



Preparation of Local Area Plans: Pilot Project for Delhi, India

Final Report

Indo-USAID Financial Institutions Reform and Expansion Project—
Debt & Infrastructure Component (FIRE-D Project)

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DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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Abbreviations

| | |
|-------------|--|
| CTP | Chief Town Planner |
| DDA | Delhi Development Authority |
| DMC Act | Delhi Municipal Corporation Act |
| EFNRA | EFN Rebeiro and Associates |
| FAR | Floor Area Ratio |
| FIRE(D) III | Financial Institutions Reform and Expansion (Debt component) Third phase |
| JJ | Juggi Jhopdi (slum) |
| LAP | Local Area Plans |
| MCD | Municipal Corporation of Delhi |
| MPD | Master Plan of Delhi |
| NIUA | National Institute of Urban Affairs |
| PASPRA | Professionals and Service Providers Rating Agency |
| RWA | Resident Welfare Association |
| SPV | Special Purpose Vehicle |
| SWOT | Strengths Weaknesses Opportunities Threats |
| USAID | United States Agency for International Development |

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Executive Summary

The Municipal Corporation of Delhi (MCD) has been concerned about unauthorized and illegal development in Delhi and has been in the process of assessing approaches to deal with the issue. Two major causes were identified, the first being the complexity and irrationality of many building regulation provisions and secondly, the high incentive for illegal development - created partly by the demand-supply mismatch in the urban land market, but also due to fundamental flaws in the development controls of buildings.

The present building regulations in Delhi are not suitably nuanced to local context or ground realities. Making these practically enforceable would require area-specific building byelaws/development controls which take into account Delhi's diversities in a detailed manner. Formulating these require in-depth study, analysis and planning at the micro-level, which the present urban planning system does not provide for. The content of Master Plans and Zonal Plans are still too broad brush, pointing towards the need for a third level, referred to as Local Area Planning (LAP).

To address this situation, the MCD initiated a process of reform, which was taken up in three phases. In December 2003, MCD constituted a study group sponsored under the Indo-USAID FIRE (D) II Project and commissioned by the National Institute of Urban Affairs (NIUA), New Delhi. Key inadequacies in Delhi's existing building byelaws, the enforcement model and enabling legislation were identified. A Consensus Paper for amending the Delhi Municipal Corporation Act, 1957, and for framing new Building Byelaws for Delhi was prepared and circulated in a Consultative Workshop. It was recommended that the Building Byelaws document be restructured into three distinct sections under "Procedure Byelaws", "Performance Byelaws" and "Planning Byelaws", which need to be area-specific. Considering this, it was suggested that the MCD institutionalize a process for preparing and implementing Local Area Plans (LAP), wherein area-specific building byelaws and development controls would be formulated as part of a comprehensive and integrated LAP.

The second phase of work ended in July 2005 and consisted of:

- (1) Reformulation of the Building Byelaws
- (2) Formulation of Draft Guidelines for the Preparation of LAP
- (3) Drafting of Amendments to the DMC Act 1957, to enable the framing of new building byelaws as well as preparation of LAP. The enabling legislation for preparing Local Area Plans was drafted as a replacement for Chapter XXI of the DMC Act (currently dealing with "Improvement").

The third phase of work, which this report documents, was initiated in October 2005. The MCD proposed to institute a system for preparation of LAPs. The second and third phases of work were carried out under the sponsorship of the Indo-USAID FIRE (D) III Project.

A pilot project for establishing and demonstrating a system for preparation of LAPs was conceived as a continuation of the process of regulatory reform by the Municipal Corporation of Delhi. A consultant team led by Environmental Planning Collaborative (EPC), Ahmedabad, in association with Sudhir Vohra Consultants (SVC), Delhi, was appointed to conceptualize the initiative and facilitate its implementation by providing oversight. Based on this experience, the EPC-SVC team were to conceive a system for preparing such plans on a regular basis and put forward a proposal for institutionalisation – which involved revising guidelines for LAP preparation and outlining an institutional framework and capacity building needs for the same. This document captures the above process.

