PLANNING, DEVELOPMENT & CONSTRUCTION,

" SLUMS IN DELHI "

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1 TYPES OF SLUM

DELHI IS THE BEST CITY YET 60% POP. LIVE IN SUB-STANDARD AREAS, NAMELY :

I. **Jhuggi Clusters**

ii. **Slum designated areas**

iii. **Urban & Rural Villages**

iv. **Census Towns**

v. **Unauthorized colonies**

vi. **Resettlement colonies**

* **Sub-standard areas are those which do not have adequate Physical, Social, Economic, Ecological, Emergency & Circulation infrastructure.**

2 FEW MAIN POINTS

2.1 Squatting Is a Continuous Process and Would Continue Till:

- **Gap Between Demand & Supply.**
- **Gap Between Rich & Poor.**
- **Limited Education**
- **Habits to squat again & again.**

ARE THERE

IN THE LAST 50 YEARS, ABOUT 2.3

3 COMPREHENSIVE DEFINITION OF "SLUMS DEVELOPMENT"

"Plan, Develop, Construct, Manage & Maintain, Built up & Open Spaces with the Involvement of Gov. , Semi Gov., NGO's & Beneficiaries of the areas which do not have proper infrastructure

The Exercise would not only be concerning to Spatial Planning but also of Raising their Socio - Economic Status (Health, Edu., Security, Justice) ; Meaning thereby: Improvement of "Total Quality of Life (Biological, Physiological & Psychological)" of person living there.

4 Steps To Achieve Objectives

I. Socio Economic Surveys, analysis & results

ii. Policies : (a) Size of plot grouping & type of services; (b) Finance; © Allotment system.

iii. Interpretation of policy to individual sites

iv. Strategy on (a) Planning; (b) Development; & (c) Construction;

v. Phasing : Selection of sites based on Equity, Economy & Emergency

VI) Implementation of the Project

(a) Trunk Infrastructure

(b) Peripheral Infrastructure

(c) Internal Infrastructure

VII) Feed Back

VIII) Education & Training modules.

IX) Employment

X) Health specially of women & children

XI) Involvement of Beneficiaries

XII) Feedback &

XIII) Modification in policies if required

5 PROPOSED ADMIN. SYSTEM

5.1 Section-6 of D.D. Act-1957

To promote & secure the development as per Plan; power to acquire, hold, manage & dispose of land & other properties, to carry out building, engineering, mining, other operations to execute works, supply of water, electricity, sewage & all other services.

5.2 MOUD on 2-1-1979 clarified the functions of DDA as under :

(a) Master Plan

(b) Enforcement of land Use

(c) Development of land for various purposes

(d) Developed lands made available to agencies

(e) Sufficiently dynamic housing programme

(f) Commercial and ancillary centres of work

(g) In exercise of its role as custodian of the Master Plan, DDA has necessarily to coordinate activities of other specialised agencies, DVB, MCD, CPWD, D. Govt. etc.

5.3 URBAN FUNCTIONS(20)

(1) Water, (2) SWM, (3) Sewerage , (4) Storm W drains , (5) Power, (6) Gas, (7) P& T, (8) Protection of Env. to control water, air, soil & noise pollution, (9) T& T via rails, (10) U. Rails, (11) Preservation of monuments, (12) Acqu. of land & allotment of alternate spaces, (13) Education, (14) Health,(15) Security, (16) Justice, (17) Safety, (18) Recreation, (19) CSC's. (20) Shelter

Function at 3 level :

a) **Macro (Policy) Level**
b) **Meso (Zonal Plan) Level**
c) **Micro (Detailed Plan) Level**

FIRST ABOVE TWO LEVELS BY DDA

The third by all the existing departments viz. Slum Wing-MCD, Delhi Jal Board, Delhi Vidyut Board, Dir. of Edu., Health, Social Welfare etc.

Physical, financial planning & Policy control by the first tier

6 RESETTLEMENT COLONIES

6.1 Evolution of Scheme

A scheme for the removal of shanty was initiated as early as 1958 on the recommendations of an Advisory Committee appointed for the purpose. A detailed note to the Cabinet and the same was approved on 26 December, 1959 & then 4-11- 60. The scheme was modified and again approved by the Cabinet vide its order No.H-11147(12)/61-III dated 12 - 11- 62, Since then the scheme has been modified many times in terms of :

(i) Size of plot (ii) Eligibility (iii) Extent & type of infra. (iv) Cost of a dev. plot

6.2 COLONIES DEVELOPED PRIOR TO 1975

18 resettlement colonies by DDA/ MCD. In 598.4 hect. with 49019 plots of 21 sq.mt.3845 plots of 67 sq.mt., besides 4504 tenements

6.3 COLONIES DEVELOPED DURING 1975-77

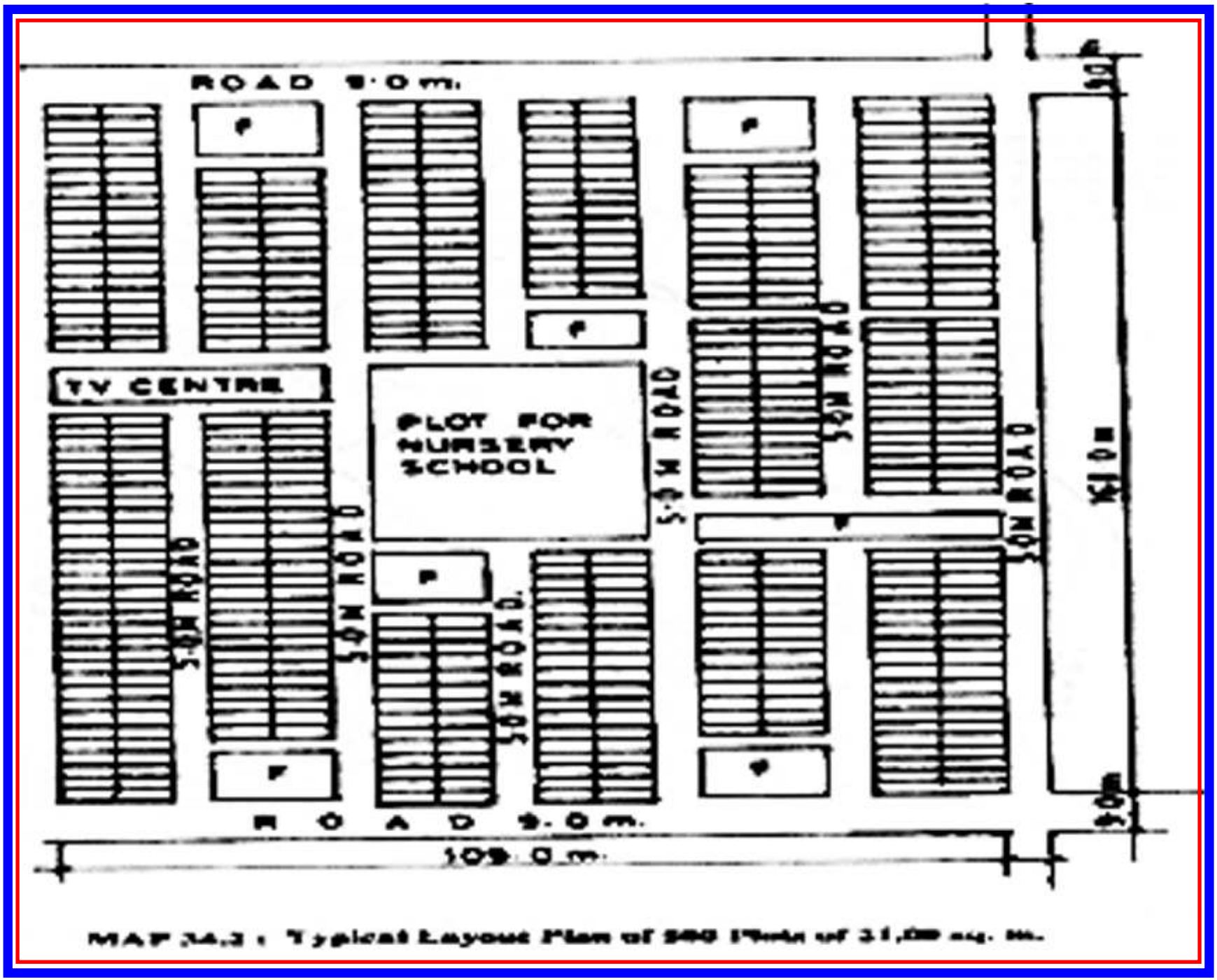
Planning concept; A cluster of 2500 people was taken as the basic planning unit at the lowest level. Each cluster has 500 plots of 21 sq.mt (3 mt. X 7 mt.) and community facilities. Each cluster is in an area of 2.1 hect. At the second level, two clusters were combined, and at the third level, four clusters.

Of the total area of 13.2 hect. Of four clusters - 10,000 pop.

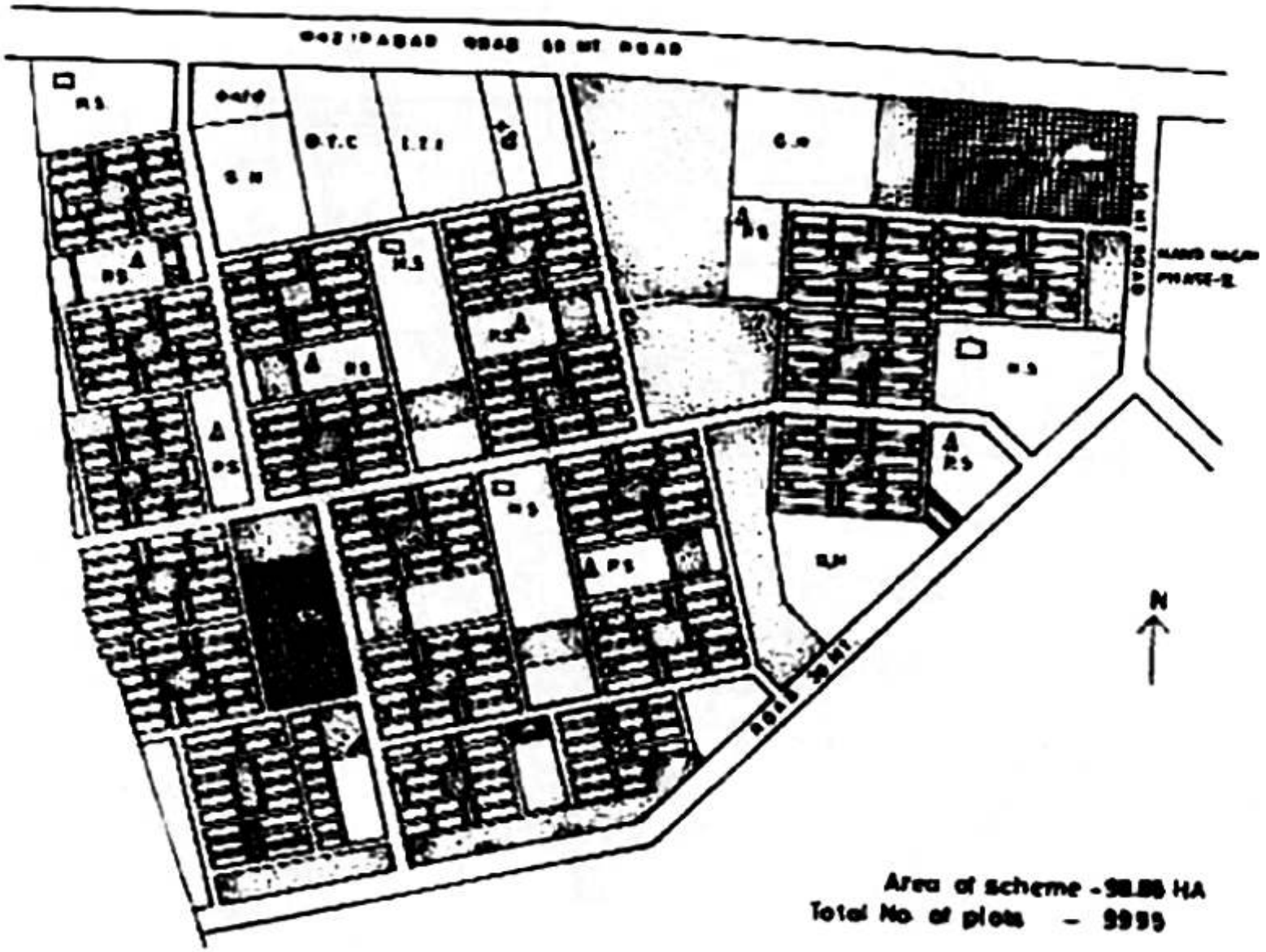
32% = plotted area,
13% = metalled road,
15% = pathways,
20% = community facilities,
16% =parks, & open spaces
4% for commercial use.

At the fourth level, cinema, fire stations, police stations, colleges, hospitals etc are as per Master Plan standards.

Till that date, DDA had incurred an expenditure @ of Rs.860 per plot and a further amount of Rs.204 per plot was committed. Now it is RS. One lakh / plot.



MAP 24.2 : Typical Layout Plan of 240 Plots of 31,000 sq. m.



MAP 34.7 : Nand Nagri Resettlement Colony Delhi

These colonies include 3 sites for colleges, 3 hospitals, 8 cinemas, 3 fire stations, 5 police stations, 25 police posts, 65 HSS , 136 PS , 141 NS , 51 dispensaries, 33 community halls/ libraries, several sites for religious building & milk booths, sites 11 KV sub-stations, 8960 shops each of 10 sq.mt., sites for dhobi ghats, few Industrial Training Institutes & few Khadi Gramodhyog.

