generative and parasitic cities 3:278-94) Routledge.

<sup>12</sup> MPD-1962 : chapter I:Gurgaon

<sup>13</sup> source: accessed at <http://www.noidaauthorityonline.com/about-noida.html>

<sup>14</sup> MPD-2001: Annexure VI

<sup>15</sup> MPD-2021: chapter 17, clause 2(6)

<sup>16</sup> CCS Working Paper No. 160 - Dewal, S. *Master Plan for Delhi: 2021, A Critical Analysis*

( section 3.1). accessed at [www.ccs.in](http://www.ccs.in)

<sup>17</sup> MPD-2021: chapter 17, clause 2(4)

<sup>18</sup> ibid : chapter 15, clause 15.2

<sup>19</sup> NCRPB (1988), *Regional Plan-2001*

<sup>20</sup> Parliament of India (2009-2010):*Third Report of the Standing Committee on Urban Development of Fifteenth Lok Sabha,M/o Urban Devt. (NCRPB) on the subject of action taken by the government on the recommendations contained in the Thirty Fifth Report of the Standing Committee on Urban Development (Fourteenth Lok Sabha).* Accessed at [www.parliamentofindia.nic.in](http://www.parliamentofindia.nic.in)

<sup>21</sup> MPD-2021(chapter 7, table 7.3, development control norms for flatted group industry)

<sup>22</sup> source: accessed at

[http://www.propertymarketindia.com/property\\_glossary.php](http://www.propertymarketindia.com/property_glossary.php)

<sup>23</sup> MPD-2001: Annexure VI

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