To start with, it was established that in any Local Area Plan, the prime objective is to prepare and implement "area-specific development controls and building byelaws" based on local needs, characteristics and context. On this basis, the content, scope, and methodology of preparing LAPs were broadly defined. Next, the consultants advised MCD on selecting appropriate areas for undertaking the preparation of model LAPs and delineating the boundaries for these. The five areas chosen for the pilot were:

- Sangam Vihar – an unauthorized colony
- Ballimaran – a heritage area, part of the "walled city"
- Yusuf Sarai – an urban village
- Vasant Vihar – a planned layout under redevelopment pressure
- Karol Bagh – a "special area" designated in the Master Plan for Delhi

The EPC-SVC team assisted MCD in the selection and appointment of consultants through due process. Finally three firms were chosen for preparing the five LAPs:

- Urban Planning Consortium (EFNRA & RCE) – for Vasant Vihar and Karol Bagh
- Feedback Turnkey Engineers – for Ballimaran and Sangam Vihar
- Ramky Infra Consulting Pvt. Ltd. – for Yusuf Sarai

The selected consultants were briefed on preparation of the pilot LAPs. Draft guidelines (prepared by EPC-SVC) prescribing a step-by-step process were issued, and a methodology workshop was conducted for training the consultants.

Thereafter, EPC-SVC assisted the MCD in supervising the LAP preparation process. This involved review of surveys, studies, analysis and plans prepared by the consultants, and providing technical/methodological inputs or suggestions where required. The initial stage of work consisted of precise delineation of LAP boundary, defining objectives, topographical and cadastral survey of the area, preparation of a detailed and accurate final base map, compilation of property database and structured public consultations. Public interaction was expected to generate a better understanding of ground realities, precipitate and resolve conflicts, understand people's aspirations, articulate a collective vision for the area, and later build consensus on area-specific building byelaws and related planning proposals.

These exercises were however hampered by the prevailing scenario of sealing and demolition of illegal/unauthorised properties in the city. These concerns led to consultants facing stiff resistance from occupants in carrying out the survey in some areas. Another important issue was with the cadastral database. For property data, the only readily available source was the property tax database of the MCD. However in places, this record was found to be inconsistent, outdated, or nonexistent or did not adequately capture the ground situation. Ownership or tenure issues were also unclear, particularly in the old city area, urban village and unauthorized colony. The survey and data collection were delayed considerably due to these difficulties faced on the ground and the fact that this nature of work was being undertaken for the first time. In the stakeholder consultations, response was muted, partly due to lack of awareness and partly due to the fear of issues related to illegal/unauthorized development. Some stakeholders were also under-represented.

The next phase of work involved studies and analysis of all physical and social characteristics of the LAP area - land uses, built-form, densities, infrastructure, road network and traffic, heritage, culture and overall character etc. These yielded interesting results and information on ground realities, discrepancies, issue, needs, etc. Based on this, as well as preliminary stakeholder consultations, the problems and potentials of each area were identified.

Of the five pilots, it was found that the conceptual proposals put forward by the consultants for Ballimaran and Sangam Vihar were fragmented, did not propose comprehensive

redevelopment strategies and simply lacked a systematic approach and analytical rigor. The volatile political environment had affected work in these areas. Moreover, given the nature of development, they were also complex and difficult to accurately document. The studies and analysis in these cases were severely constrained due to the inability of the consultants to produce a credible base map and database. Eventually, the LAP exercise in Ballimaran and Sangam Vihar had to be abandoned mid-way as the consultants withdrew from the project.

Conceptual Plans for the remaining three pilots were presented to all concerned representatives and after receiving comments, the consultants revised and submitted the Concept Plan Reports. The Draft LAP was then to be prepared detailing out project proposals, including schematic cost estimates for implementation, proposals for cost recovery and schematic financial structuring. At this stage, due to continuous delays in the work, it was decided to review the overall experience of the project and capture the learning in this process document. Currently, the Draft LAP for Vasant Vihar and Karol Bagh are in the final stages of submission to the MCD. The EPC-SVC team continues to give inputs to the consultants. The Draft LAP for Yusuf Sarai is yet to be submitted to the EPC-SVC team for review.