PROVISIONS WERE MADE AS PER MPD

6.4 DURING LATE 70'S

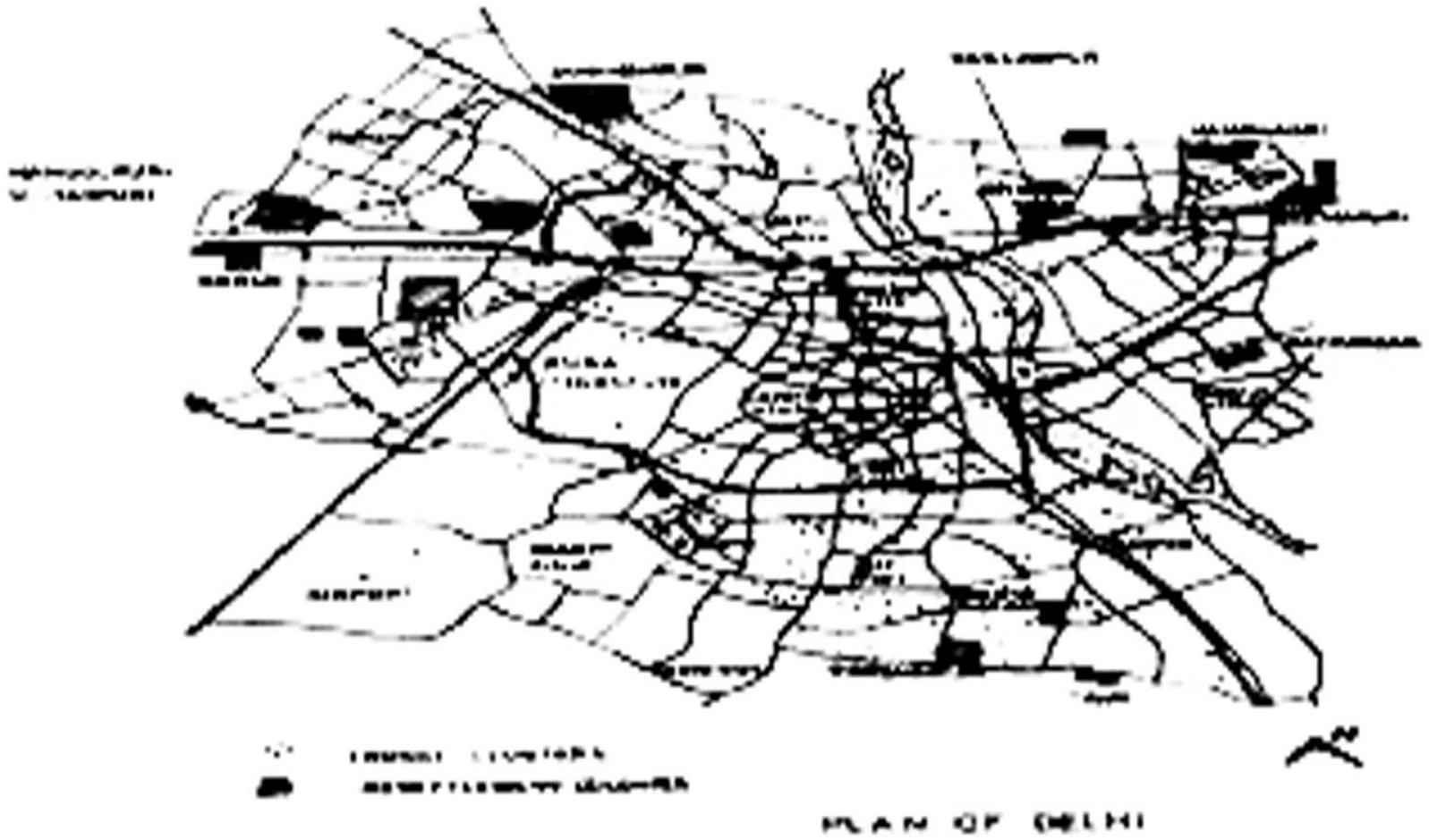
Strong view on increasing the size of a plot from 21 sq.mt to at least 32 sq.mt was advocated, but nothing was finalised.

(i) Ministry of UD- 15 March, 1979 decided to accord approval for the grant of perpetual lease to allottees. Decisions were taken on this subject from time to time, but implementation was never started. The last decision was in Oct 1998.

6.5 RESETTLEMENT COLONIES- 1975-77

	NAMES	AREA IN HEC.	POP.
1.	Dakshinpuri & Extn.	65.37	12300
2.	Khanpur	7.15	1378
3.	Chaukhandi	6.55	1534
4.	Khyala Complex	20.00	3362
5.	Gokalpuri	14.86	2402
6.	Shakarpur Complex	54.03	8464
7.	Nand Nagri	50.58	1000
8.	Sultanpuri	150.72	16000
9.	Mangolpuri	177.73	27800
10.	Hyderpuri	57.87	6442
11.	Jahangirpuri	132.17	22000
12.	Patparganj Complex	168.00	25000

	(Khichripur, Kalyanpuri, Trilokpuri)		
13.	New Seemapuri	17.74	3166
14.	Nangloi	22.00	4472
15.	N.G. Road	13.50	2300
16.	Seelampur Complex	9.80	1642
	Total	**968.07**	**148262**



MAP OF DELHI

MAP 34.1 : Location of Slums Clusters and Resettlement Colonies

6.6 PHYSICAL PLANNING OF RESETTLEMENT COLONIES

One of the largest programme in 1975-77 in 968.07 hects. With 1,48,262 plots of 21 sq.m.

In (1975-85) a lot of thinking & discussions took place on the following points.

(1)Size of plot, (2) Cost of development per plot, (3) Location of a colony (4) System of physical infra. (5) Norms of social infra. (6) Total dev. (7) System of allotment, (8) Financial pattern.

TOTAL PICTURE OF RESETTLEMENT COLONIES IN 3 PHASES I.E. (I) UP TO 1974; (II) 1975-80 AND (III) 1980-86

Phase	*No. of Resettlement colonies developed*	*Area (in Hect.)*	*No.of plots (21 sq.m)*	*No.of plots (26 sq.m)*	*No.of plots (67 sq.m)*	*Total*
I (upto 1974)	**18**	**598.40**	**49019**	**-**	**3845**	**52864**
II (1975-1980)	**16**	**968.07**	**148262**	**-**	**-**	**148262**
III (1981-1986)	**9**	**34.96**	**7630**	**7285**	**-**	**14915**
	43	**1601.43**	**204911**	**7285**	**3845**	**216041**

7 A NEW MODEL OF IN/AROUND SITU DEVELOPMENT & CONSTRUCTION OF URBAN SPACES FOR SHANTY (JHUGGI) CLUSTERS

7.1 Three pronged strategy

I. Resettlement of shanty (Jhuggi)
II. E IUS
III. 'In / Around Situ' development / construction of Urban Spaces

7.2 'in / Around Situ Model Best One:

i Does not disturb present system.
ii Does not dislocate work places.
iii. T&T burden is not increased.
iv. Per capita expenditure is less cont.
v. By people, from people & for people

vi. Permanent settlement with accepted physical, social & economic Infrastructure

vii. Existing social infrastructure can be shared.

viii. Some land has to be taken from adjoining areas / uses.

ix. 'Development Control Regulations' for Greater Bombay- March, 1991. May be made applicable .

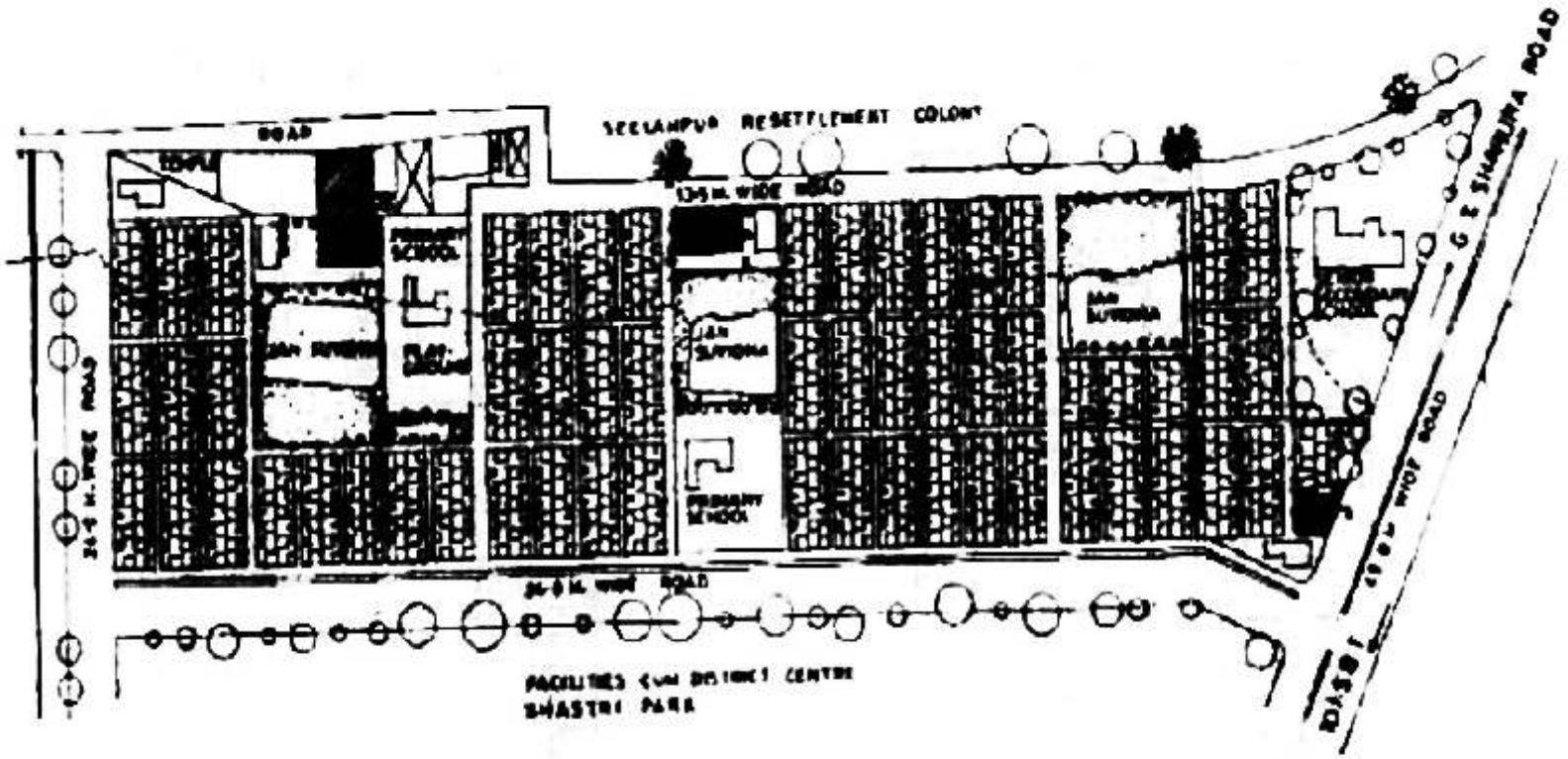
7.3 LOCATION OF THE SEELAM PUR COMPLEX

Total area of 12.5 hect. Out of this, 5.6 hect. Is already occupied by the jhuggi cluster. Part of the area of facilities-cum-District Centre is still being encroached upon.

DESIGN OF THE CLUSTER

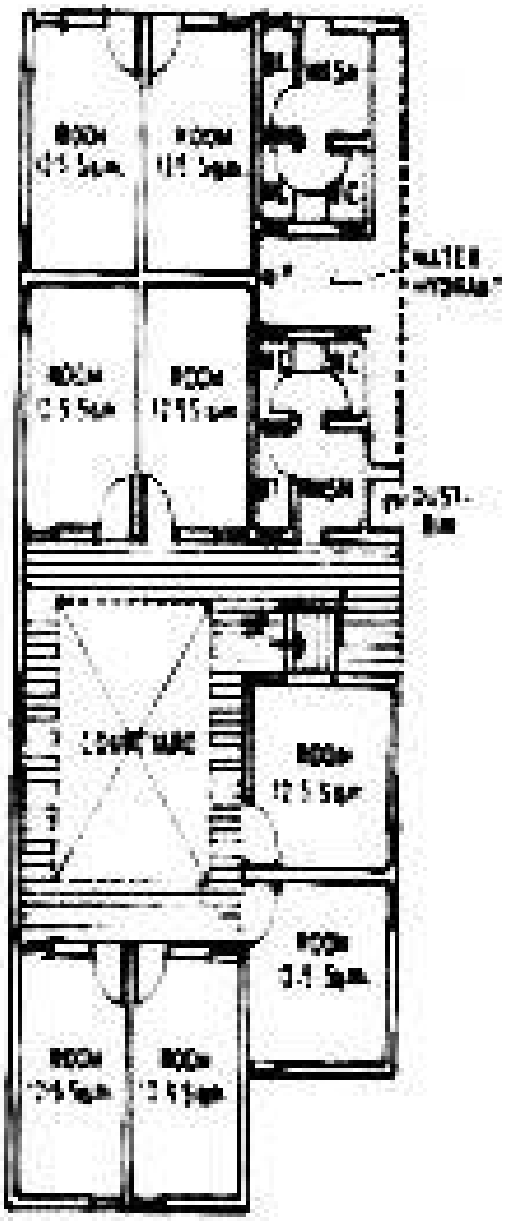
12.5 hect. For 'In/ around Situ'

MAP 32.1 : Layout Plan of 'In/Around Site' Development at Seelampur Complex

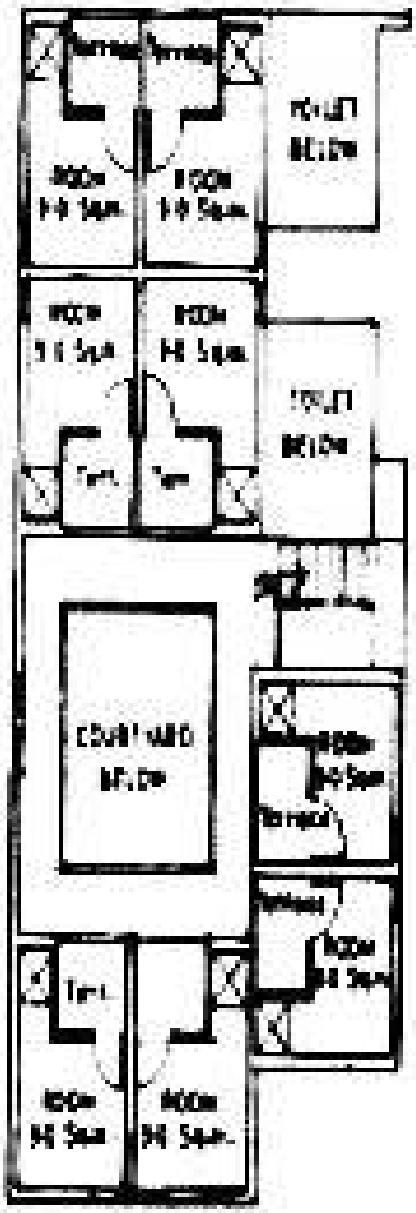


SALIENT FEATURES

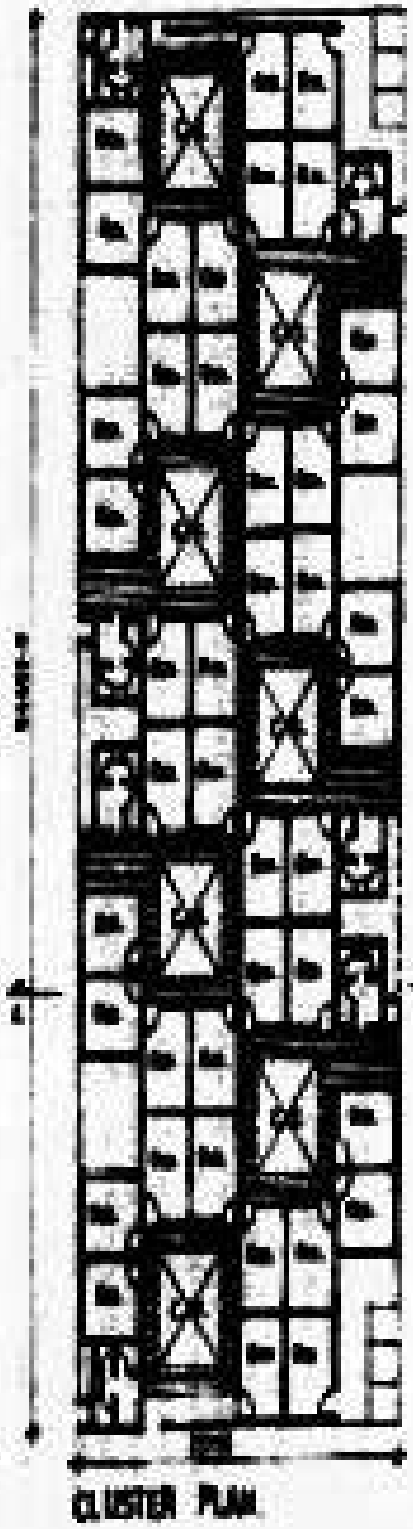
1. BUILTUP SPACE — GROUND FLOOR 12·5 Sq.m., 1st FLOOR 9·0 Sq.m.
2. PHYSICAL INFRASTRUCTURE — INTIMATE ON GROUP BASIS FREE ON INDIVIDUAL BASIS
3. SOCIAL INFRASTRUCTURE — AS PER MASTER PLAN-2001



