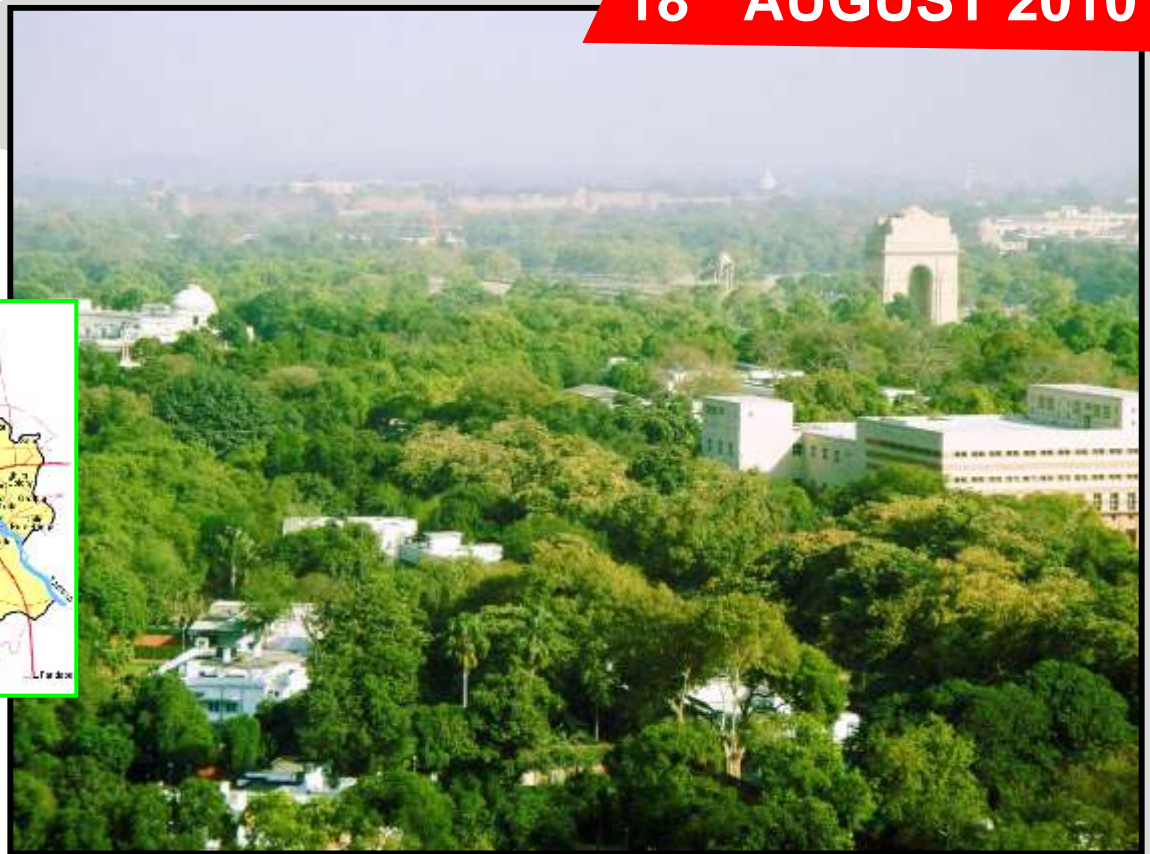


DIMENSIONS OF GREEN AREAS IN 50'S AND ONWARDS UP TO 2021 AD



R.G. GUPTA
Policy/City Planner

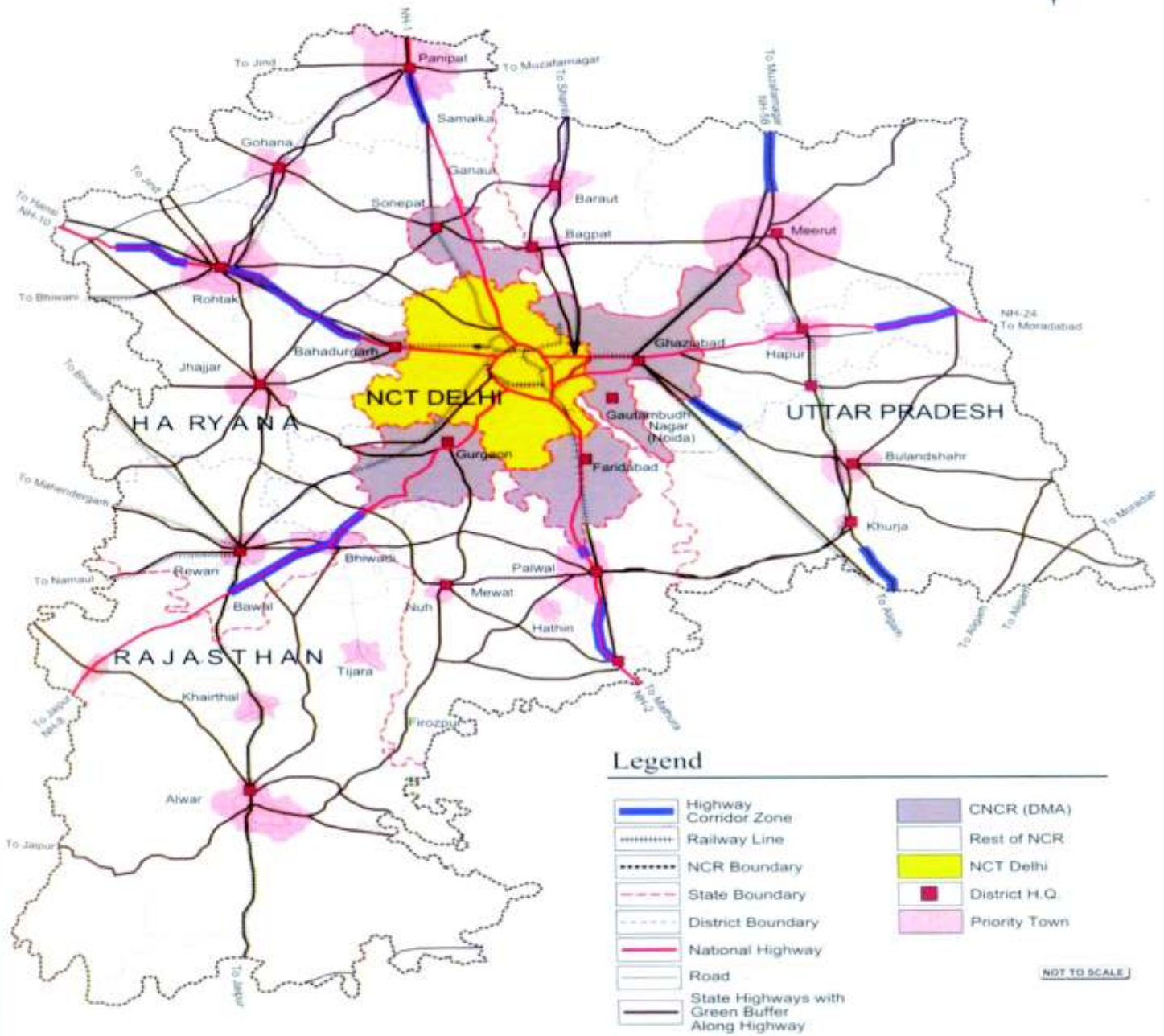
18TH AUGUST 2010



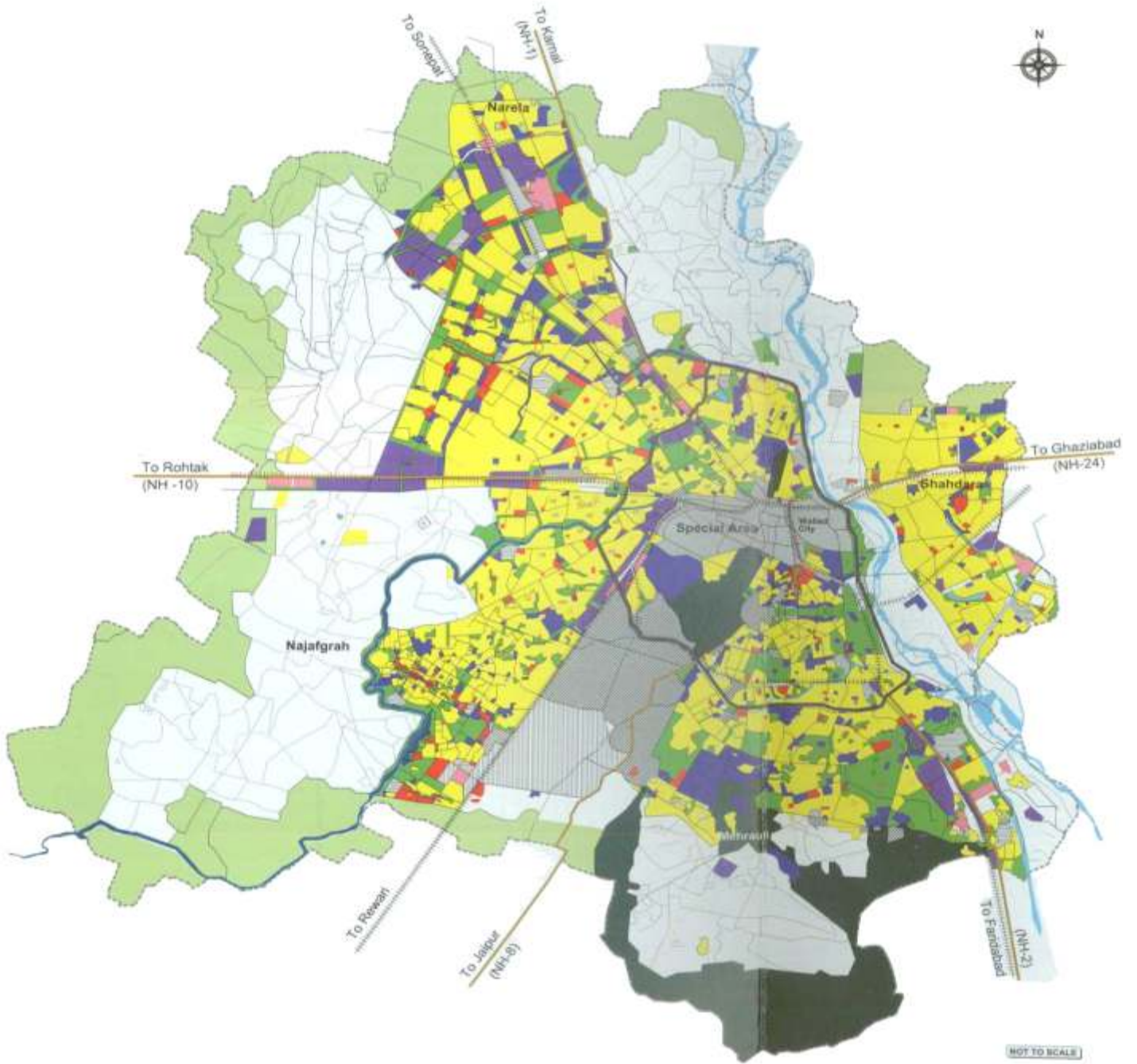
DEVELOPMENT OF ECOLOGY AS
IN MPD 2021 AD AND COMMON WEALTH GAMES

R.G. GUPTA
POLICY/CITY PLANNER

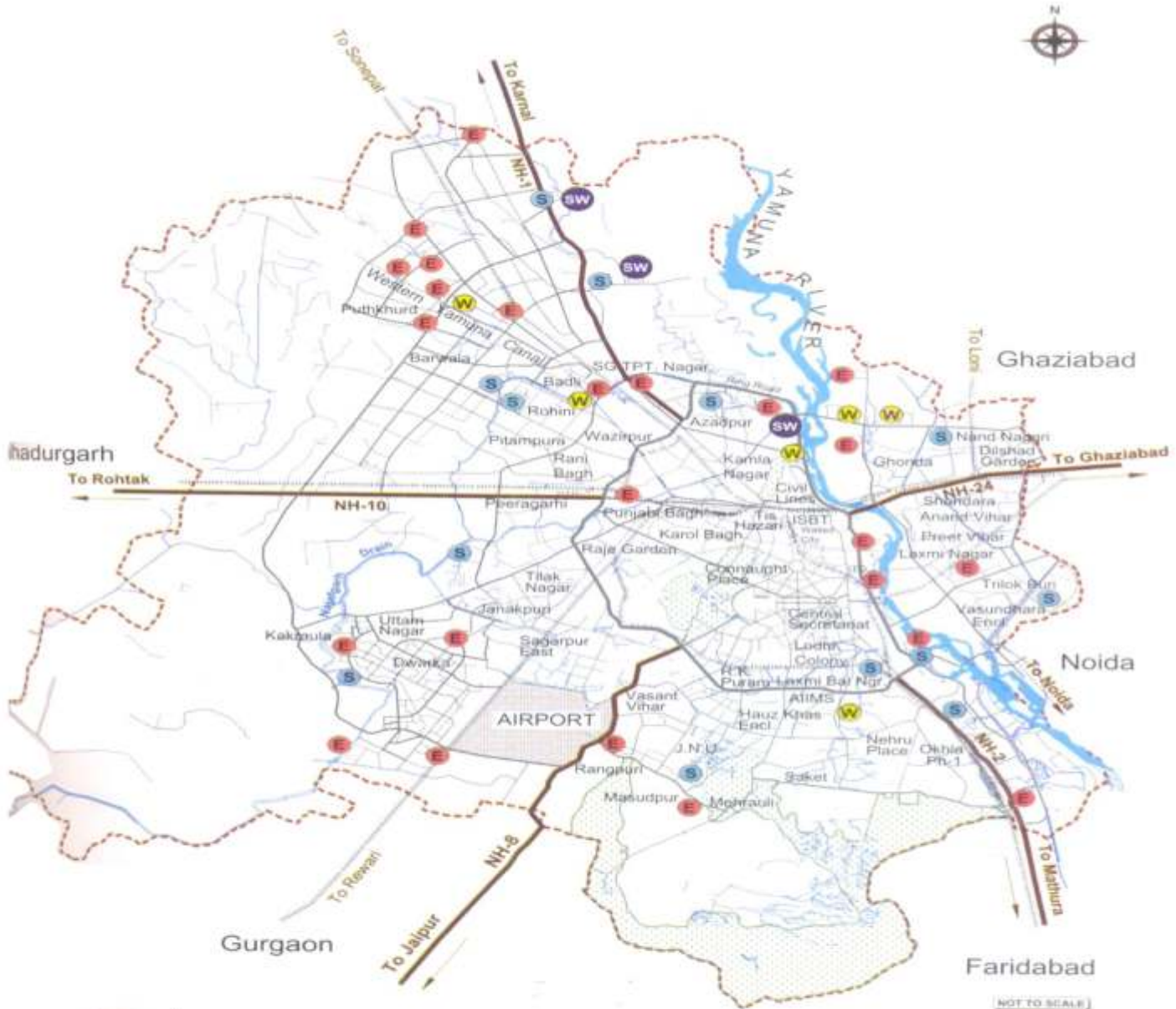
NATIONAL CAPITAL REGION



MASTER PLAN FOR DELHI 2021 (Draft) Land Use Plan



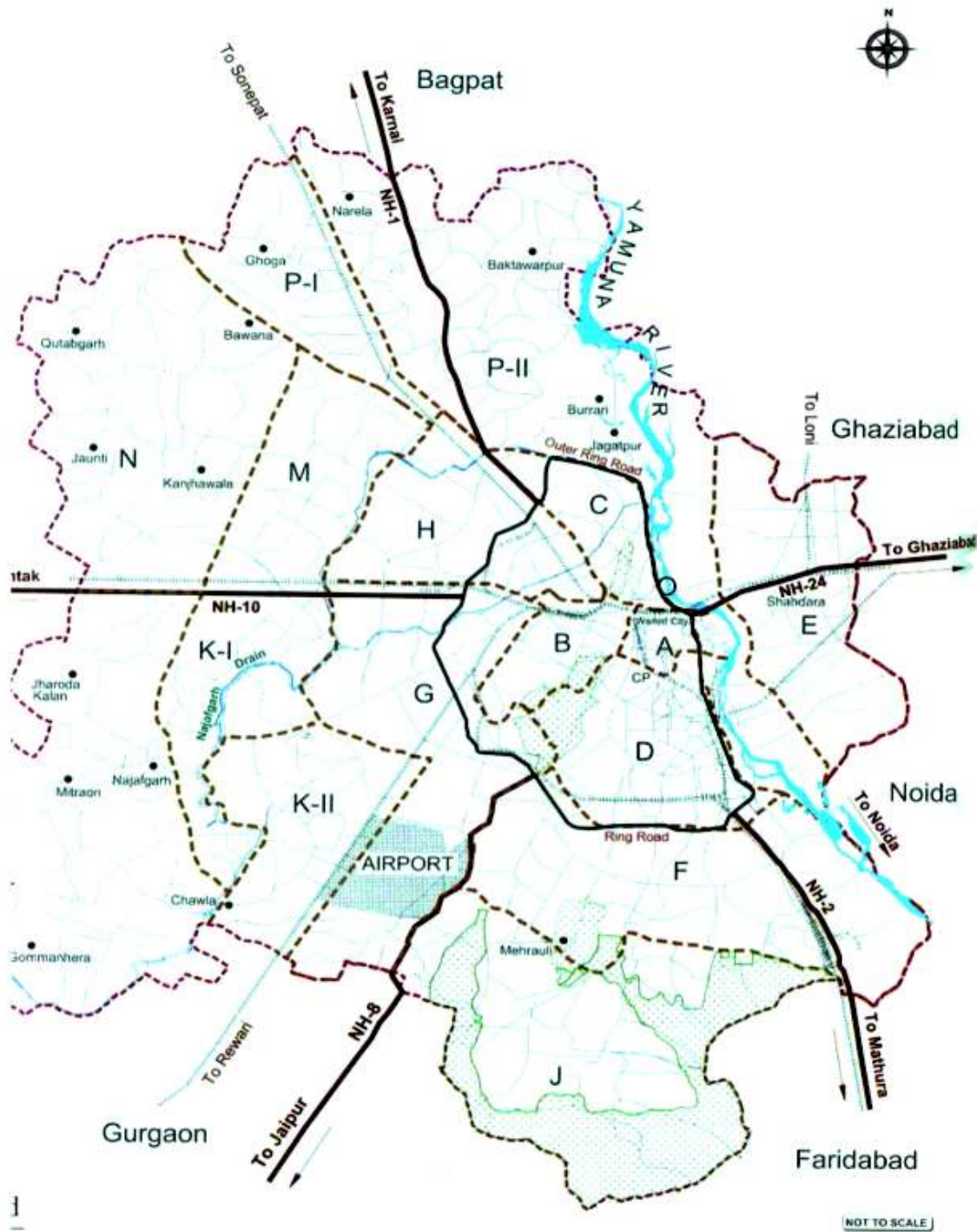
PHYSICAL INFRASTRUCTURE: UTILITIES



Legend

	U1 Water (Treatment Plant etc.)		U4 Solid Waste (Sanitary Landfill etc.)
	U2 Sewerage (Treatment Plant etc.)		Drains
	U3 Electricity (Power Houses, Substations etc.)		River Yamuna

NATIONAL CAPITAL TERRITORY OF DELHI ZONES (DIVISION)



- Zone (Divisions) Boundary
- Sub Zone Boundary
- National Highway
- Union Territory of Delhi Boundary
- Railway Line
- River
- Drain

NOT TO SCALE

- 1 Position prior to the first Master Plan of Delhi upto 1960
- 2 Provisions made in the first Master Plan of Delhi-1961-81
- 3 Provisions made in MPD-2001
- 4 Provisions made in MPD-2021
- 5 Inferences from the present trends

POSITION PRIOR TO THE FIRST MP OF DELHI UPTO 1960

It was in a total extent of 844 hect. for a population of 2.6 million @ 3.5 sq.mt. per person, distributed as details given under:

Zone-A	(Walled City and surrounding areas)	- 49.0
Zone-B	(Karol Bagh, Naraina etc.)	- 46.0
Zone-C	(Civil Lines & Mall road complex)	- 144.9
Zone-D	(Lutyen Delhi)	- 495.6
Zone-E	(Trans Yamuna Area)	- 6.9
Zone-F	(South Delhi)	- 50.2
Zone-G	(West Delhi, Rajouri Garden, Janakpuri etc.)	- 50.8

PROVISIONS MADE IN THE FIRST MP OF DELHI (1962-81)

- 10,461 hect. of green areas for a projected population of 5.2 million was at the rate of 20.2 sq.mt. per person, in 23.6% of the total urbanisable land. This is highest in any of the city of the country.