CLUSTER DETAIL PLAN



CLUSTER DETAIL PLAN



CLUSTER PLAN

SECTION AA

NOTE :-

7.4 COMPONENTS IN A GROUP

Area of one Unit in		***Sq.mt.***
I.	Multi-purpose room including cooking corner	12.5
ii.	Proportionate are of WC, bathroom and washing space which are on ‘Group Basis’	2.0
iii.	Proportionate area of common courtyard	7.0
iv	Total area for each unit	21.5

7.5 PROPOSED LAND USE OF THE SCHEME

Land use		*Area in hect.*	*%age*
(I)	Residential Area		
	(i) Plots, toilet blocks		
	Common courtyard	5.8	46.4
	(ii) Public and semi		
	public facilities	3.3	27.4
	(iii) Road and lanes	2.2	17.6
	(iv) Commercial		
	Shopping Centre	0.3	2.4
	(formal & informal)		
	(v) Parks and green	0.9	7.2
	Total	**12.5**	**100.0**

7.6 DENSITY OF THE COMPLEX

(i) 200 dwelling units per gross hect. or 1000 persons per gross hect.

(ii) Net density of the complex (after exclusive area of P and SP facilities and parks). 350 units per hect. or 1750 persons per hect.

7.7 REHABILITATION THROUGH MULTI-STOREYED CONSTRUCTION

(I) By increasing proportionate (FAR) of District Centre to compensate losses due 'In/Around Situ' development & construction.

(II) Multi-storey construction Achieved density would be much more than in single / double storey model .

8 POINTS FOR DECISIONS:

8.1 ADMINISTRATION OF SLUMS

Two levels. The first level :

Policy planning for (a) Land, (b) Size, (c) type of services, (d) Finance, (e) Allotment, (f) Socio-Economic development, (g) Any other factor.

- Interpretation of policies for individual sites
- Strategy for planning, development, construction & management.
- Involvement of Private Sector & Joint Venture.

2ND LEVEL:

Implementation- Slum Wing. DJB. DVB etc. To solve it 13 steps as given in Slides 6 & 7 be followed

8.2 Planning at Macro Level

- 30% for Trunk & City level facilities.
- 20% for Zonal level facilities.
- 5-8 % (Net) for Slum rehabilitation.
- Balance for other uses &development.

8.3 Strategy of Implementation

i. EIUS to a limited extent.

ii. In / Around Situ development to a large extent subject to Environ. & City Level development.

iii. Resettlement only in selected cases.

8.4 SOCIAL GROUPING

i. Smallest groups : 1500-2000 pop.
ii. Basti Vikas Mandals. 5000 pop.
iii. Commu. Vikas Mandal. 15000. pop

Maximum emphasis has to laid on women development & children. For this training modules are available.

8.5 TRAINING MODULE OF EDU.HEALTH, WOMEN & CHILDREN(22)

1. Urbanization trends.
2. Understanding the dev. Philosophy; changes from GNP to HRD.
3. Development policies and programmes.

4. Urban basic infrastructure services.
5. Objectives & organizational framework
6. Primary health care approach
7. Immunisation
8. Diarrhoea management
9. Growth promotion
10. Early childhood education
11. Working children & street children
12. Women development
13. Water & sanitation
14. Neighbour hood planning process
15. Community self-helf survey
16. Planning at the project level
17. Implementation plan
18. Orientation, field visit and follow up
19. Organisational structure & non-formal sources of power

20. Training requirements

21. Modalities of training the resident community volunteers

22. Communication skills and methods.

8.6 FINANCING

i. 20% from high comm. &other profitable uses at city level.

ii. 30% from com.use & HIG from within the project.

iii. 25% from plan funds.

iv. 25% from beneficiaries.

9 SOLUTION

9.1 PERSPECTIVE PLAN OF DELHI- 2021 A.D.

1. Background : Present population 17 M & by 2021 A.D. 23 M.

   For this 1650 Mgd water, 1200 Mgd sewer & 8000 MW power & 40 M. Passenger trips & between 80-90% area of the NCTD.

THIS IS A HUGE TASK & WOULD DEVELOP THE ENTIRE SYSTEM OF DELHI.

9.2 NCR AS AN IDENTITY

LEGAL, POLITICAL & ECONOMICAL

9.3 SETTLEMENTS & INFRASTRUCTURE

Development of the counter magnets, Priority cities with all types of infrastructure:

I. **Physical Infrastructure :** Water, Sewer, Drainage, SWM, Power, Road, Rails, Urban rails, flood protection works.

ii. **Social Infrastructure :** Health, Education, Security, Safety, Justice, Recreation, Shelter.

iii. **Economic Infrastructure :** Work places to increase GDP & per capita income.

iv. **Ecological Infrastructure :** To stop and control water, air, noise and soil pollution.

v. **Emergency Infrastructure :**Earthquake, Cyclone, Fire, Drought, Flood.

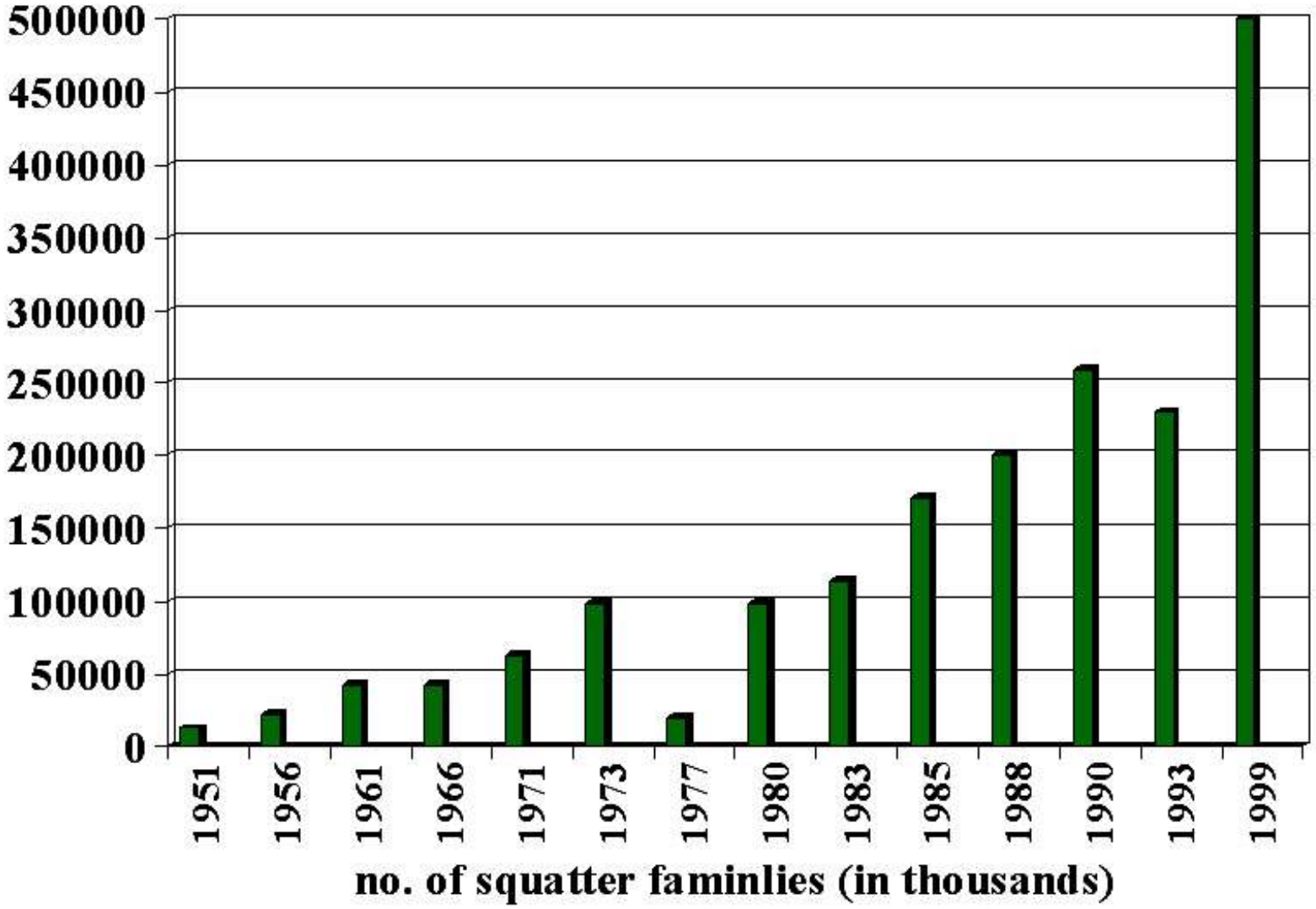
9.4 Participatory Model for land acquisition & development

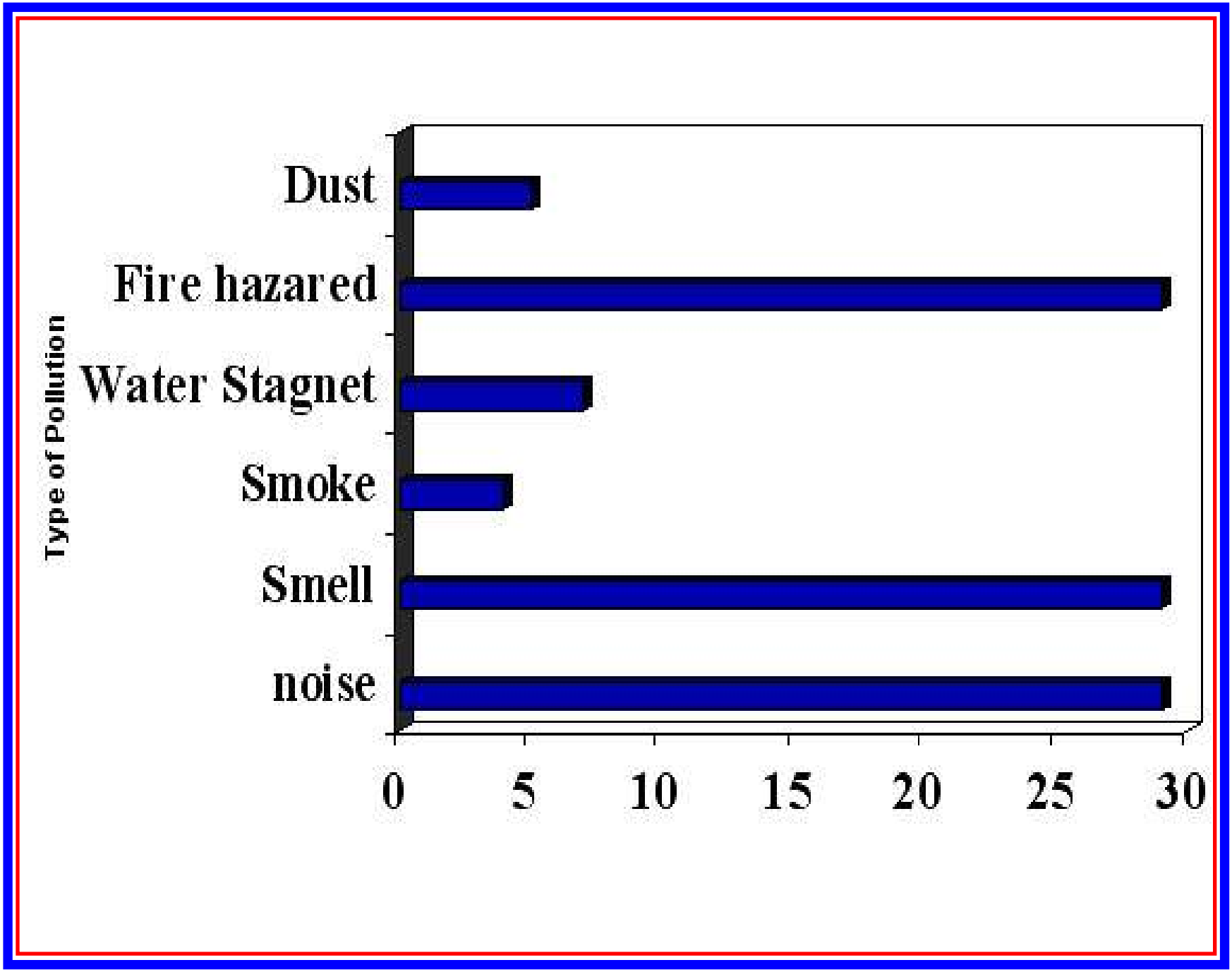
9.5 Involvement of Pri. Sector & Joint Venture

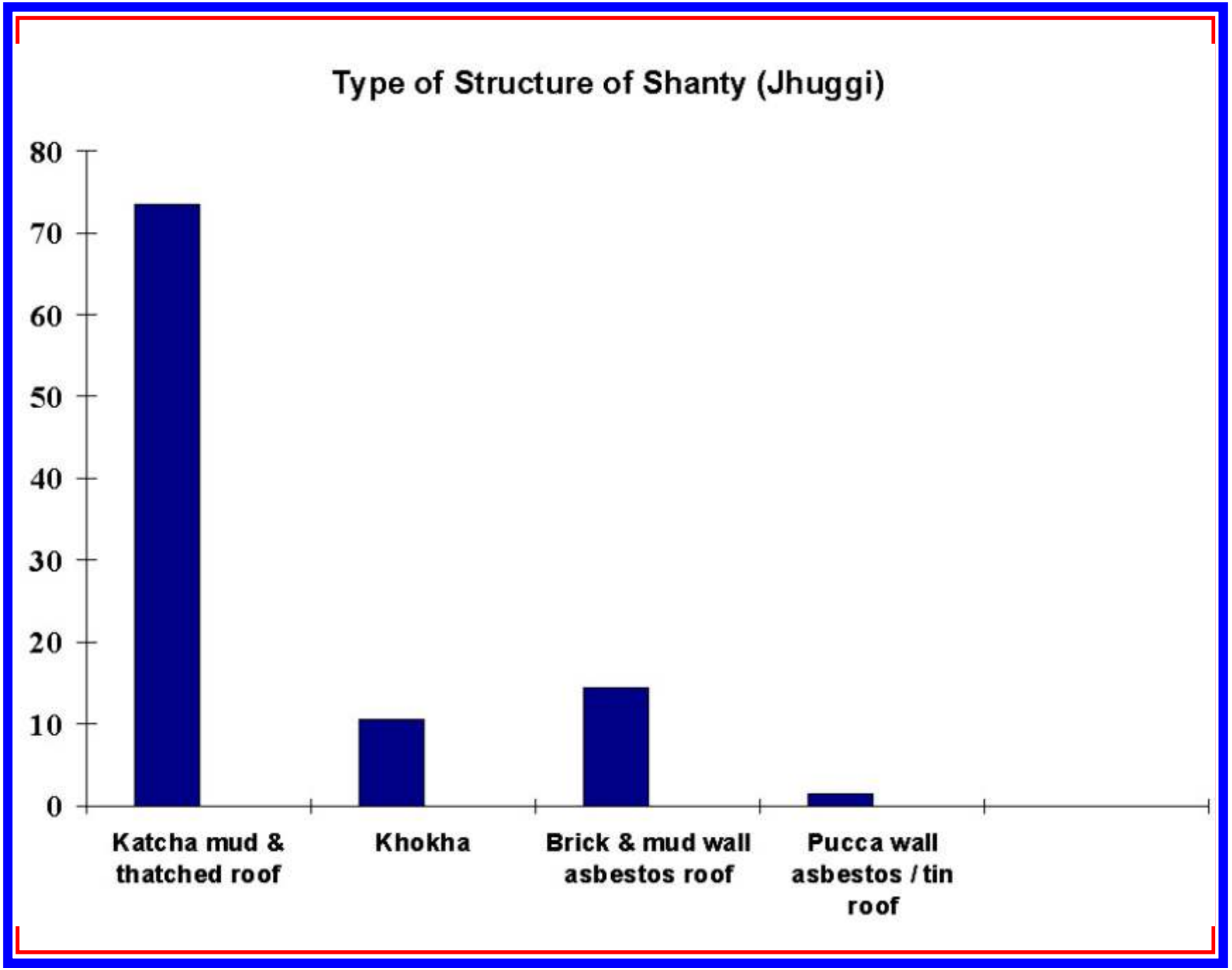
9.6 Other points As given in para 8.

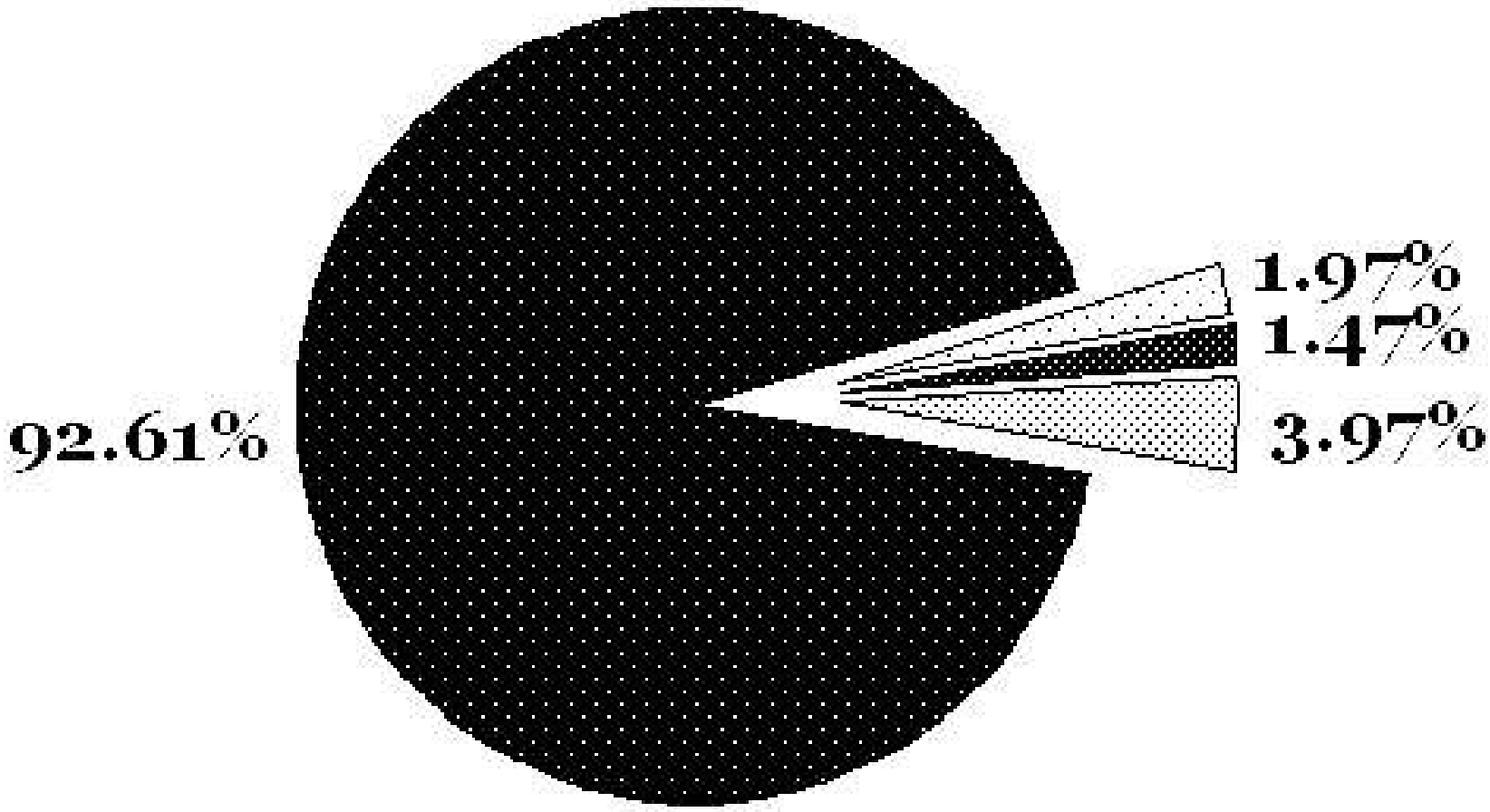
SURVEYS OF JHUGGIE CLUSTERS

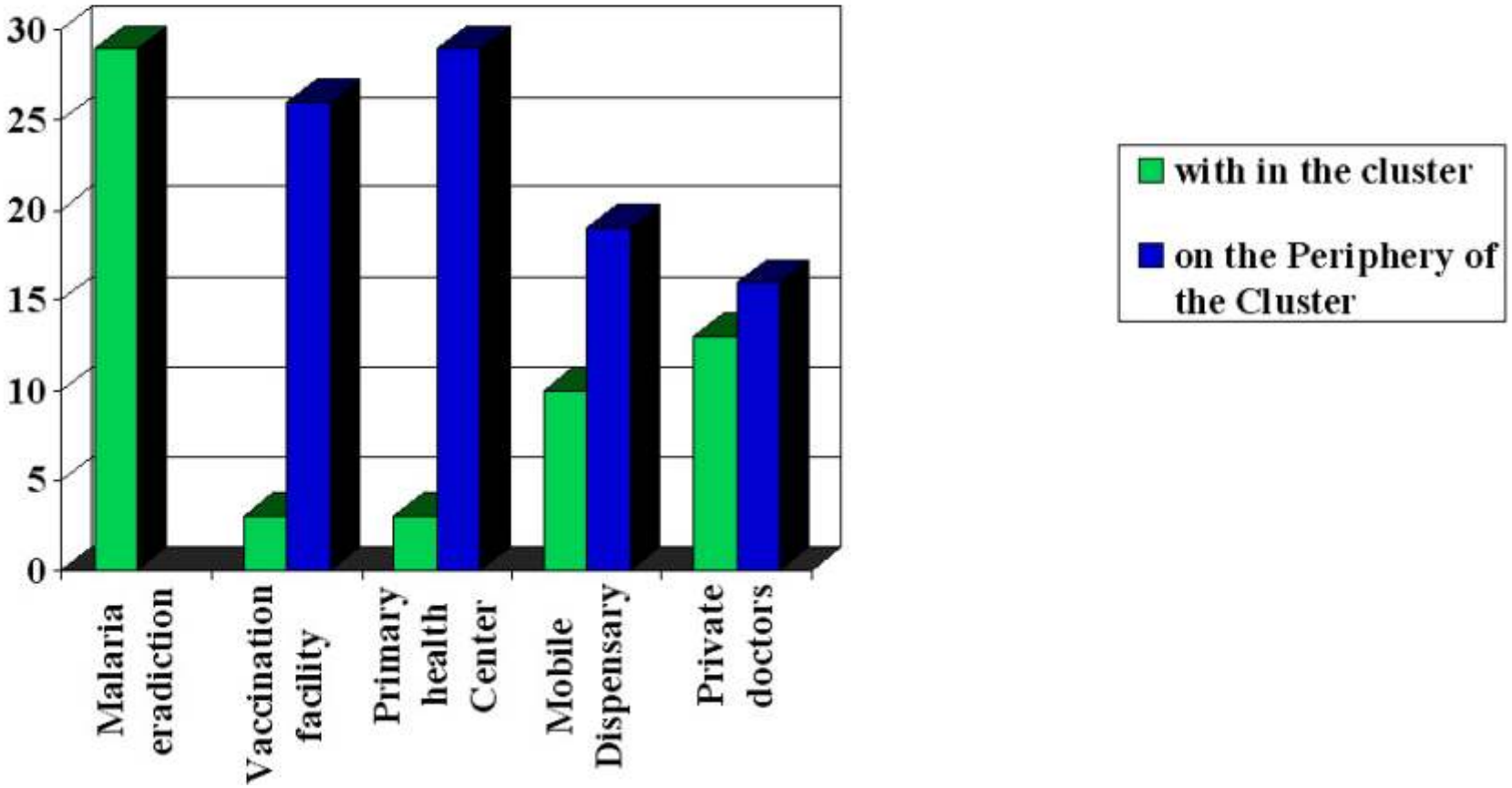
Growth of squatters during the last four decades



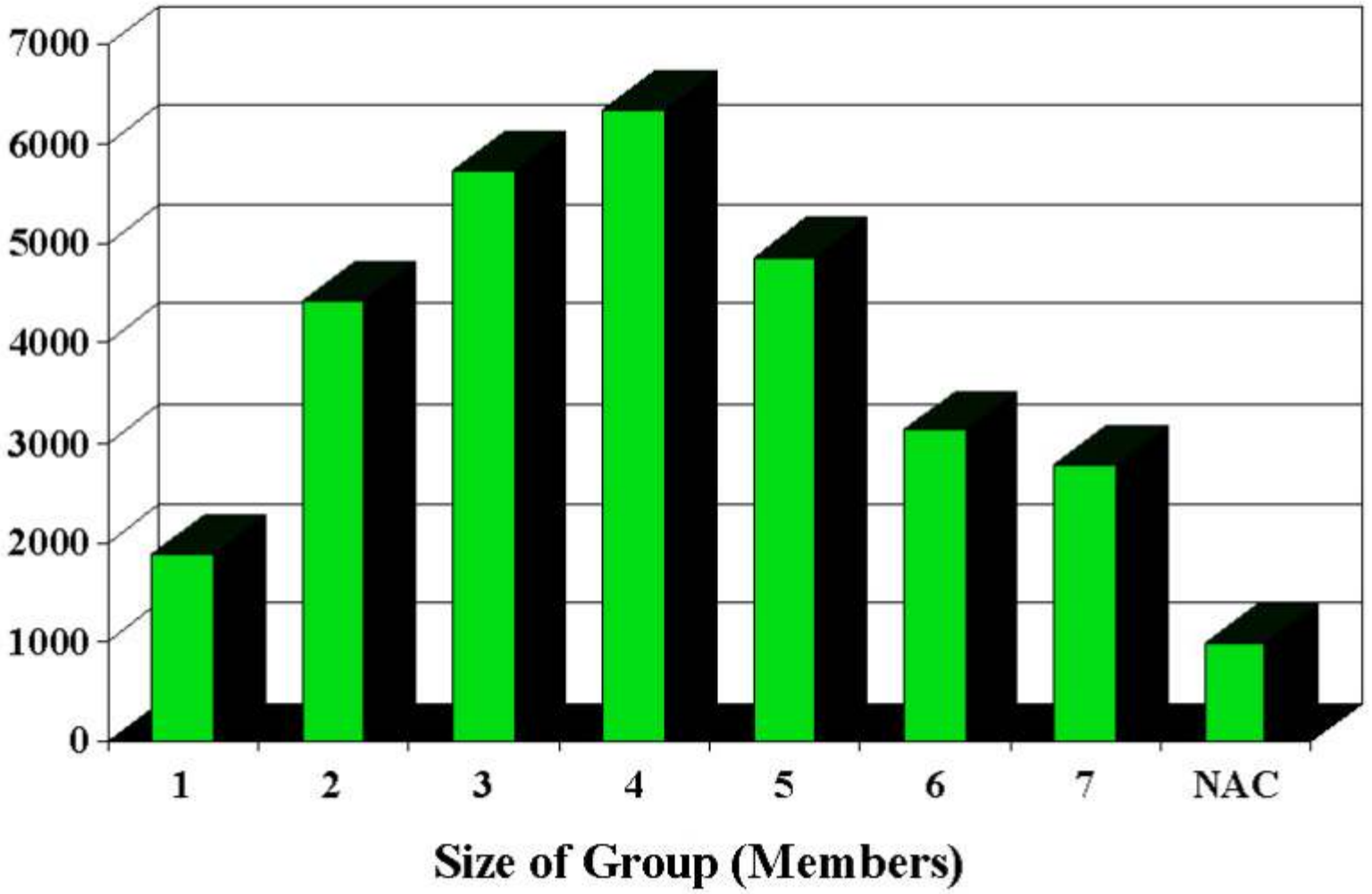

Type of Pollution
Dust
Fire hazared
Water Stagnet
Smoke
Smell
noise
0
5
10
15
20
25
30


Type of Structure of Shanty (Jhuggi)
80
70
60
50
40
30
20
10
0
Katcha mud & thatched roof
Khokha
Brick & mud wall asbestos roof
Pucca wall asbestos / tin roof