- 6820 hect. of District parks, playground, open spaces were distributed throughout Delhi as details given under:

Zone-A	(Walled City and adjoining areas)	- 221.2
Zone-B	(Karol Bagh, Naraina etc.)	-162.8
Zone-C	(Civil Lines & Mall Road Area)	- 622.0
Zone-D	(Lutyen Delhi)	- 1005.6
Zone-E	(Trans Yamuna Area)	- 995.2
Zone-F	(South Delhi)	- 2169.6
Zone-G	(Rajouri Garden, Janakpuri)	- 750.4
Zone-H	(North West Delhi)	- 492.8

PROVISIONS MADE IN MASTER PLAN-2001

Within DUA-81, the following special activity areas for recreation are proposed for development:-

- Additional special children parks (like India Gate children park) – 7 nos. These are proposed at Dhaula Kuan, Pitampura, Keshopur, Sanjay Van, Trilokpuri, Gulabi Bagh, Feroz Shah Kotla and Coronation Memorial.
- Children traffic training parks – 6 nos. at Punjabi Bagh, Baba Kharak Singh Marg, Pragati Maidan, Dilshad Garden, Wazirpur and Loni Road.
- Picnic Huts – 5 nos. these can be in the district parks at Paschimpuri, Pitampura, Bidiwakla Bagh, Kalkaji and Mehrauli.
- In the Urban Extension, wherever possible, water bodies (lakes) should be developed to act as major lung spaces and to attract migratory birds and for improving the micro-climate.
- The district parks in the Urban Extension would be @ 9 sqm. per person
- Replantation: There are large number of trees in the parks in Delhi which have completed their full span of life. This is specially true about the plantation in New Delhi. Replantation should be done in these areas.

ACTUALS AS AT 2001

Development done in terms of :

Regional Park

3 Nos. – 867 Hect.

Urban Forests

26 Nos. – 1980 Hect.

Distt. Parks

39 Nos. – 1560 Hect.

Green Belts

16 Nos. – 240 Hect.

Zonal Greens

21 Nos. – 315 Hect.

Sports Centres

8 Nos. – 88 Hect.



REGIONAL PARKS

The Ridge of Delhi Designated as Regional Park Area consists of:

Northern Ridge

87.00 hect.