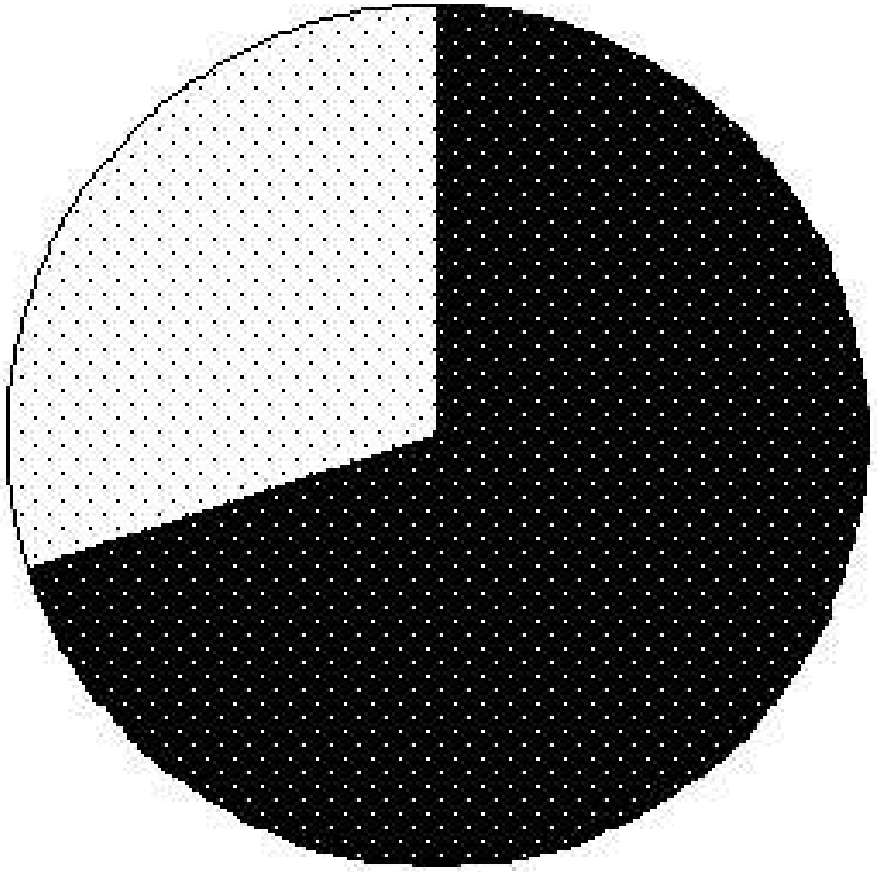

92.61%
1.97%
1.47%
3.97%

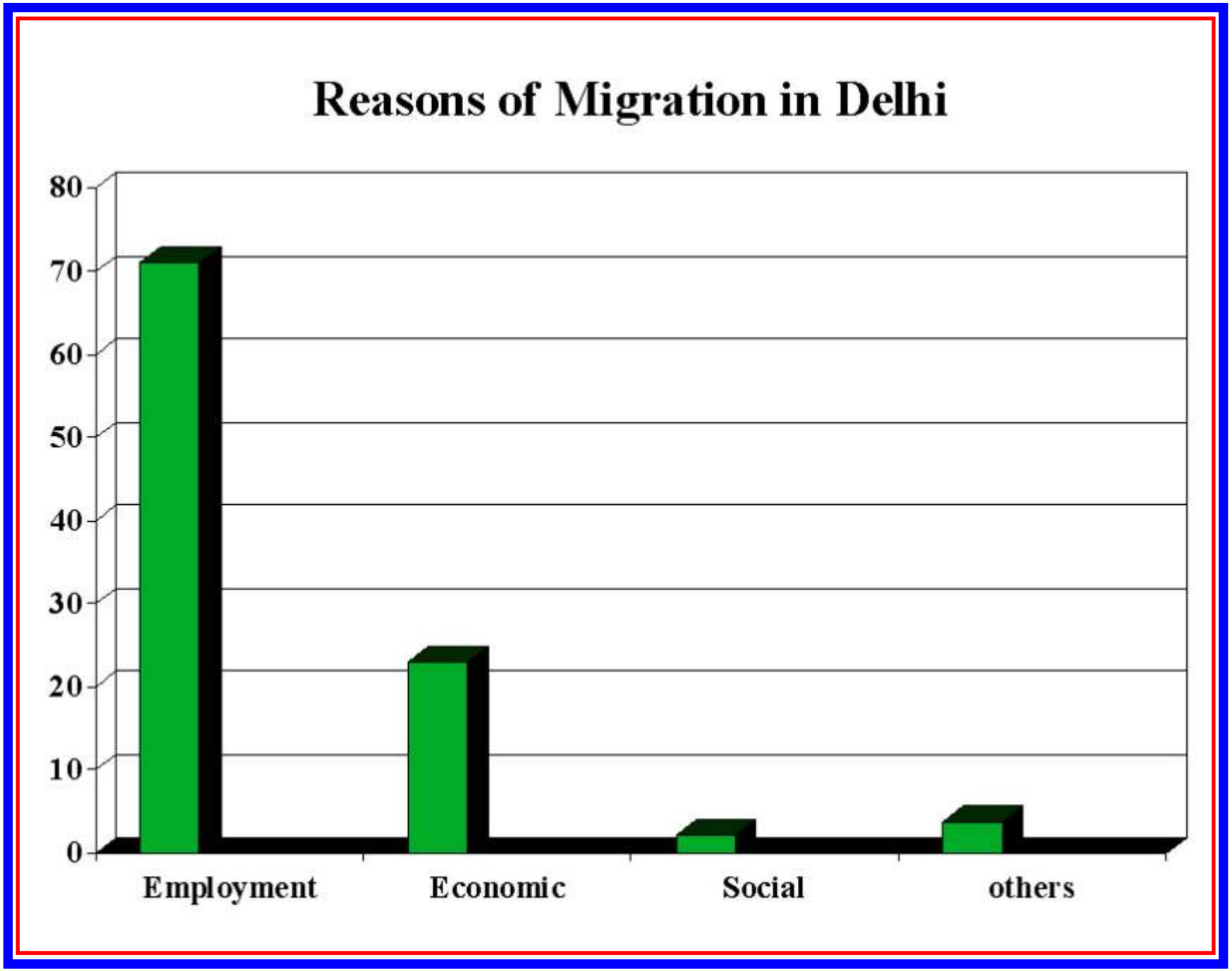

30
25
20
15
10
5
0
Malaria eradiction
Vaccination facility
Primary health Center
Mobile Dispensary
Private doctors
with in the cluster
on the Periphery of the Cluster

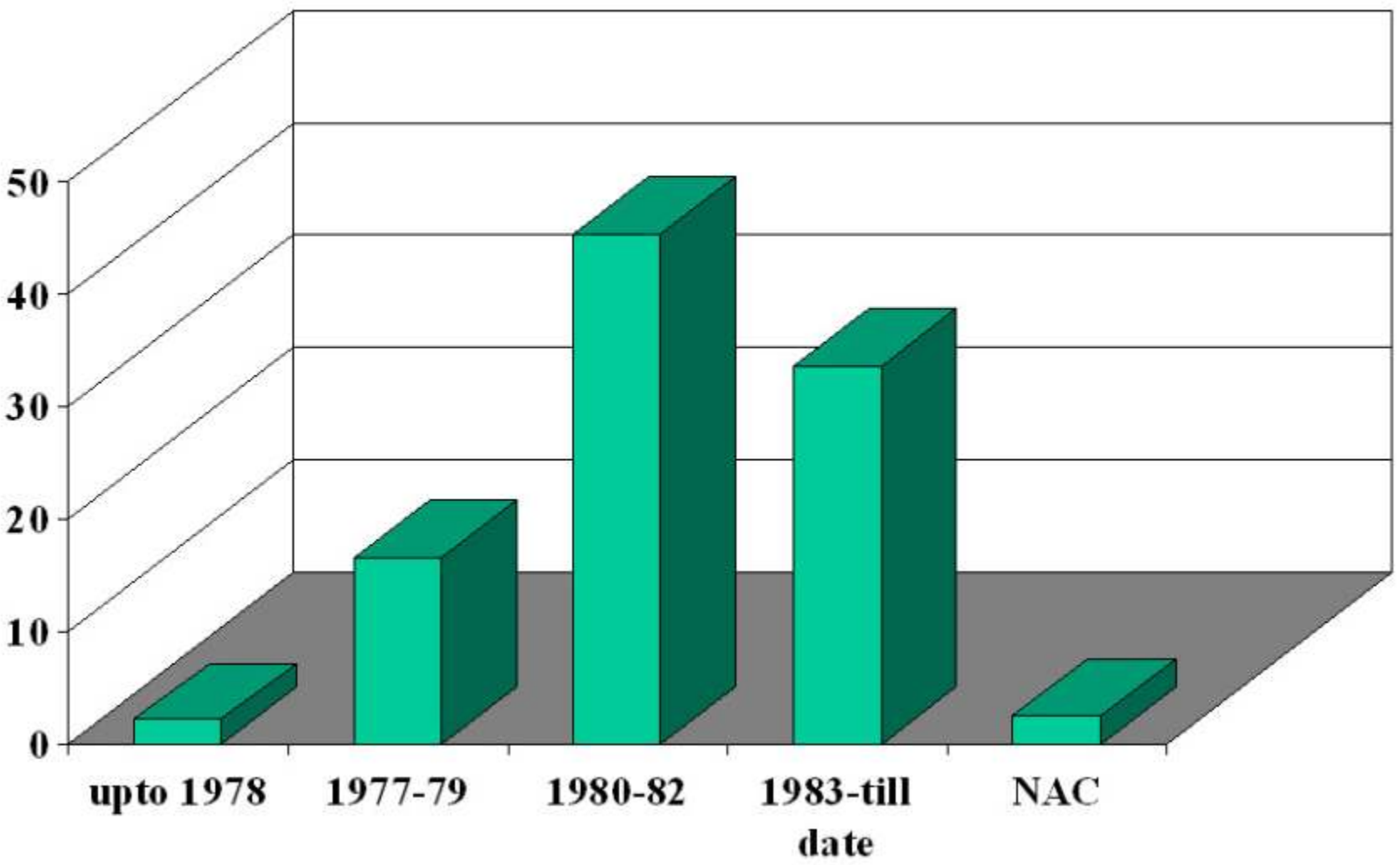
Size of Family (members) in 29 Sampled Clusters

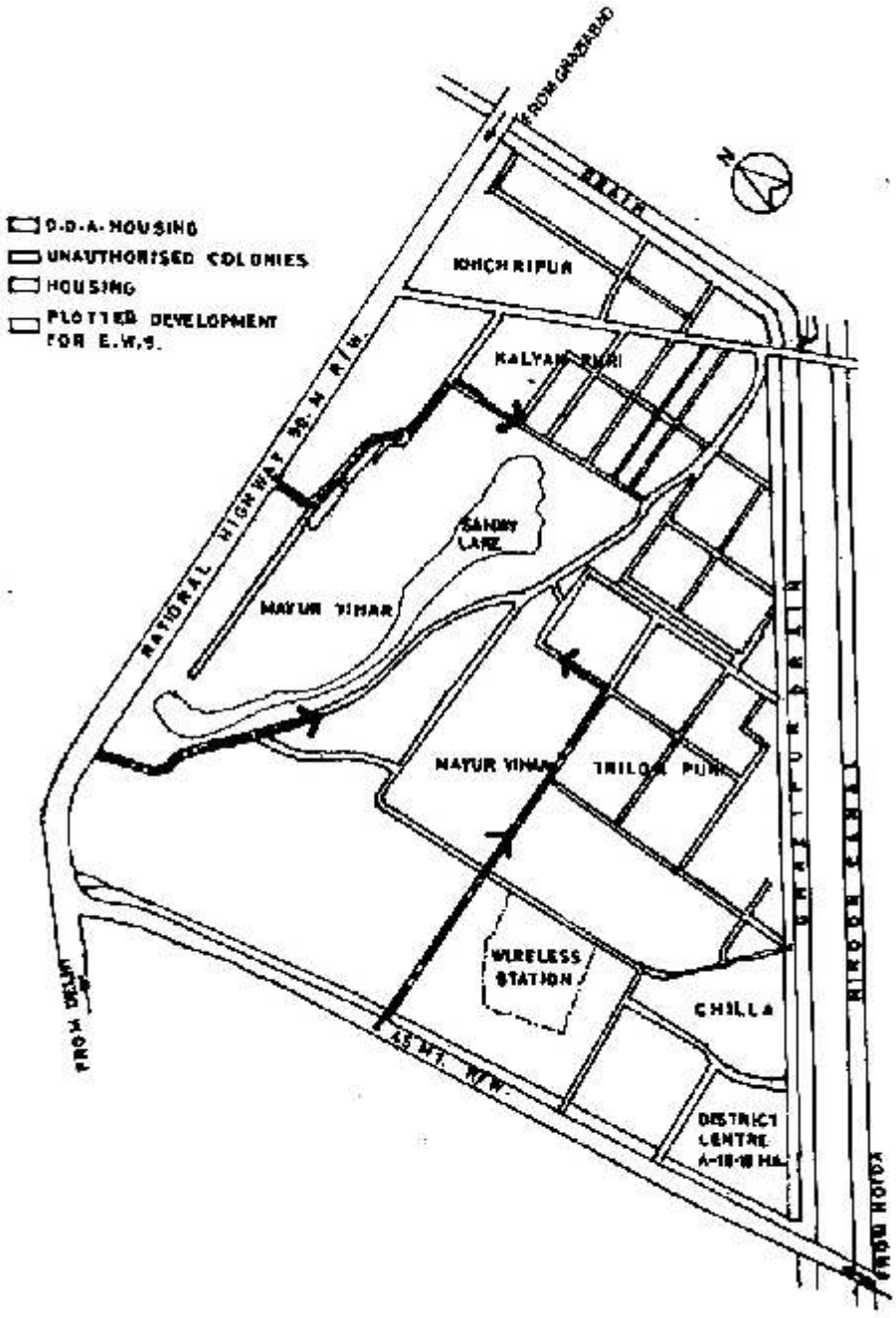


No. and %age of Earners in 29 Sampled Cluster

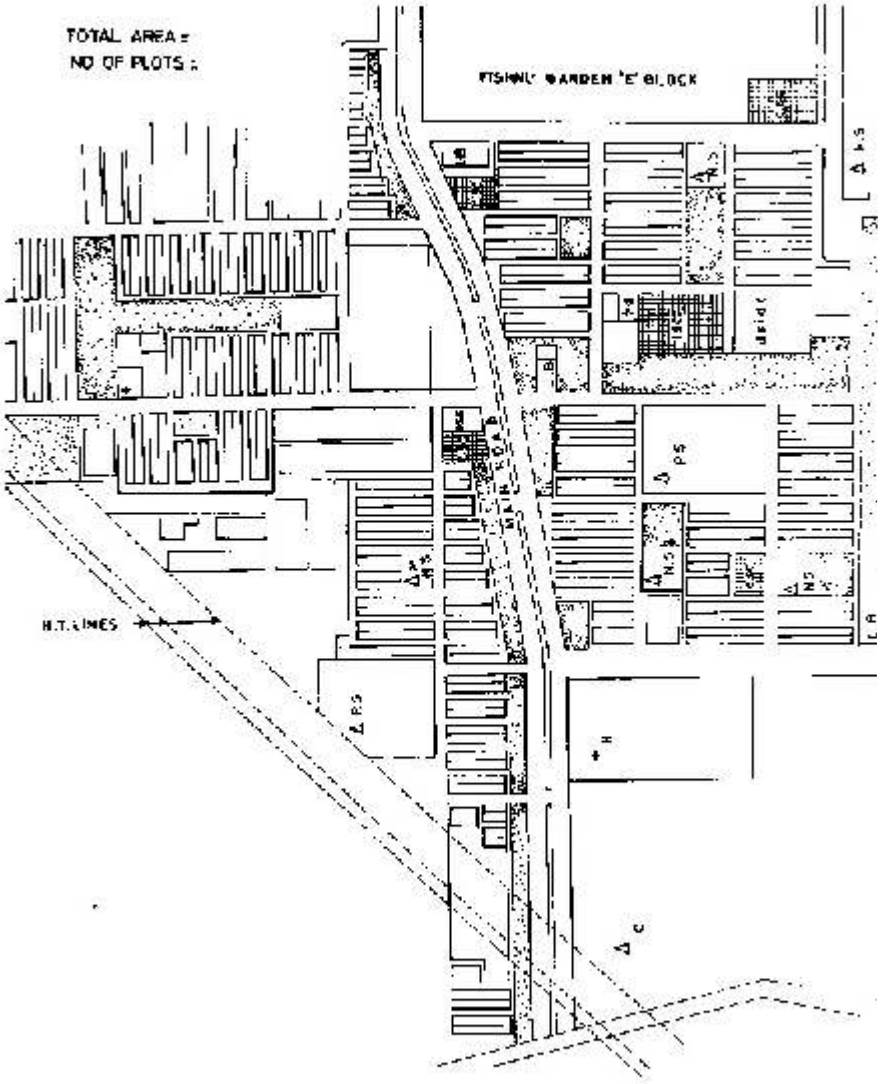



Reasons of Migration in Delhi
80
70
60
50
40
30
20
10
0
Employment
Economic
Social
others

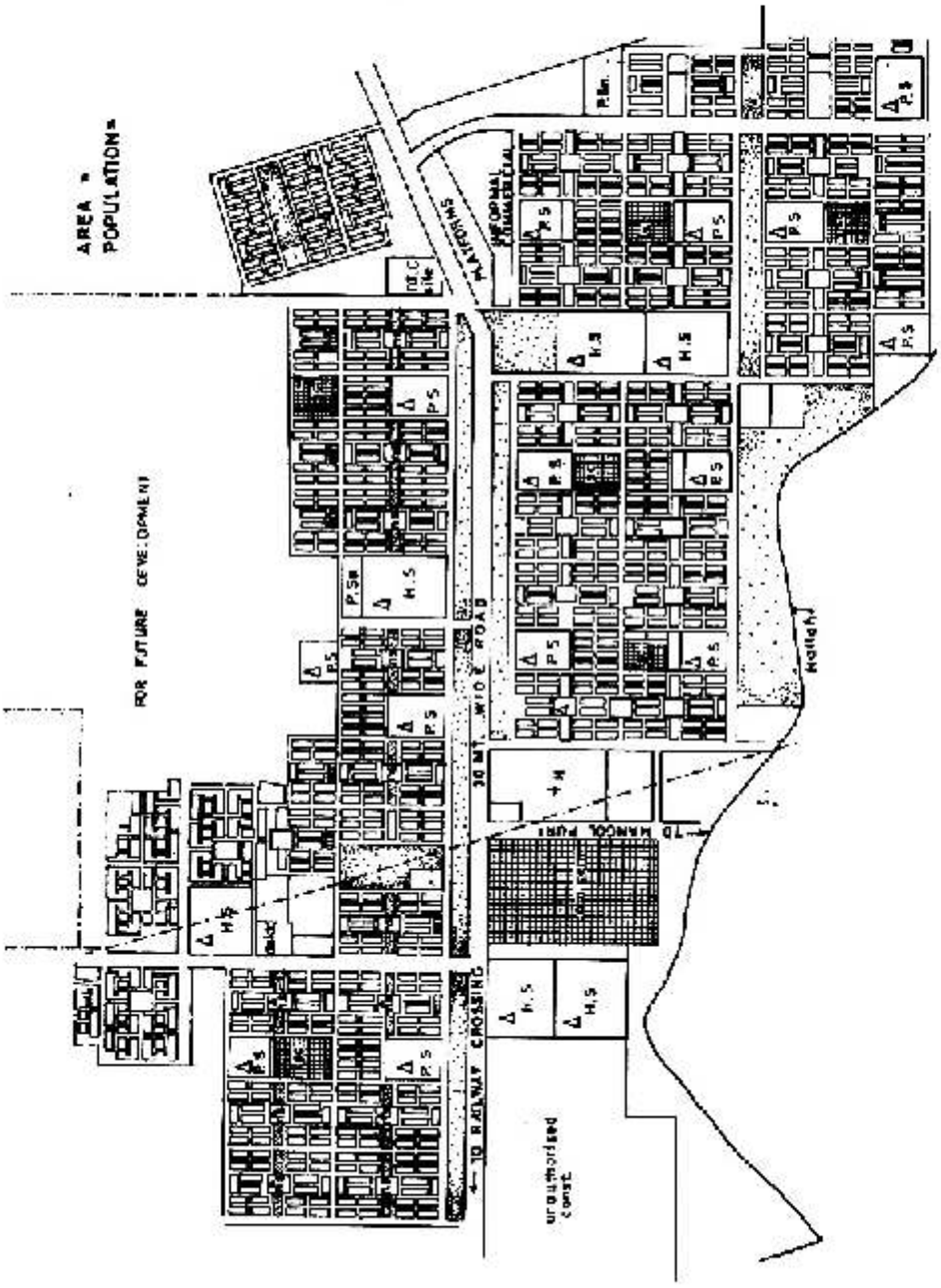

Year of Migration of Squatters to Delhi
50
40
30
20
10
0
upto 1978
1977-79
1980-82
1983-till date
NAC



MAP 34.3 : Patparganj Complex (Khichri Pur, Kalyan Puri, Trilokpuri and Himmat Puri)