Central Ridge

864.00 hect.

South Central Ridge

686.00 hect.

Southern Ridge

620.00 hect.

Source: NCR Plan 2021

ENVIRONMENTAL PLANNING

Components	Unit	Period of Monitoring	Phase I upto 2011	Phase II 2011-2016	Phase III 2016-2021	Target upto 2021
New landscape / Recreational area						
i) City Park	No.	10 years	4	2	3	9
ii) District Park	No.	5 years	9	3	6	18
iii) Community Park	No.	1 year	43	17	30	90
iv) City Multi-purpose ground	No.	10 years	4	2	3	9
v) District Multi-purpose ground	No.	5 years	9	3	6	18
TOTAL						144
Components	Unit	Period of Monitoring	Phase I upto 2011	Phase II 2011-2016	Phase III 2016-2021	Target upto 2021
vi) Community Multipurpose ground	No.	1 year	43	17	30	90
vii) Divisional Sports Centres	No.	5 years	4	2	3	9
viii) District Sports Centres	No.	1 year	9	3	6	18
ix) Community Sports Centres	No.	5 years	43	17	30	90
TOTAL						207
GRAND TOTAL						351

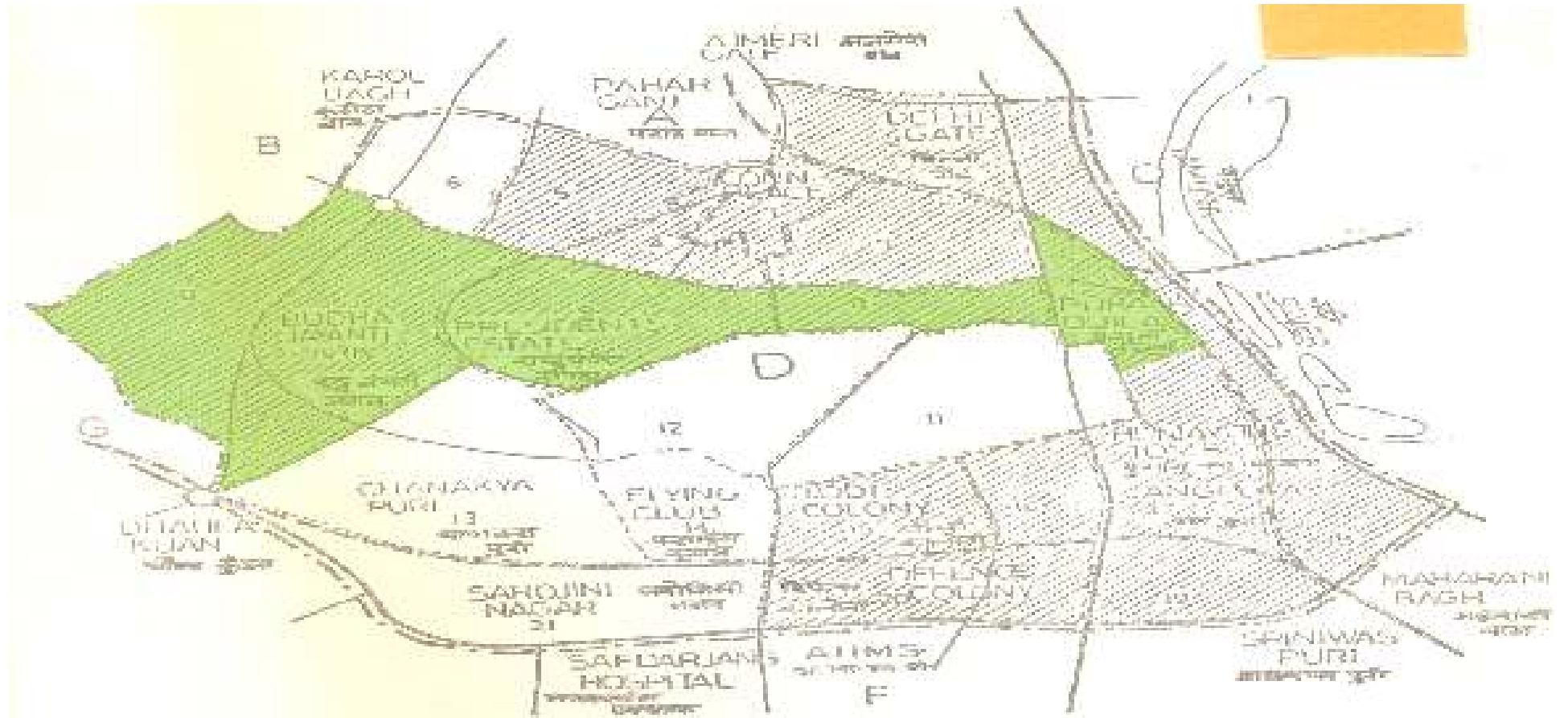




REGIONAL PARK

Northern Ridge	87 ha.
Central Ridge	864 ha.
South Central Ridge (Mehrauli)	626 ha.
Southern Ridge	6200 ha.
TOTAL	7777 ha.



ZONE - D



-  दिल्ली मुक्त योजना - 1956 के अंतर्गत अधिनियमित क्षेत्रों में योजना
-  ZONAL PLANS APPROVED UNDER MPO - 52

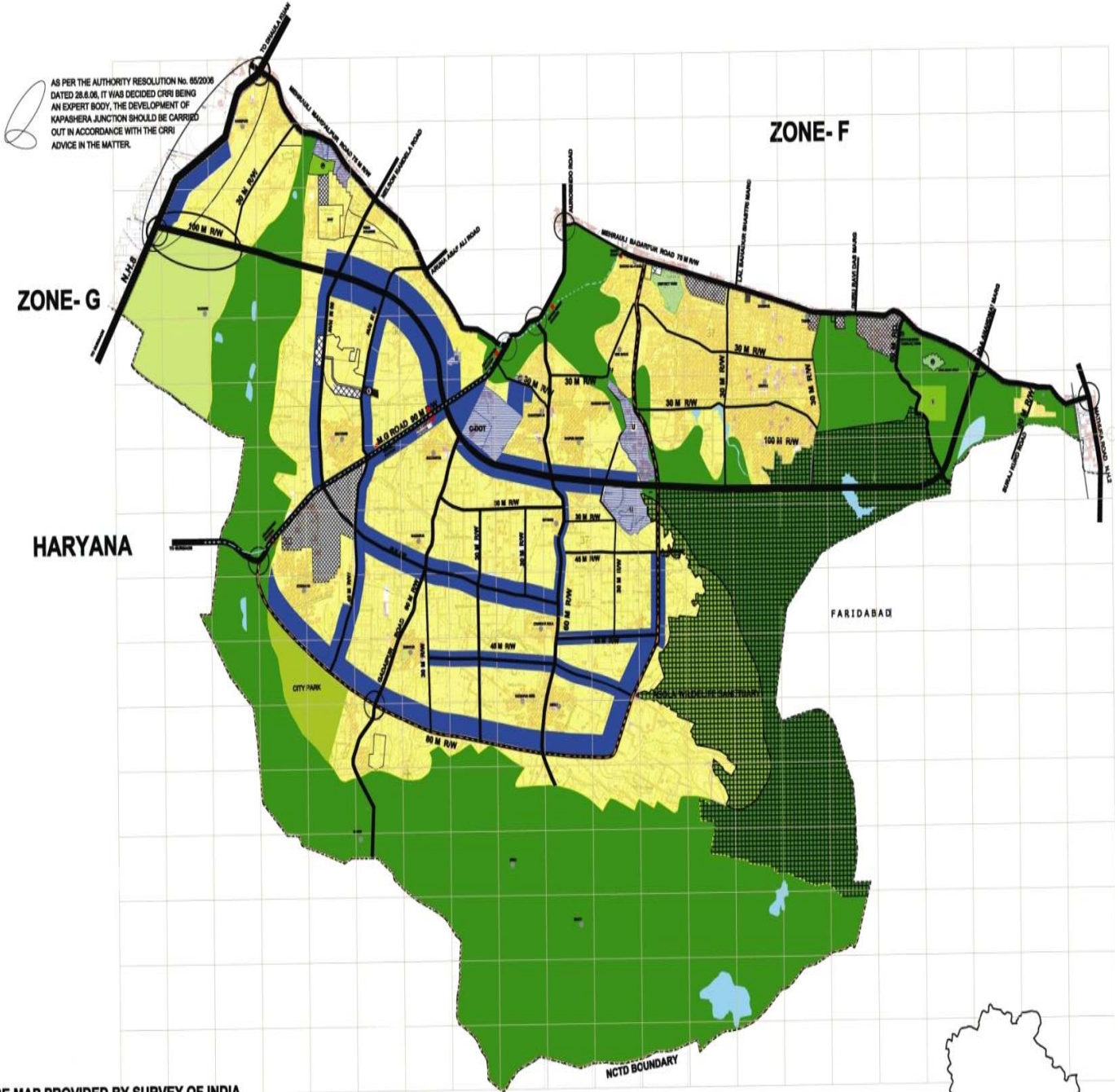


ज़ोन (डिविज़न) 'डी', नई दिल्ली
 ZONE (DIVISION) 'D' NEW DELHI

PLANNING NORMS, STANDARDS FOR RECREATIONAL AREAS/PARKS AT SUB-CITY LEVEL

S.NO.	Category	Planning Norms & Standards	
		Population/Unit (Approx.)	Plot Area (Ha)
1	City Park	10 lakh	100
2	District Park	5 lakh	25
3	Community Park	1 lakh	5
4	Neighbourhood Park	10000	1.0000
5	Housing Area Park	5000	0.5000
6	Tot lot at Housing Cluster Level	250	0.0125
7	City Multipurpose ground	10 lakh	8
8	District Multipurpose ground	5 lakh	4
9	Community Multipurpose ground	1 lakh	2

ZONE - J



1. BASE MAP PROVIDED BY SURVEY OF INDIA.
2. THIS BASEMAP / ZDP DO NOT INDICATE ANY PROPERTY OR OWNERSHIP OF LAND. ALL GROUND FEATURES ARE OUTCOME OF GROUND SURVEY
3. BOUNDARY OF REGIONAL PARK AS PER MPD 2021

Authenticated on behalf of
Govt. of India vide
Letter No. K.12011/3/Zone-J/2019-ODIB
dated 17.06.2019

Sd/-
U. Viswesatham
Under Secretary to the Govt. of India
Ministry of Urban Development



KEY PLAN

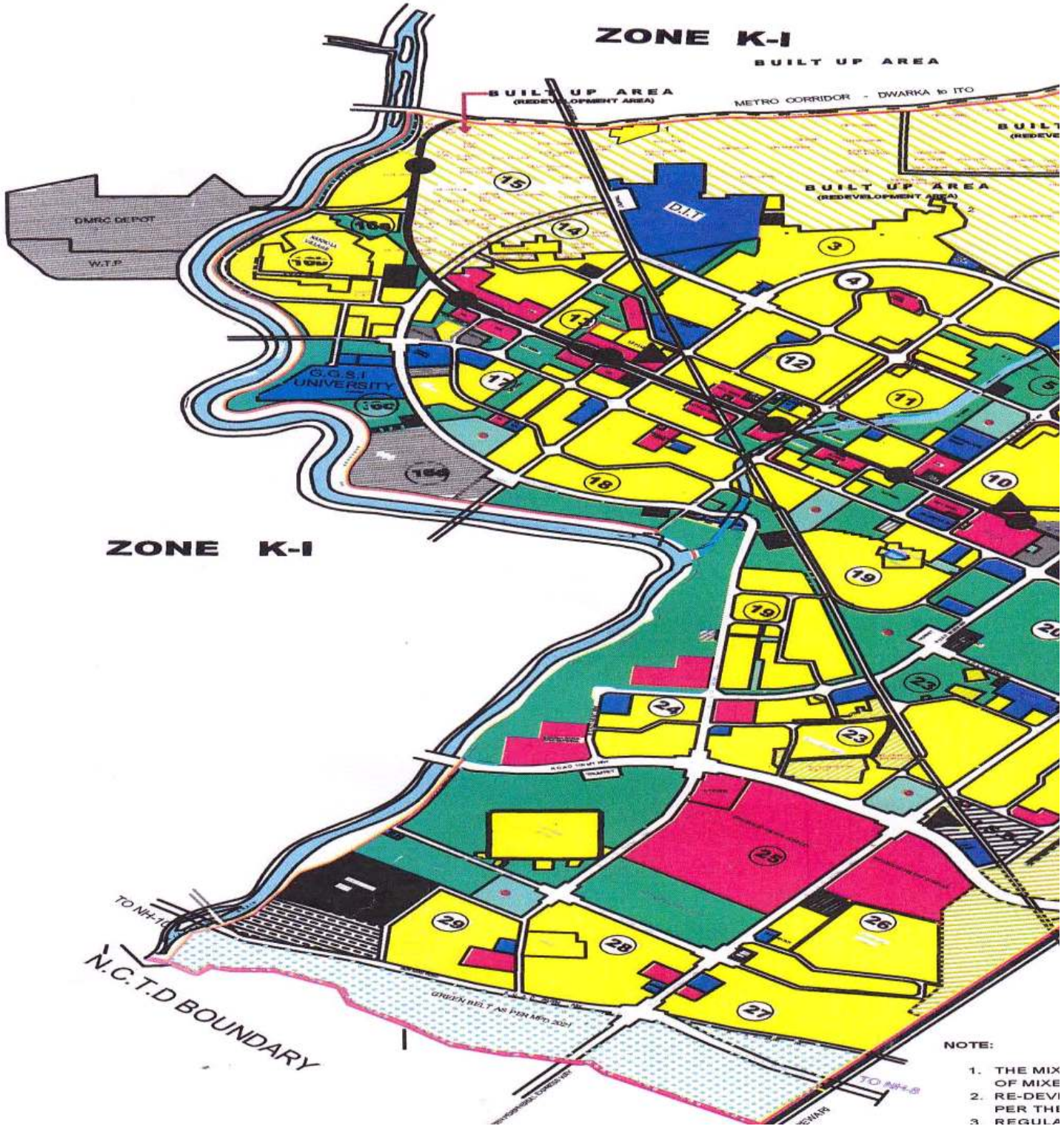
ZONE - G-18

FACILITY CORRIDOR
FACILITY CORRIDOR INCLUDES THE FACILITIES AS PER TABLE 3.3 OF MPD 2021, WHICH SHALL BE DETAILED OUT IN THE LAYOUT PLANS.

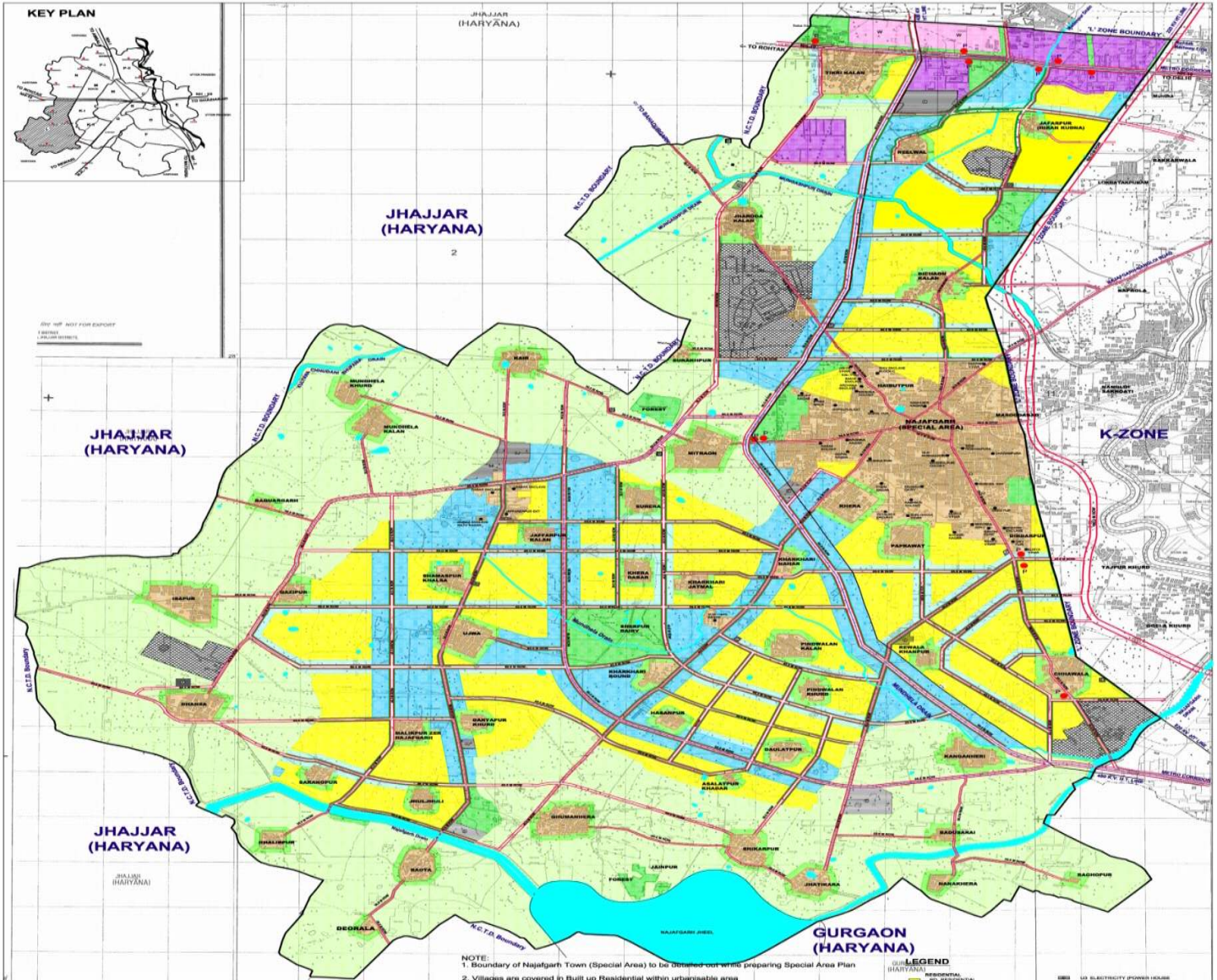


APPENDIX 1 - DDA PROPOSED ZONAL PLAN

ZONE - K-2



ZONE - L



- NOTE:**
1. Boundary of Najafgarh Town (Special Area) to be demarcated while preparing Special Area Plan
 2. Villages are covered in Built up Residential within urbanisable area
 3. Unauthorised colonies included in Residential land use subject to final decision of Court
 4. Residential plots under twenty point programme to be processed as per Govt. Policy
 5. Plan for services like Water supply, Sewerage & Drainage to be worked out
 6. Green areas of 100mts width around villages may also be used for village facilities
 7. Facility corridor consists commercial, industrial, public-amenity public, transportation, Government use (undetermined) and Formal Park
 8. Details of facility corridor to be worked out while preparing layout plan of Schema/Sector
 9. Plan approved by Authority on 30-10-07 and modified based on the recommendations of the taken subsequently Authority

LEGEND

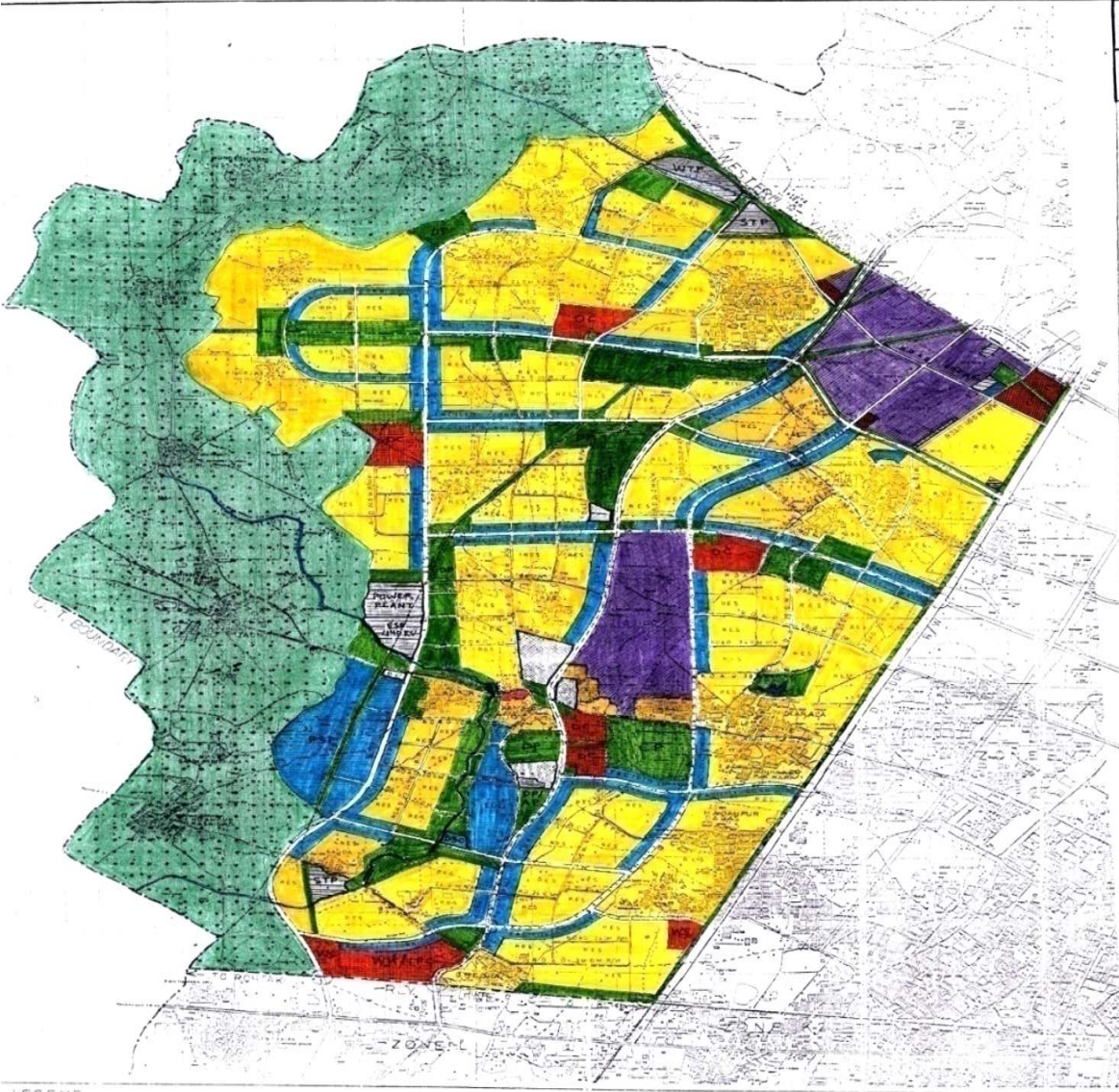
	RESIDENTIAL (R1)		SEWERAGE TREATMENT PLANT ETC
	COMMERCIAL (C1)		ELECTRICITY (POWER HOUSE)
	INDUSTRIAL (I1)		SEWERAGE
	RECREATIONAL (R2)		BOUNDARY OF K-ZONE
	TRANSPORTATION (T1)		BOUNDARY OF HARYANA
	WATER BODY		BOUNDARY OF NCTD

PROPOSED LANDUSE
DRAFT ZONAL PLAN - L
 (as per MPD - 2021)

DATE: 23.09.2007
Scale: 1 : 25,000
Prepared by: A.L. Varshney
Checked by: R.R. Jain
Approved by: S. Das
Director (Pig.)