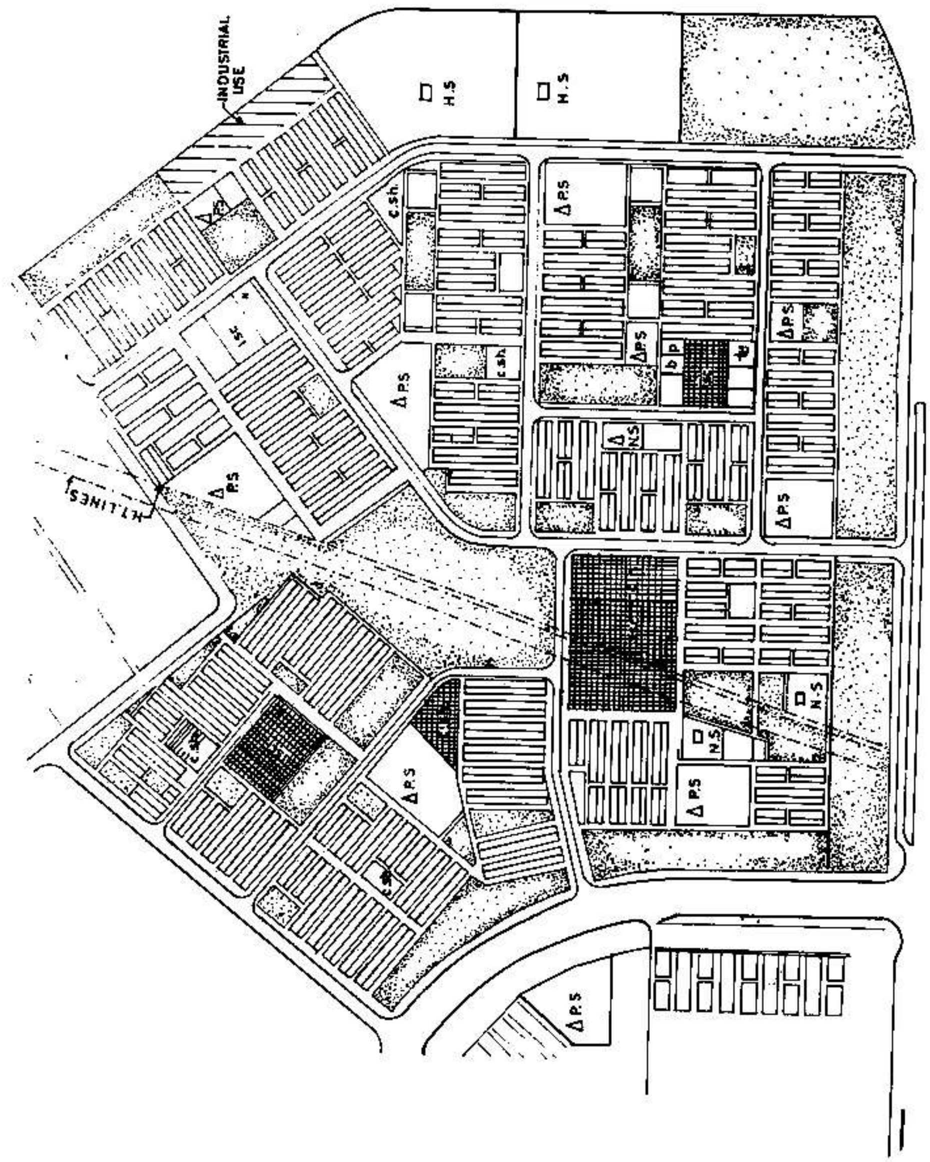


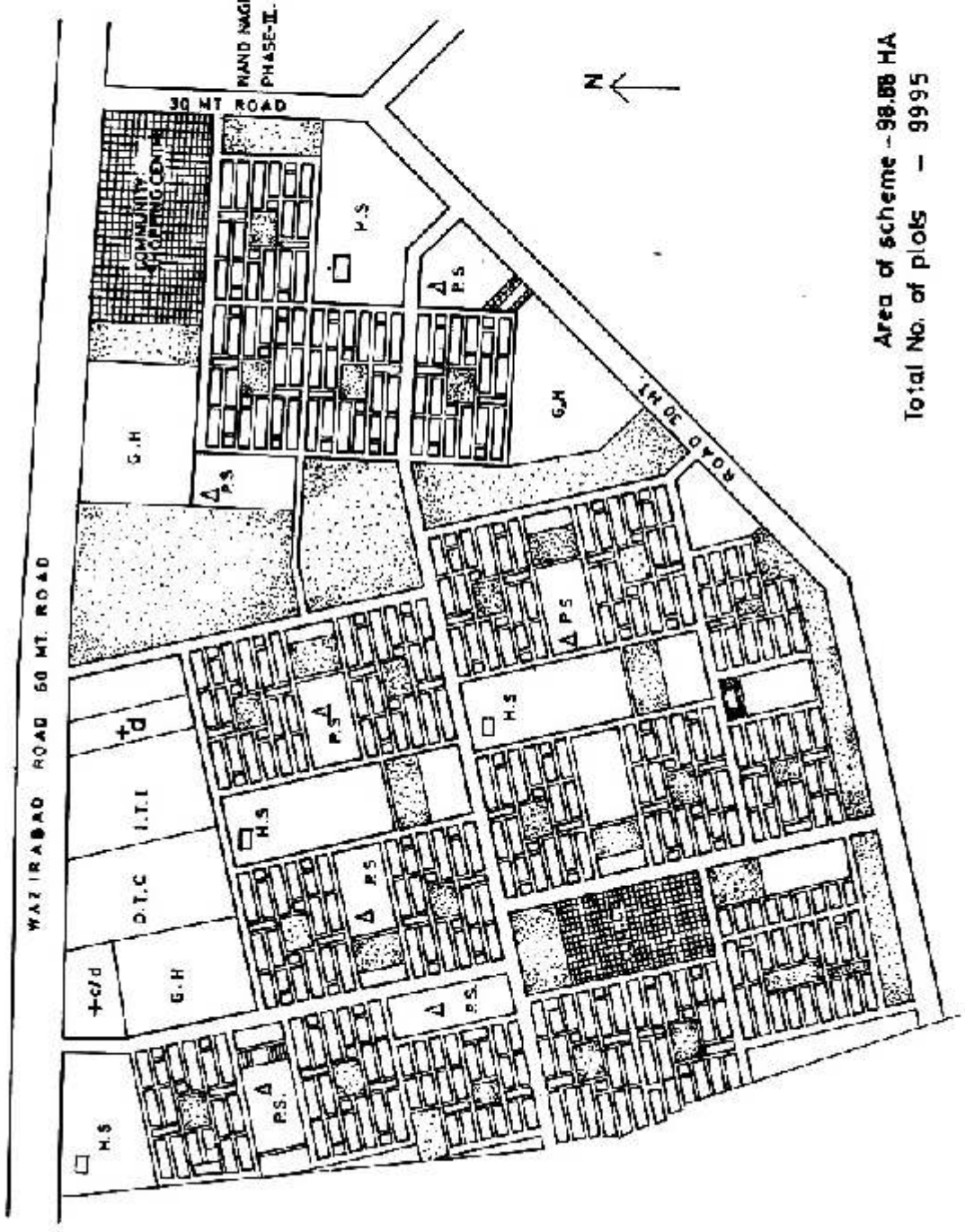
MAP 34.4 : Khyala Resettlement Colony



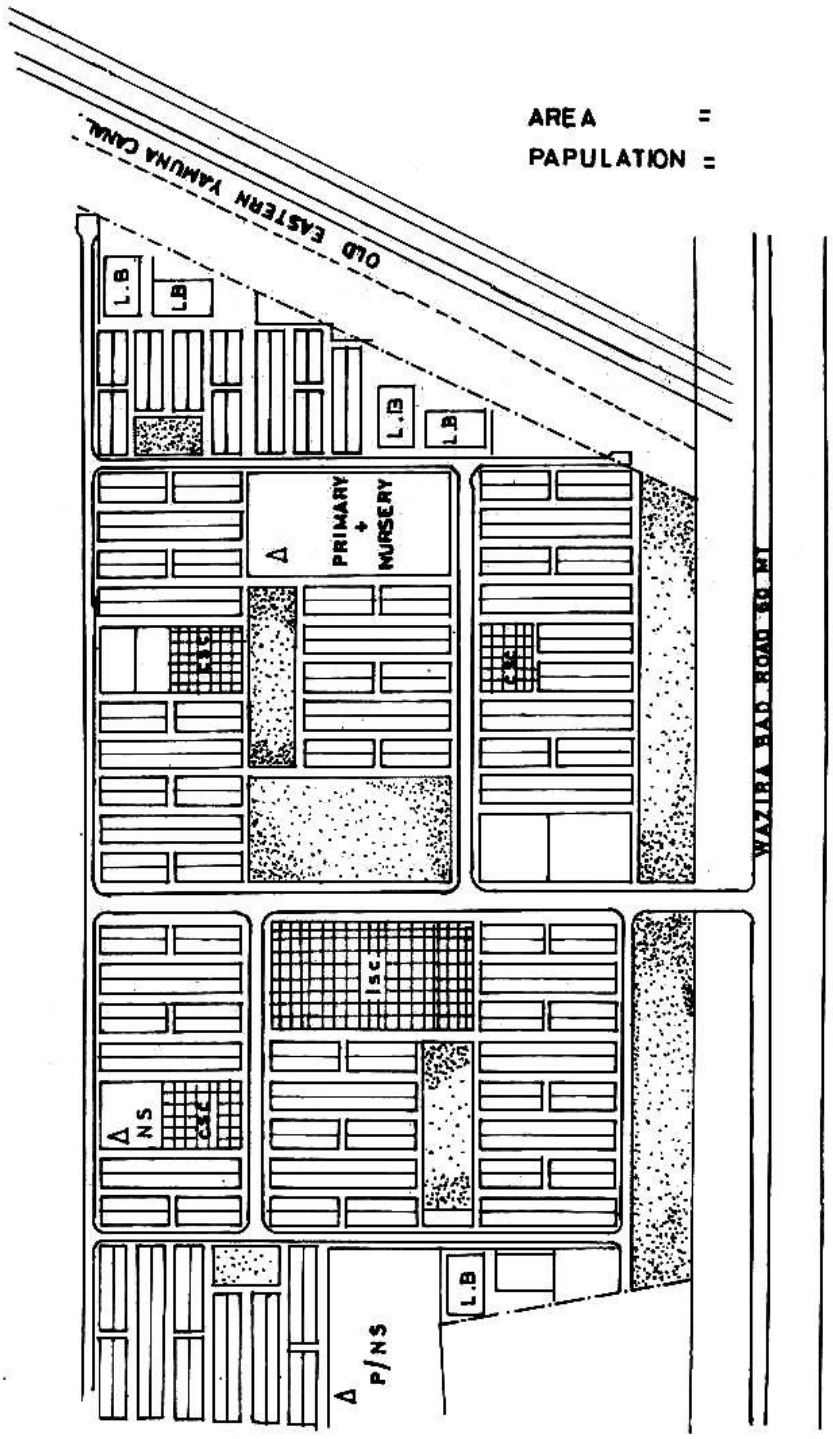
MAP 34.5 : Sultanpuri Resettlement Colony Delhi

MAP 34.6 : Shakarpur Ressettlement Colony Delhi

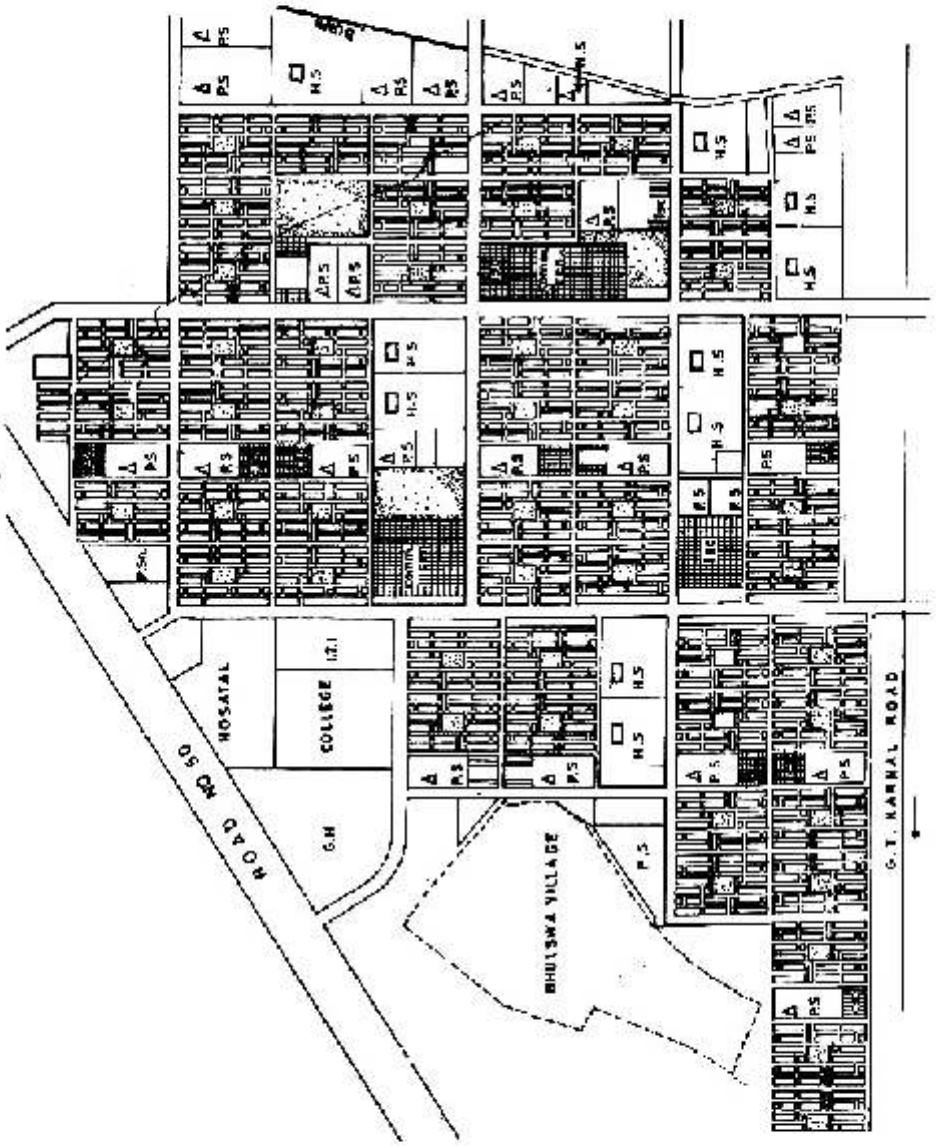




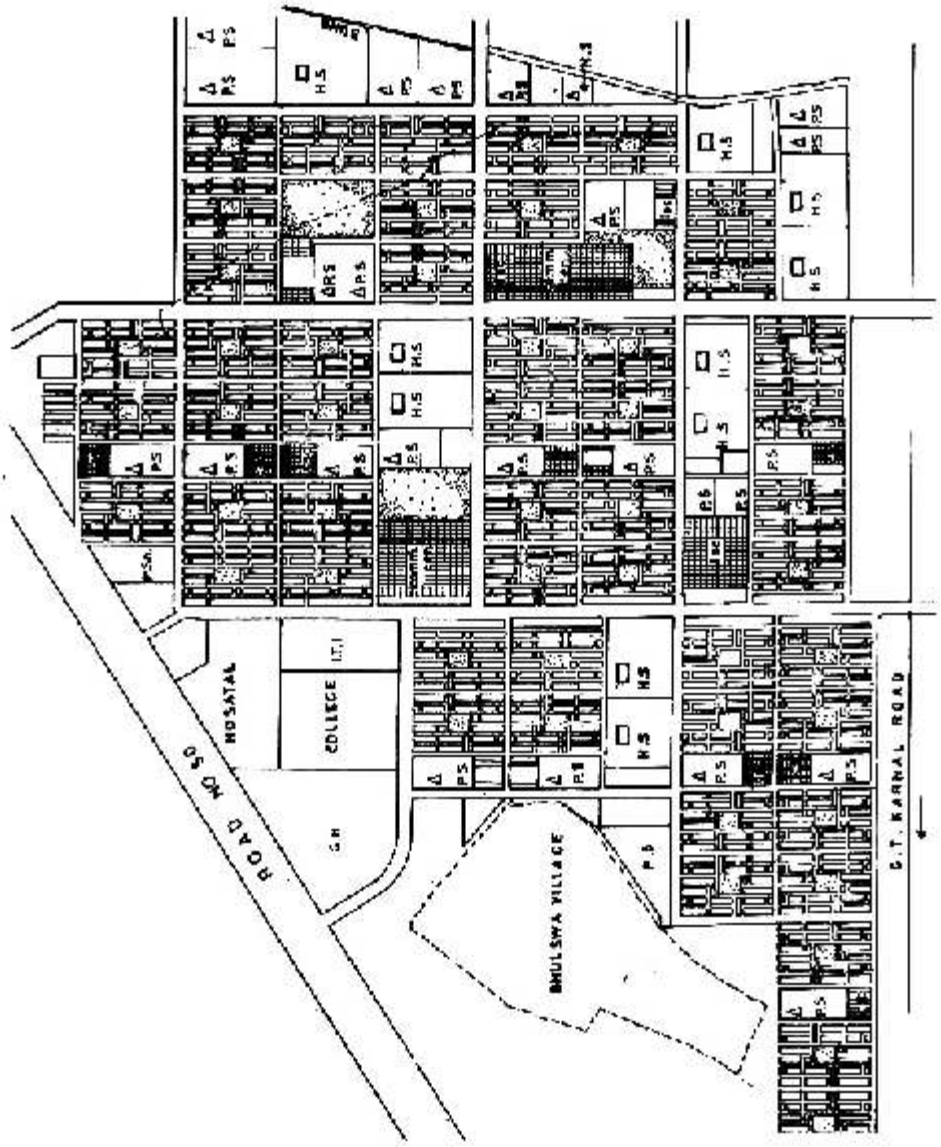
MAP 34.7 : Nand Nagri Resettlement Colony Delhi