DELHI DEVELOPMENT AUTHORITY
DWARKA PROJECT

ZONE-N



DELHI DEVELOPMENT AUTHORITY
 ROHINI PROJECT PLANNING & D
LAND USE PLAN
 (MAP-1)

NOTES:
 THE ZONAL DEVELOPMENT PLAN FOR ZONE-N HAS BEEN APPROVED BY GOVERNMENT OF INDIA VIDE LETTER NO K-12011/23/2009-DDIB DATED 8.3.2010 UNDER SECTION 9(2) C DD ACT, 1957.

Authenticated on behalf of
 Govt. of India vide letter
 No K-12011/3/Zone-N (NW Delhi-III)/
 2010-DDIB Dated 1st June, 2010.

 Sd/-
 1.6.10
U.VISHWANADHAM
 Under Secretary to the Govt. of India
 Ministry of Urban Development
 Nirman Bhawan, New Delhi.



LEGEND	
RESIDENTIAL	
R1 RESIDENTIAL AREA	[Symbol]
R2 EXISTING HOUSING	[Symbol]
COMMERCIAL	
C1 DISTRICT CENTRE	[Symbol]
C2 COMMUNITY CENTRE	[Symbol]
C3 SERVICE MARKET	[Symbol]
C4 REGIONAL MARKET	[Symbol]
C5 SUB-CITY WHOLESALE MARKET	[Symbol]
C6 WAREHOUSING/IFE	[Symbol]
INDUSTRIAL	
I1 MANUFACTURING/SERVICE HOUSING	[Symbol]
I2 SERVICE CENTRE	[Symbol]
RECREATIONAL	
R2 DISTRICT PARK	[Symbol]
R3 PARK	[Symbol]
R4 MULTIPURPOSE/AMUSEMENT PARK	[Symbol]
R5 CITY PARK	[Symbol]
R6 PARK	[Symbol]
R7 MULTIPURPOSE PARK	[Symbol]
R8 COMMUNITY PARK	[Symbol]
TRANSPORTATION	
T1 BUS TERMINAL/STOP	[Symbol]
T2 HIGHWAY	[Symbol]
T3 MONORAIL/METRO RAIL	[Symbol]
T4 RAILWAY LINE	[Symbol]
T5 HIGHWAY/RAILWAY CROSSING	[Symbol]
UTILITY	
U1 WATER TREATMENT PLANT	[Symbol]
U2 SOLID WASTE/GAM LANDFILLING	[Symbol]
U3 SEWERAGE TREATMENT PLANT	[Symbol]
U4 DRAINAGE WATER BODY	[Symbol]
U5 ELECTRIC SUB STATION ABOVE	[Symbol]
U6 ELECTRIC SUB STATION UNDER	[Symbol]
GOVERNMENT	
G1 GOVERNMENT OFFICE/COURTS	[Symbol]
G2 MUNICIPAL OFFICE FOR WATER & SEWERAGE	[Symbol]
G3 GOVERNMENT LAND	[Symbol]
PUBLIC AND SEMI-PUBLIC FACILITIES	
P1 HOSPITAL A (100-200 BAYS)	[Symbol]
P2 HOSPITAL B (201-500 BAYS)	[Symbol]
P3 HOSPITAL C (101-200 BAYS)	[Symbol]
P4 HOSPITAL D (100-150 BAYS)	[Symbol]
P5 NURSING HOME (100-200 BEDS)	[Symbol]
P6 NURSING HOME (200-300 BEDS)	[Symbol]
P7 MULTI-PURPOSE COMMUNITY HALL	[Symbol]
P8 PROFESSIONAL COLLEGE	[Symbol]
P9 MEDICAL COLLEGE	[Symbol]
P10 VOCATIONAL TRAINING CENTRE	[Symbol]
P11 GAME CENTRE FOR PHYSICALLY/MENTALLY CHALLENGED	[Symbol]
P12 SCHOOLS FOR PHYSICALLY/MENTALLY CHALLENGED	[Symbol]
P13 EXERCISE GROUND FOR PHYSICALLY/MENTALLY CHALLENGED	[Symbol]
P14 ORPHANAGE/CHILDREN'S CENTRE	[Symbol]
P15 OLD AGE HOME	[Symbol]
P16 WORKING WOMEN'S HOSTEL	[Symbol]
P17 RECREATIONAL CLUB	[Symbol]
P18 CREMATION GROUND	[Symbol]
P19 BURIAL GROUND/CEMETERY	[Symbol]
P20 TELEPHONE EXCHANGE	[Symbol]
BOUNDARY	
B1 GREEN BELT	[Symbol]
B2 ADOPTIVE ROAD	[Symbol]
B3 ZONE BOUNDARY	[Symbol]
B4 ZONE BOUNDARY	[Symbol]

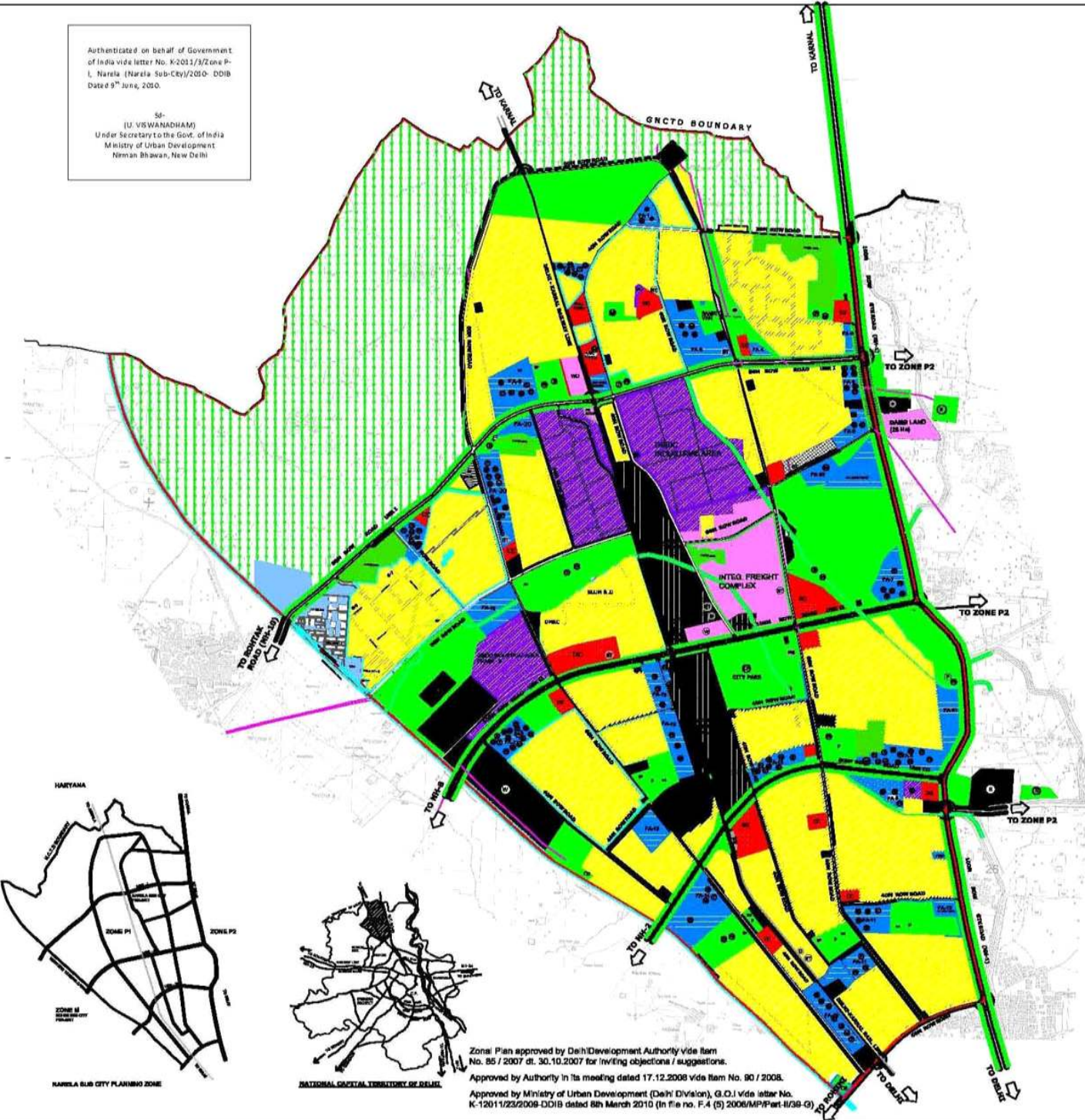
ZONAL DEVELOPMENT PLAN OF ZONE - 'N' (North West Delhi - III)
 DATE: APRIL 2010
 BY: DIRECTOR PLANNING
 P.L. ASSISTANT

ROHINI
 PROJECT OFFICE NEW DELHI

ZONE-P-1

Authenticated on behalf of Government of India vide letter No. K-2011/3/Zone P-1, Haridra (Haridra Sub-City)/2010- DDIB Dated 9th June, 2010.

50-
(U. VISWANADHAM)
Under Secretary to the Govt. of India
Ministry of Urban Development
Nirman Bhawan, New Delhi

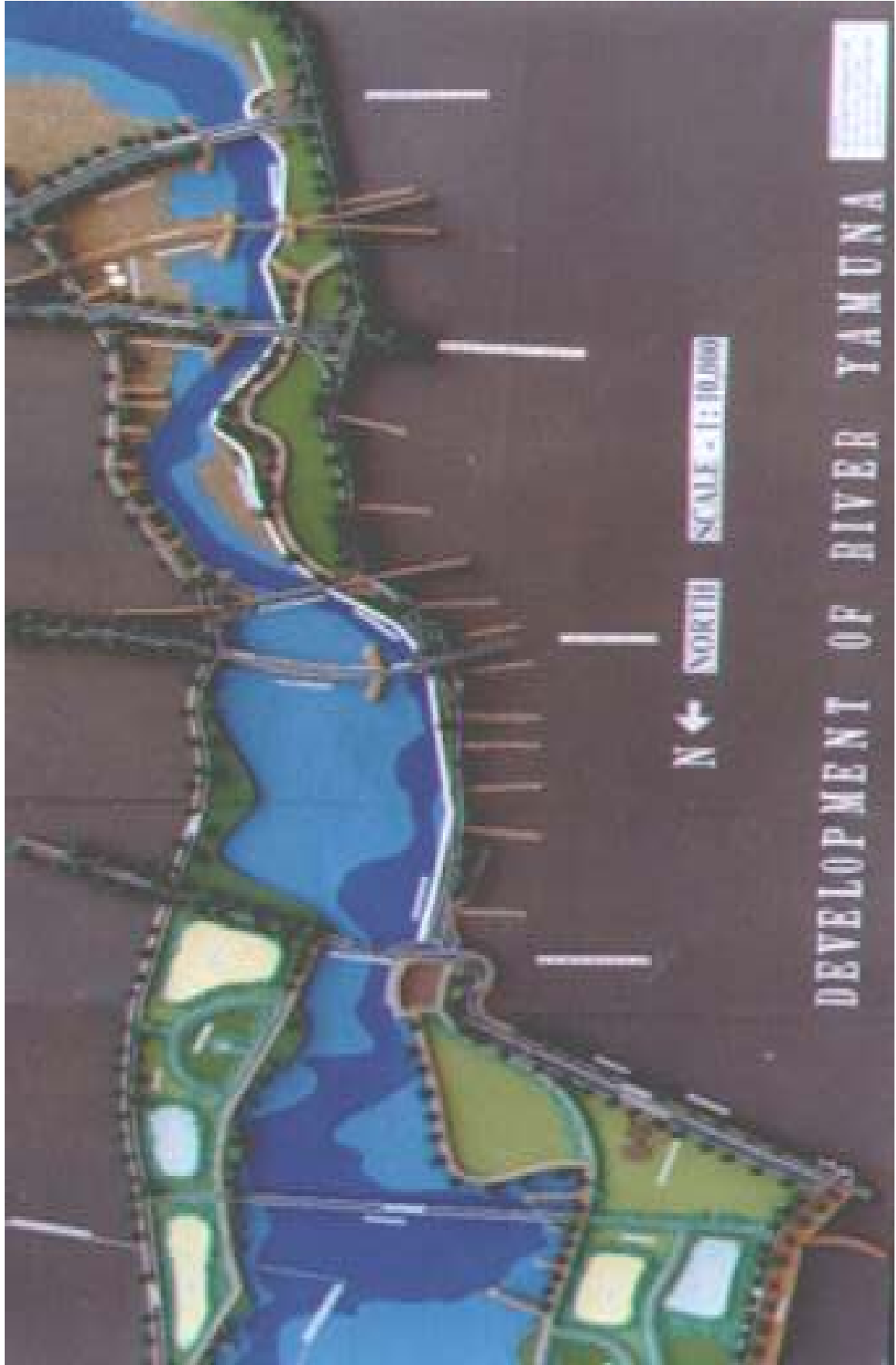


Zonal Plan approved by Delhi Development Authority vide Item No. 85 / 2007 dt. 30.10.2007 for inviting objections / suggestions.
Approved by Authority in its meeting dated 17.12.2008 vide Item No. 90 / 2008.
Approved by Ministry of Urban Development (Delhi Division), G.O.I vide letter No. K-12011/23/2009-DDIB dated 8th March 2010 (In file no. F.4 (B) 2006/MP/Part-II/39-G)

RIVER YAMUNA



RIVER YAMUNA



TOTAL PROVISIONS AS IN MPD 2021 AD

Land Use Area (Ha.) Percentage to total area (Ha.)

Land Use	Area (Ha.)	Percentage to total area (Ha.)
Total Geographical Area – NCT Delhi	148300.0	100.00
Natural Features (Forest, Wild Life Sanctuary, Ridge, River Yamuna and Other water bodies/drains)	19509.1	13.16

HIGHWAY CORRIDOR ZONE

The NCR Plan has proposed promotion of planned and regulated development along the National Highways. Due care has to be taken to ensure that the activities being permitted are segregated from highway traffic through proper green belts, and regulated and controlled access to the Highways.

LAND USE DISTRIBUTION

LAND USE	% OF LAND
Residential	45-55
Commercial	4-5
Industrial	4-5
Green/Recreational*	15-20
Public & Semi - Public Facilities	8-10
Circulation	10-12

*This does not include green areas within the various gross land use categories

STADIUMS (11 NOS.)



1 Yamuna Sports Complex

2 Yamuna Yellow Dorm

3 Anebedkar Stadium

4 Indira Gandhi Stadium

5 Shivaji Stadium

6 Talkatora Stadium

7 Dr. S.P.N. Swimming Pool

8 National Stadium

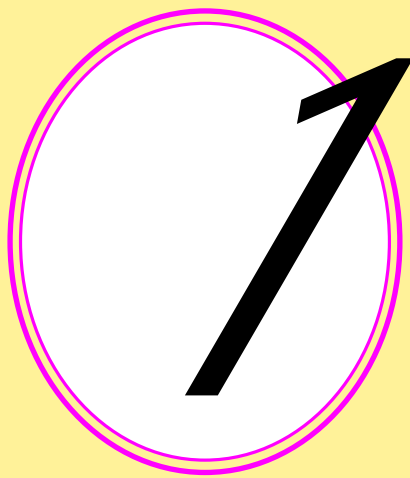
9 Nehru Stadium

10 Siri Fort Complex

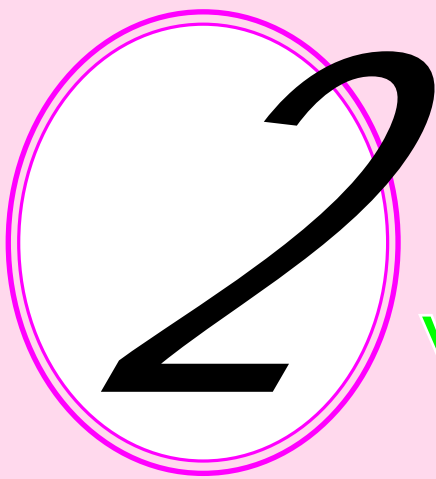
11 Karni Singh Stadium

R.G. GUPTA
POLICY/CITY PLANNER





Yamuna Sports Complex



Yamuna Yellow Dorm

3

Amebedkar Satdium





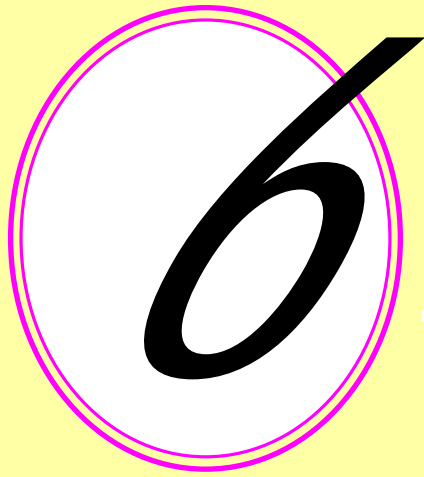
4

Indira Gandhi Stadium

5

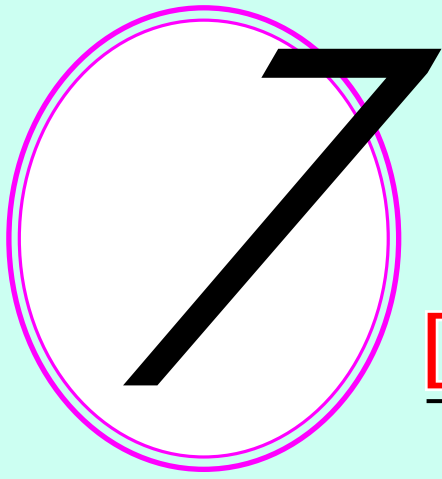
Shivaji Stadium





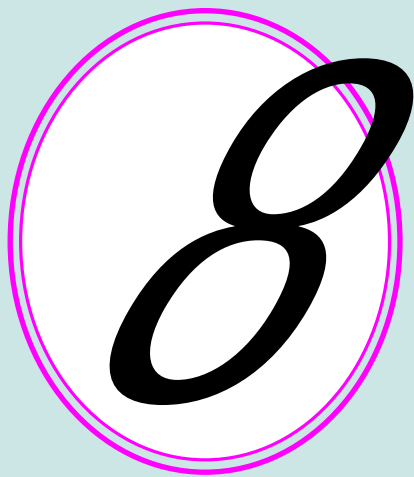
Talkatora Stadium



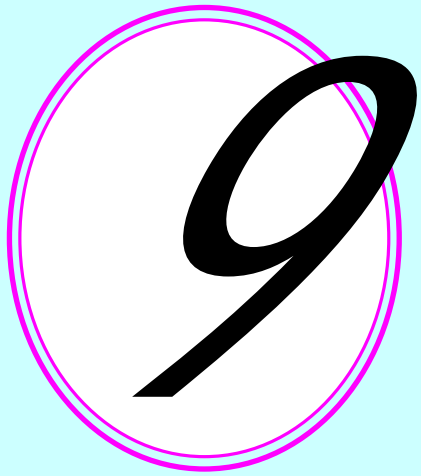


Dr. S.P.N. Swimming Pool





National Stadium



Nehru Stadium



10

Siri Fort Complex





11

Karni Singh Stadium

OTHER SPORTS COMPLEX (15 NOS.)

- 1 Saket Sport Complex;
- 2 Netaji Subhash Sports Complex, Jasola;
- 3 Vasant Kunj Sport Complex;
- 4 Baba Gang Nath Sports Complex, Munirka;
- 5 Qutab Golf Course, Lado Sarai;
- 6 Hari Nagar Sports Complex;
- 7 Paschim Vihar Sports Complex;
- 8 Dwarka Sports Complex;
- 9 Major Dhyan Chand Sports Complex, Ashok Vihar;
- 10 Rohini Sports Complex;
- 11 Rashtriya Swabhimani Khel Parisar, Pitampura;
- 12 Bhalswa Golf Course;
- 13 Poorvi Delhi Khel Parisar, Dilshad Garden;
- 14 Yamuna Sports Complex, Surajmal Vihar and
- 15 Chilla Sports Complex

FORTY EIGHT IMPORTANT RELIGIOUS, ECOLOGICAL PARKS AND OTHER SITES

- 1 Birla Mandir;
- 2 Chattarpur Mandir;
- 3 Lotus Temple;
- 4 Shri Ram Auditorium;
- 5 Adventure Land – Rohini;
- 6 Air Force Museum;
- 7 Bhalswa Lake;
- 8 Boating Lake - Purana Quila;
- 9 Delhi Golf Club;
- 10 Delhi Haat;
- 11 Haat in Pitampura;
- 12 Eco-bio diversity & bird century near Burari;
- 13 Garden of 5 senses;
- 14 Habitat Centre;
- 15 Hauz Khas Monuments;

- 16 Humayun Tomb;
- 17 India Gate;
- 18 India International Centre;
- 19 Jama Masjid;
- 20 Jantar Mantar;
- 21 Kamani Auditorium;
- 22 Lodhi Garden;
- 23 National Museum;
- 24 National Rail Museum;
- 25 National Science Centre;
- 26 Nehru Park;
- 27 Nehru Planetarium;
- 28 New Delhi Railway Station;
- 29 Old Delhi Railway Station;
- 30 Purana Quila;
- 31 Qutab Minar;
- 32 Rajghat;
- 33 Red Fort;
- 34 Sanjay Lake;

- 35 Shree Ram Auditorium;
- 36 Suraj Kund;
- 37 Town Hall;
- 38 Tuglakabad Fort;
- 39 Anand Vihar Rly. Station;
- 40 Mughal Garden;
- 41 Children Park;
- 42 Parliament Bhawan;
- 43 Shanti Van;
- 44 Indraprastha Park;
- 45 Zoo;
- 46 Budha Jayanti park;
- 47 Bijai Mandal;
- 48 Japanese Park



BIODIVERSITY PARKS

A SAFE-NET MITIGATING THE IMPACT OF CLIMATE CHANGE

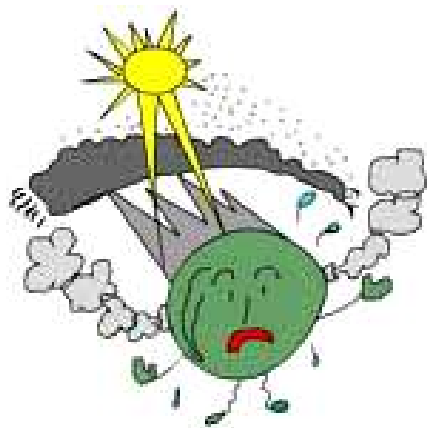
R.G. GUPTA
POLICY/CITY PLANNER

**Dr. Faiyaz A. Khudsar, Scientist Incharge, Yamuna Biodiversity Park,
CEMDE University of Delhi, Delhi-110007**

Climate change is any long-term significant change in the “average weather” that a given region experiences.