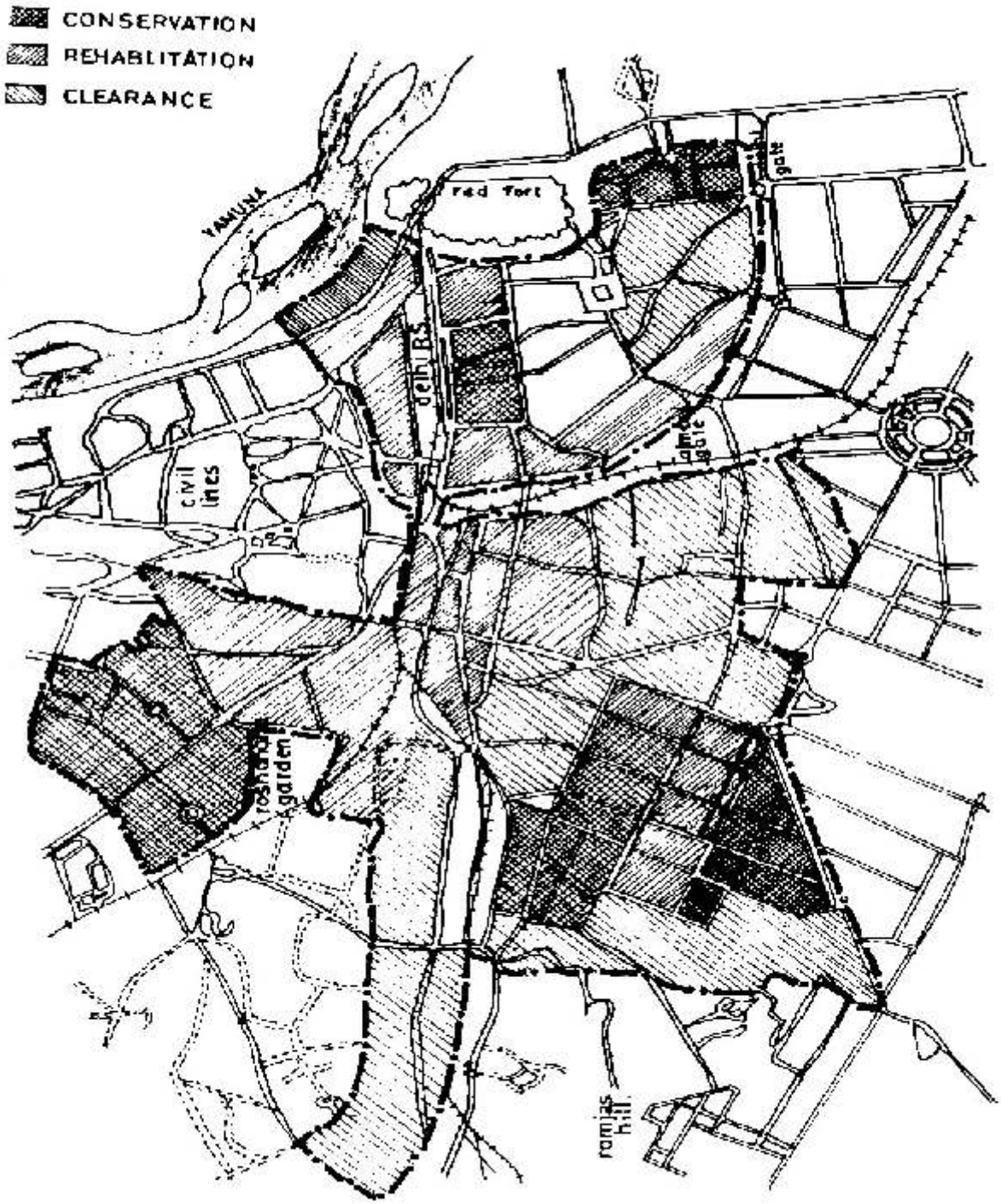
MAP 34.8: Gokulpuri Resettlement Colony



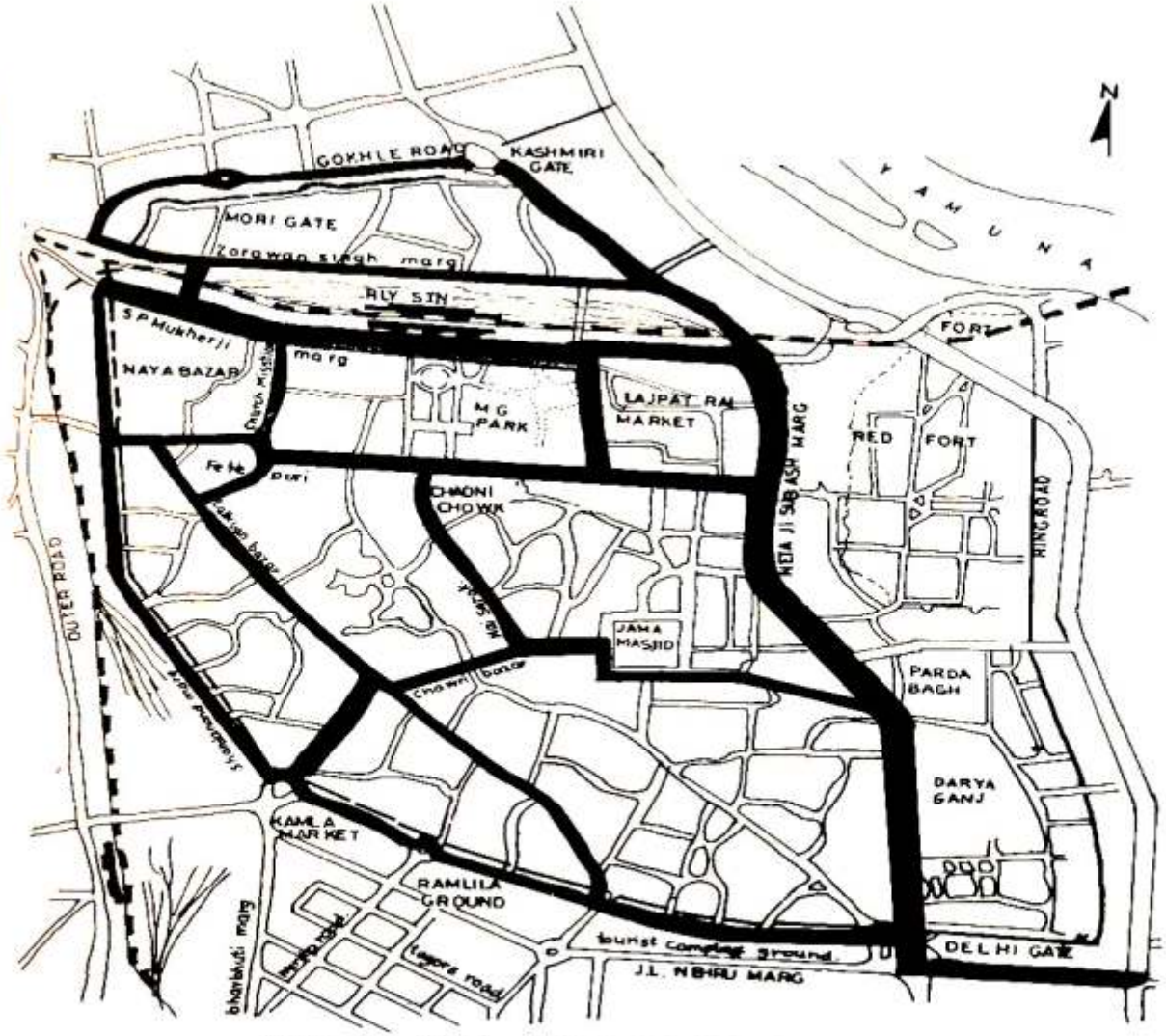
MAP 34.9 : Jahangirpuri Resettlement Colony



MAP 34.9 : Jahangirpuri Resettlement Colony



MAP 39.1 : Walled City of Delhi and Surroundings



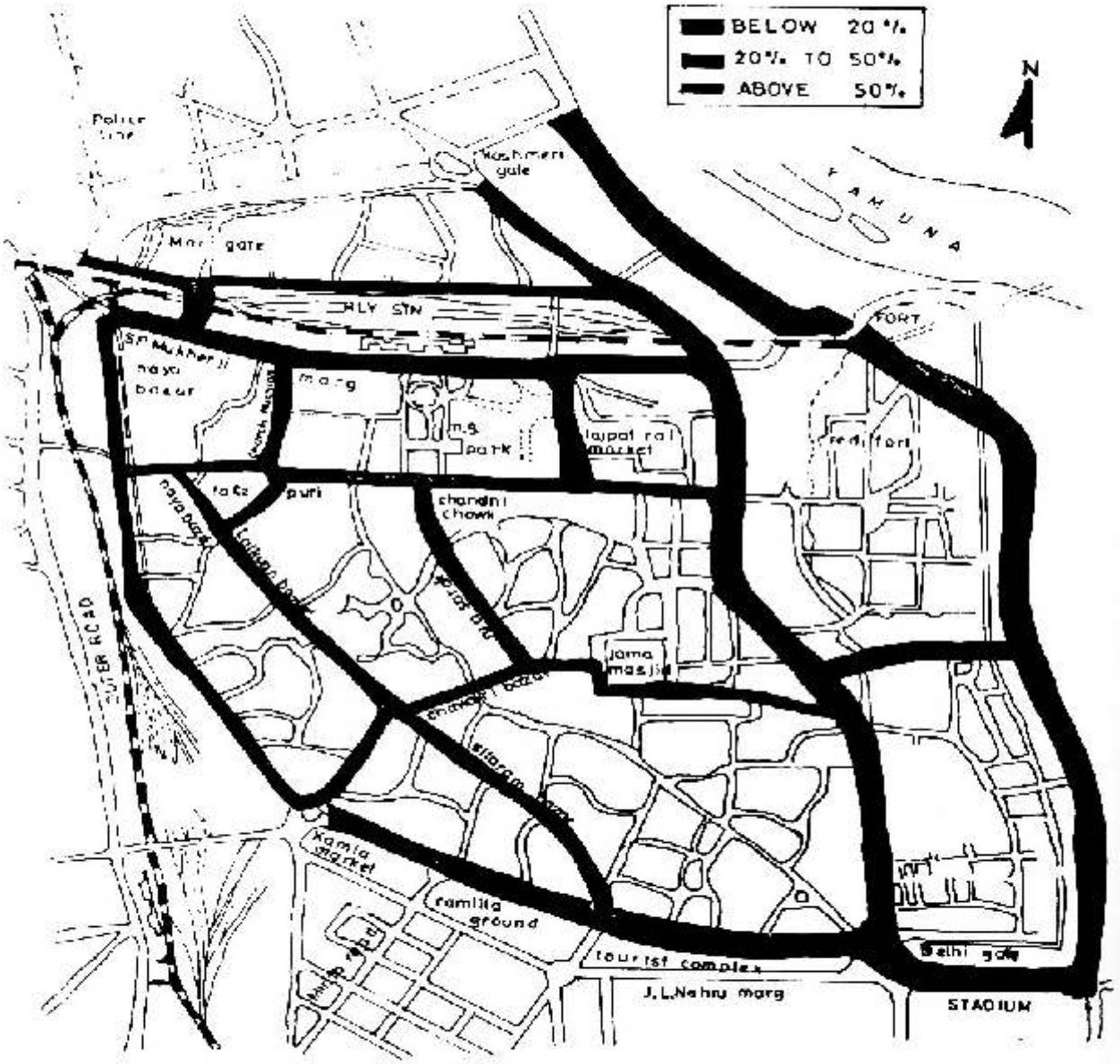
WALLED CITY AREA OF DELHI

LEGEND

- ABOVE 5000
- 2500 - 5000
- BELOW-2500

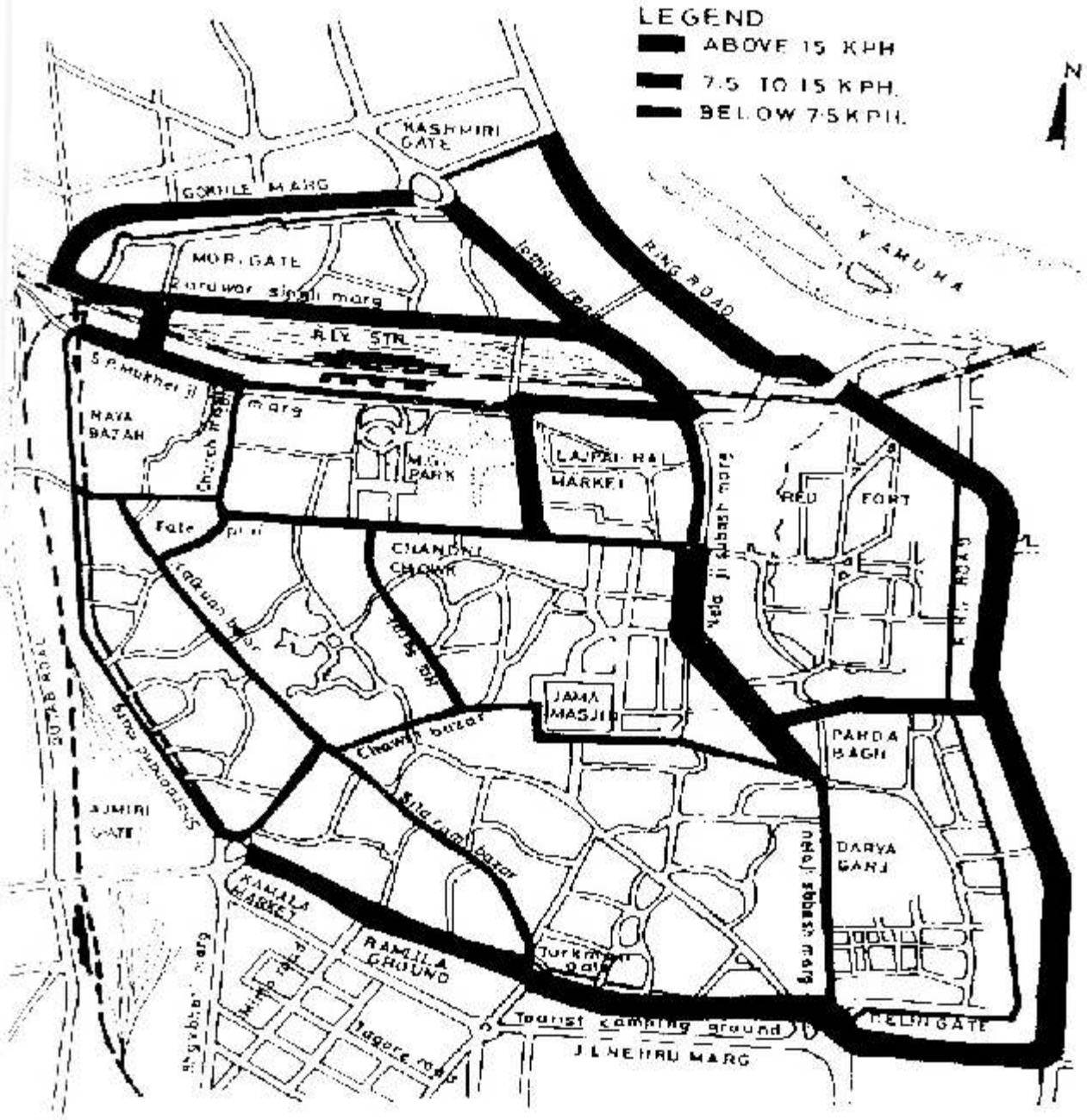
TOTAL PEAK HOUR VOLUME IN BOTH DIRECTIONS

MAP 39.2 : Classification of Road Network by Vehicular Volume



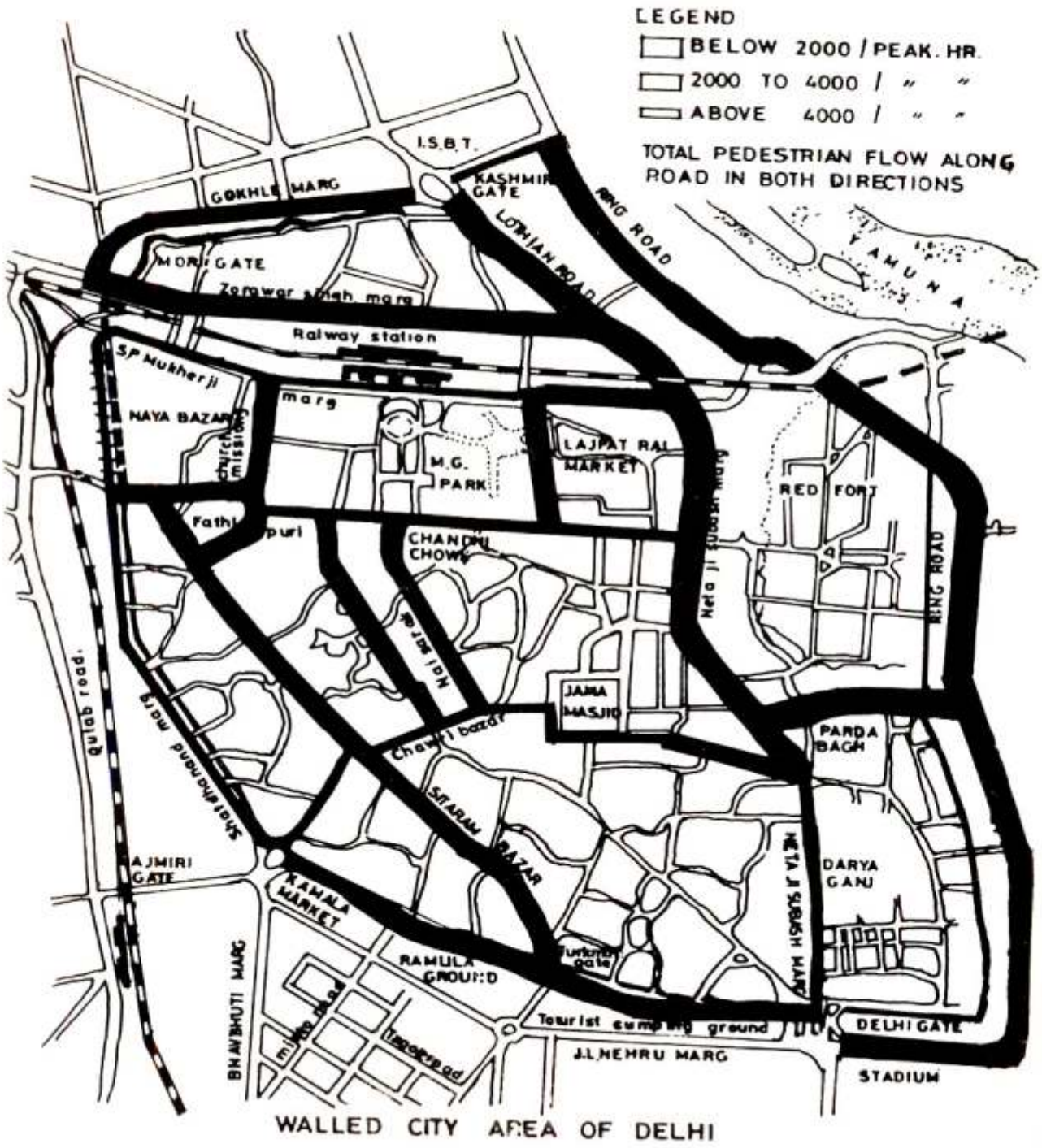
WALLED CITY AREA OF DELHI

MAP 39.3 : Classification of Road Network by Percent of Slow Vehicles



WALLED CITY AREA OF DELHI

MAP 39.4 : Classification of Road Network by Vehicular Journey Speed



WALLED CITY AREA OF DELHI