The biggest factor of present concern is the increase in CO₂ levels due to emissions from fossil fuel combustion, followed by aerosols (particulate matter in the atmosphere). Other factors, including land use, ozone depletion, animal, agriculture and deforestation, also affect climate.

Every 1°C rise in temperature puts 10% of species at risk of extinction



IMPACTS

- Loss of synchronization among interdependent species
- Shifting of plant species to north (what will happen to polar ones?)
- Drier summers could lead to more periods of drought
- Temperature rise and counter effects (Extinction of temperate species due to change in life history).
- Disease and Pest outbreaks
- Bird Migration
- Change in hydrological regime



FACTS



The year 2006 was the warmest year on record since 1901. It was characterized by annual mean temperature over the country as a whole being 0.59 degrees Celsius above the average calculated during 1961-1990. Minimum temperatures were more than two degrees Celsius above normal over northern parts of the country.

Traditionally dry areas like Saurashtra and Kutch and West Rajasthan, besides Gujarat, Madhya Pradesh, Maharashtra and Orissa, received excess rainfall, Himachal Pradesh, east and west U.P, Bihar, Jharkhand and Assam and Meghalaya remained deficient.





IMPACT ON ECOSYSTEMS DUE TO CLIMATE CHANGE

- Accelerated habitat loss
- Changes in range: geographical range of many species will move towards the higher altitude
- Increased extinction rates (Asiatic lion, dancing deer, *N. khasiana*, branderi species of Barasingha)
- Changes in Physiology: Reproduction timings, duration of growth
- Changes in phenology



CLIMATE CHANGE AND BIODIVERSITY IS A TWO-WAY LANE.



- While climate change is a driver of biodiversity loss, the deterioration of habitats and loss of biodiversity also intensify climate change.
- Deforestation, for example, is currently estimated to be 20 percent of all human-induced CO₂ emissions.



MITIGATION

- The risk of climate change's damage to ecosystems can be significantly reduced by implementing ecosystems-based strategies.
- One effective way to do this is by protecting forest ecosystems and increasing the size of existing carbon pools to reduce greenhouse gas emissions.
- Conserving a patch of native vegetation may be a key component of integrated disaster risk reduction in the face of climate change.



BIODIVERSITY AND CLIMATE EXTREMES

Forests : Carbon sinks

Multi-aged, diverse forests - resilient to ice-storms & fire

Forested river corridors- drought resilient and help in climate regulation & amelioration of climate extremes

Wetlands : Water filtration, Flood control, store water & reduce erosion by (slow runoff)

Species & genetic diversity enhance ecosystem resiliency

Diverse ecosystems-More productive and better able to withstand and recover from climate extremes, pests and disease

Conserving gene pools for adaptation





CREATE A BIODIVERSITY PARK

What can we do.....
At local level ?

Creating Biodiversity Corridors.....



WHAT ARE THEY?

These parks are unique landscapes, the first of their kind in India, which, like nature reserves, harbour hundreds of vanishing species living together in the form of diverse communities and provide ecological, cultural and educational benefits to the urban society.

An ecosystem approach where in-situ and ex-situ conservation measures are being adopted



FUNCTIONS OF PARKS

1. Parks act as a heritage site and repository of about 30-35 threatened communities of Yamuna river basin
2. On the contrary of Delhi's roadside ornamental trees and shrubs, Biodiversity park harbour wild and much more important plant species which were once found but disappeared now.
3. The parks act as an additional sink for CO₂ and other pollutants while source for O₂ and enhance ground water recharge and augment fresh water availability
4. The parks have a positive impact on the local weather patterns and buffer ambient temperature thereby preventing dust storm and expansion of desert.
5. The parks become an ideal medium for environmental education at school/college/institutions level and also promote eco-tourism and social connectivity across the urban community
6. The parks provide ideal alternative habitats for migratory and resident bird species
7. Act as a biodiversity corridor



YAMUNA BIODIVERSITY PARK

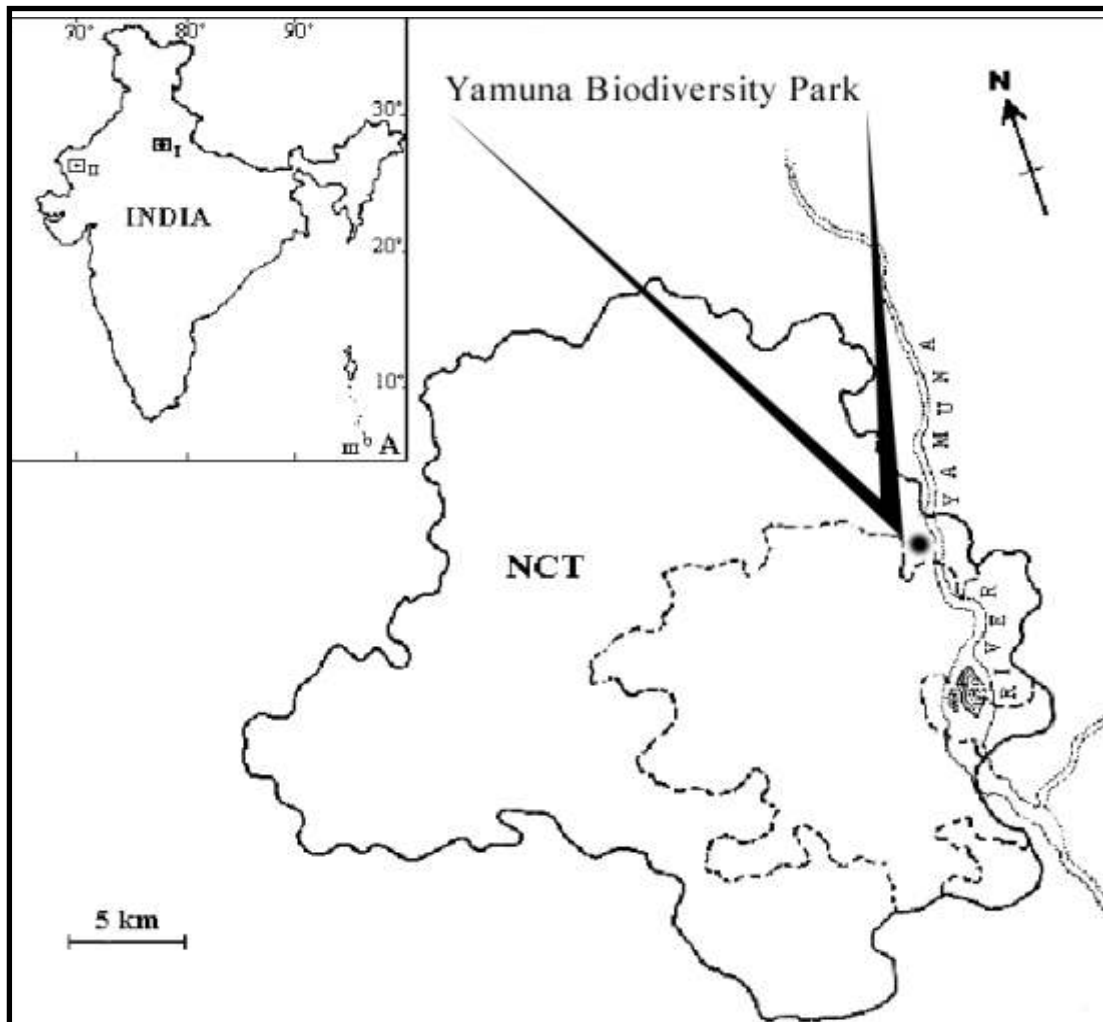




YBP - LOCATION

- Located close to river Yamuna near Wazirabad in Delhi
- Spread over 157 acres
- —additional 300 acres already acquired

YAMUNA BIODIVERSITY PARK





AERIAL VIEW OF THE YBP





CHALLENGES AT Y B P

- Highly sodic soils
- pH of the soil varies between 7.3 to 9
- Average soil pH 8.5
- Water too is highly alkaline



INITIAL CONDITIONS IN YBP



A TRAIL THROUGH MOUNDS IN 2003



SEQUENTIAL DEVELOPMENT IN YBP-1



Site selection for
development of
wetlands in 2002



Development of
wetlands-initial
stages in 2003



Wetlands in 2004
nearly fully
developed

A TRAIL THROUGH MOUNDS IN 2009





A VIEW OF VISITOR AREA



VISITOR AREA





A VIEW OF NATURE RESERVE AREA



A circular inset image showing a dense forest with various green trees and foliage.

TOPICAL DRY DECIDUOUS FOREST COMMUNITY





MOUND OF VISITORS' AREA





MOUND OF VISITORS' AREA



TROPICAL DRY DECIDUOUS FOREST ECOSYSTEM WITH TEAK AS A DOMINANT SPECIES





SAL FOREST COMMUNITY





GRASSLAND



Grassland has become home of many birds like munias, prinias and shrikes



GRASSLAND BIRDS



**INDIAN HARE: CAN BE SEEN
BOUNCING HERE AND THERE IN
YAMUNA BIODIVERSITY PARK**



CONSERVATORY FOR BUTTERFLY





BUTTERFLY DIVERSITY



AROUND 45 SPECIES OF BUTTERFLIES ARE FOUND IN CONSERVATORY OF BUTTERFLIES OF YBP

CONSERVATORY OF FRUIT YIELDING SPECIES



7 varieties of citrus, 6 varieties of guava, 6 varieties of sapota and 8 varieties of Anar with varying size, weight and taste have been planted.



Phalsa



Karonda



Loquat



MEDICINAL GARDEN



More than 450 species of medicinal value have been planted



TROPICAL MOIST DECIDUOUS FOREST ECOSYSTEM



In nature reserve zone, natural regeneration of many trees have been started

WOODLAND BIRDS



Rose finch



Koel



Peafowl



Coppersmith Barbet

Wetlands in 2004
nearly fully developed



WOODLAND BIRDS



Purple sunbird



Yellow footed Green Pigeon



Wryneck



Indian Hornbill

DIVERSITY IN DRAGONFLIES/ DAMSELFLIES





MIGRATORY DUCKS' WETLAND





5TH SUCCESSFUL YEAR OF MIGRATORY BIRDS' ARRIVAL



A BIGGER FLOCK OF IMPORTANT BIRD RED CRESTED POCHARD, THIS YEAR



MIGRATORY DUCKS



Northern Shovellor



Gadwal



Common Teal



Garganey



A RARE/ VULNERABLE BIRD DARTER NESTS AND BREEDS





CARVING SUITABLE NICHES



IMPORTANT TOOL TO STUDY CHANGES AND SHARE WITH THE COMMUNITY





**6 VARIETIES OF NYMPHAEA HAVE
BEEN FLOWERED SO FAR...**

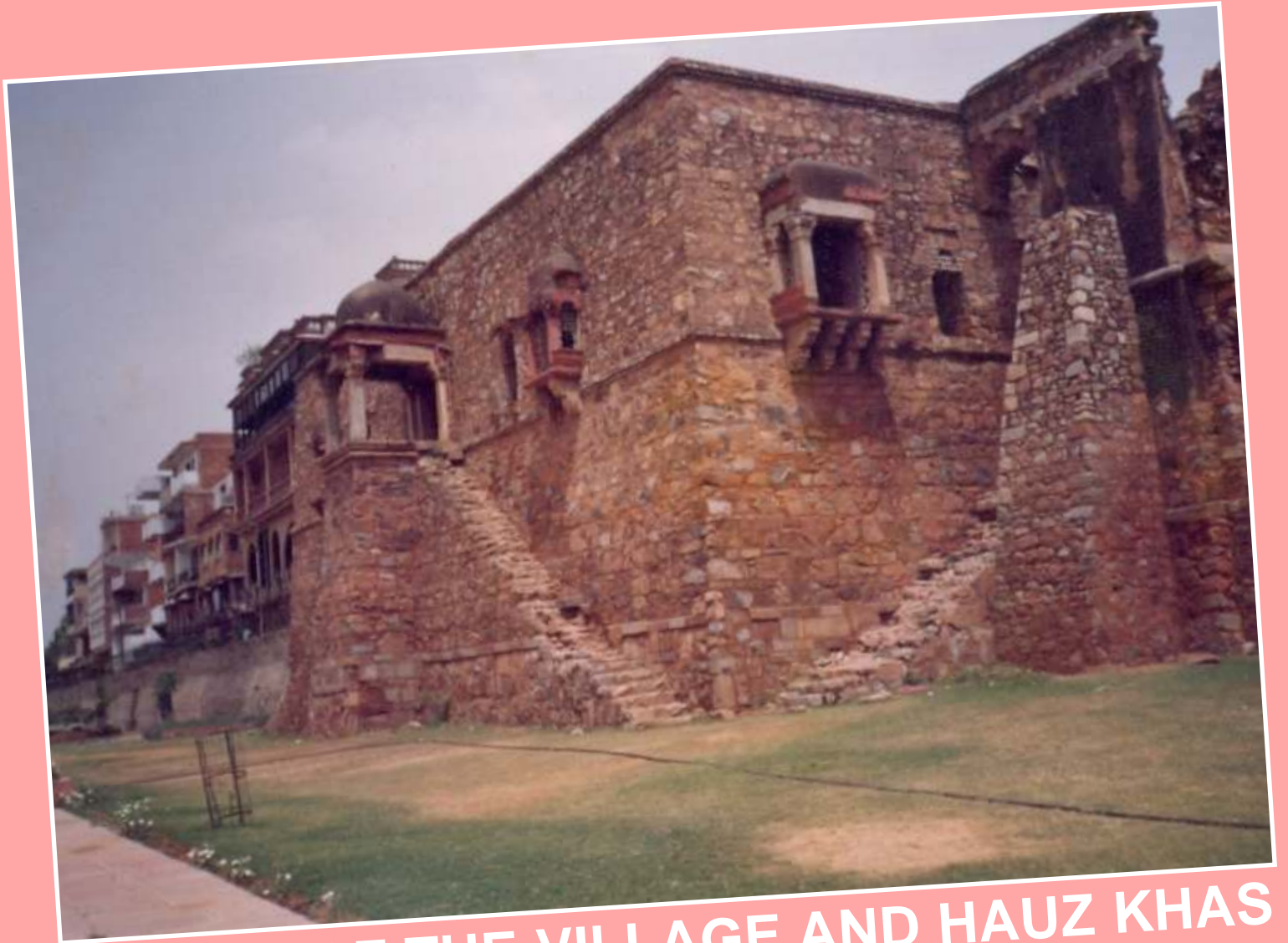


Thank You !

HISTORICAL MONUMENTS IN DELHI







**FACADE OF THE VILLAGE AND HAUZ KHAS
MONUMENT HAS BEEN MIXED UP**

HAUZ KHAS



TRANSFORMATION OF THE
VILLAGE INTO A COMMERCIAL
ENTITY TO SPOIL THE BOTH

VIEW OF THE HAUZ KHAS MONUMENTS



COMMENTS

THESE ARE THE OUTSTANDING GROUP OF MONUMENTS, BUT THE COMMERCIAL ACTIVITIES IN THE VILLAGE HAUZ KHAS HAVE ADVERSE EFFECT ON THESE, THE CONCERNED AUTHORITY MUST ACT AND STOP SUCH ACTIVITIES.

SIRI FORT



COMMENTS

SIRI FORT WALL IS DECAYED DUE TO AGE AS SEEN IN THE LEFT OF PHOTOGRAPHS, MODERN STRUCTURE WITHIN THE WALL HAS FURTHER RUINED THE ENTIVIRONMENT.

MASJID MOTH



MULTI-STOREYED STRUCTURES AND COMMERCIAL
ACTIVITIES HAVE COME UP NEAR
TO THE OLD MONUMENTS

FEROZSHAH KOTLA



MOST OF THE FRONT IS OCCUPIED BY UNAUTHORISED
AND
UNINTENDING CONSTRUCTION.

FEROZSHAH KOTLA



COMMENTS

THE OLD SETTLEMENT ABUTTING THE WALLS OF FIROZSHAH KOTLA IS SPRAWING AND PEOPLE ARE GRADUALLY CONSTRUCTING PUGCA AND SEMI-PUGCA STRUCTURES IN THE VACANT LAND AVAILABLE AROUND THE MONUMENT, IF THE SAME PROCESS CONTINUES IT MAY ENDANGER THE EXISTANCE EVEN OF MONUMNET.

KASHMERE GATE



KASHMERE GATE



COMMERCIAL DEVELOPMENT WITH PARKING IS COMING UP AND HISTORICAL GATE IS GOING DOWN.

KHIRKEE MOSQUE



IF THERE WOULD HAVE BEEN PROPER BYE LAWS,
THEN THIS SITUATION

COMMENTS

THE MONUMNET IS IN A TOTAL STATE OF NEGLECT. IT NEEDS IMMEDIATE REVITALISATION SO AS TO MAKE THE MONUNET A TOURIST ATTRACTION. ATLEAST THE APPROACH ROAD TO THE MONUMNET CAN BE WIDENED AND FACADE OF THE MONUMNET CAN BE OPEND OUT TO MAKE IT VISIBLE FROM THE ROAD.

ACTION PLAN

1 Creation of a 'GREEN FUND'

It has been established that creation and development of green areas is a must to fulfil the basic needs of human beings.

For this, it is proposed to levy 'GREEN FUNDS' 2% cost of the project on all the project on all the projects which have a floor area of 500 sq.mt. and more, of any of the landuses.

2 Formulation of a 'City Forum' at non-governmental level

A 'CITY FORUM' should be formed with public representatives, senior professionals of various disciplines, senior government officers, eldermen etc.

3 Delineation of Green Areas

This is an important aspect. In many cases, green areas are encroached and misused because it is not known that a particular pocket is marked as green in an approved plan.

NAME OF IMPORTANT PARKS WITH AREAS DEVELOPMENT AS IN 1989

1	Ashok Vihar	(28.8 hect.);
2	Rohini	(12.0 hect.);
3	Lawrence Road	(12.0 hect.);
4	Northern Ridge	(80.0 hect.);
5	Gulabi Bagh	(12.2 hect.);
6	Pitam Pura	(47.1 hect.);
7	Shalimar Bagh	(49.7 hect.);
8	Kitchener Lake	(40.0 hect.);
9	Kalkaji	(92.8 hect.);
10	New Friends Colony	(8.4 hect.);
11	Bagh-E-Badli	(0.8 hect.);
12	Siri Fort	(142.0 hect.);
13	Sarita Vihar	(7.8 hect.);
14	LSRC Greater Kailash Part-I	(14.4 hect.);
15	Sanjay Van	(150.0 hect.);
16	Jahanpanah City Forest	(174.4 hect.);

17	Saket	(19.2 hect.);
18	Hauz Khas	(160.0 hect.);
19	Anand Mai Ashram	(100.0 hect.);
20	J.N.U. Mehrauli	(320.0 hect.);
21	Satpula lake	(14.0 hect.);
22	Surajmal Samadhi	(6.1 hect.);
23	Shahdara Lake	(14.9 hect.);
24	Trilok Puri	(70.8 hect.);
25	River Font	(64.0 hect.);
26	Tagore Garden	(26.0 hect.);
27	Janakpuri	(36.8 hect.);
28	Vikas Puri	(33.2 hect.);
29	G-17 Area	(11.8 hect.);
30	Parsad Nagar	(3.0 hect.);
31	Madipur	(3.8 hect.);
32	Zone G-18	(4.0 hect.);
33	Saket / Malviya Nagar	(30.0 hect.);
34	Janak Puri	(71.0 hect.);
35	Paschim Puri	(57.6 hect.);

36	Pitampura	(58.0 hect.);
37	East of Kailash	(21.6 hect.);
38	Lawrence Road	(40.6 hect.);
39	Safdarjang Dev. Area	(11.3 hect.);
40	Ashok Vihar	(23.3 hect.);
41	Shalimar Bagh	(9.2 hect.);
42	Vikas Puri	(58.5 hect.);
43	Vivek Vihar Phase – I	(7.2 hect.);
44	Naraina	(7.8 hect.);
45	Yammuna Vihar Blik. – B	(3.3 hect.);
46	Jhilmil Phase – I	(1.7 hect.)

THANK - YOU



R.G. GUPTA
Policy/City Planner

President – “Character Infrastructure Educational Society” &
Co-opted Member of Delhi Vidhan Sabha.

F.I.E.; F.I.T.P. ; F.I.I.A.; F. AMDA;

Member-IRC; IBC;IIPA;IIRS;ISRS;IRTI;CIT

Director-UICT; Dir.- UPS; Dir. - R.G. M.P. Ltd. ; MD-
GNHS; Ex-Member Planning

GGs-IPU; Ex. Addl. Comm. Planning-DDA; Ex-Consultant
DSIDC; DTTDC; DAMB;

Slum Deptt.; DLLPC; Ex. Advisor-NCR-Planning Board; Ex.
Consultant “Delhi Jal

Board; Ex. Sr. P. Secy. JC PPV in Parliament; Member of
Expert Committee on Lal

dora and Extended Lal dora By GOI; MOUD; Macro Level
Policy and Financial

Planner;

Correspondence Address: UPS Campus, Block-A, Preet Vihar,
Delhi-92, India

T/F No. 2244-00117 Mobile No. 09811018374. E-Mail:

ram_gopal_gupta@yahoo.co.in ; Websites: www.rgplan.org ,
www.uict.org ;

www.rgedu.org