This document looks at three case studies and contains pithy extracts from the Draft Plan Report of the Vasant Vihar LAP and Concept Plan Reports of Karol Bagh LAP and Yusuf Sarai LAP. A brief description of each area, in terms of location, demography and socio-economic profile, nature and intensity of development, urban structure - land use and road network, built typologies, height/bulk etc, key issues emerging from surveys and public consultations, as well as broad strategies and recommendations provided the by consultants in each case, are given.

The process of facilitating preparation of the LAPs has been rich in learning at various levels. The constraints and problems encountered in the process and lessons learnt are reviewed in this document. Key issues that affected the process including the changing political environment, lack of institutional capacity in the MCD for urban planning functions, and inadequate vendor development are discussed.

There has also been considerable learning about the nuances of the local area planning process and the content of LAPs. The experience and problems encountered while undertaking the preparation of base maps and stakeholder consultations is discussed. Based on these insights, alternatives approaches or specific suggestions to counter some of these issues are put forward. Adapting guidelines and the methodology for LAP preparation is discussed covering the issues of proper delineation of LAP boundaries, base map preparation, stakeholder consultation, and conceptualization of interventions. Where and how the LAP fits into Delhi's three-tiered planning process, its scope and limitations are also detailed.

For Delhi's three-tier planning system to be effective, all the levels need to be integrated and comprehensive in nature, with the lower levels conforming broadly to the intent of the higher levels. They will, however, differ in the degree of detail and the flexibility of proposals in the next level of planning, during implementation. Thus the vision for the city's overall structure and form is enshrined in the Master Plan and taken towards implementation in the Zonal and Local Area Plans by further detailing, refinement and where needed, change.

Managing the external environment is crucial. This may include taking the larger political process into account, establishing modern procedures for commissioning and managing such planning exercises on a regular basis, carrying out a formal vendor-development process including perhaps training and certification, undertaking a systematic exercise for delineation of LAP boundaries, etc. Considering that accurate, detailed and legally sanctified maps and databases documenting ground realities are critical for effective and meaningful Local Area

Planning, it may be a good idea to separate the preparation of cadastral base maps from the LAP exercise. As the official face of governance at the local level, stakeholder consultation processes need to be led by the MCD and legitimate platforms, such as Resident Welfare Associations, which may be officially recognized for this purpose. The hierarchical structure of planning from Master Plan to LAP has to be cast clearly in legislation and procedure in order to determine the appropriate amount of control and flexibility at each level.

The case for institutionalizing Local Area Planning has been put forward in this document and the three-tier planning system is conceptualized. The need for a third level of urban planning is emphasized by looking at the shortcomings of the existing system and the inadequacy of the Delhi Master Plan and Zonal Plans to respond effectively at the local area level.

Based on the experiences of the pilot project, revised guidelines have been prepared, which will set a methodology and process to be followed to prepare future LAPs. It is reiterated that the vision and objectives of a LAP must be coherent with the Master and Zonal Plan. The size or boundary of a LAP area may be delineated based on the extent and nature of development and complexity of issues involved. The revised guidelines have been included at the end of this document and the process is captured in three broad phases – Preparatory Works, Studies and Analysis, Urban Planning and Urban Design Proposals.

One of the most important achievements of the initiative was the emerging consensus among all three governments – the MCD, Government of the National Capital Territory of Delhi, and GOI – recognizing the LAP as the only rational way of accommodating both citizen views and real estate market needs in a realistic urban development strategy at the local level. Recent events like the revision of the Master Plan for Delhi and the anticipated amendments to the law have significantly increased the relevance of the LAP concept promoted through this initiative. Provisions of the revised Master Plan have not only legitimized the concept of Local Area Plans, but also offer many urban planning opportunities for using the LAP as a significant and powerful tool for the realization of the Plan's objectives. Proposed amendments to the DMC Act have been steadily moving ahead in the due process for legislation and are now in the final stage. A small but significant change made to the draft amendment is the possibility of Resident Welfare Associations preparing the LAP and presenting it to the MCD for consideration and sanction. Amending the DMC Act to enable LAP preparation is an extremely important step in the right direction. However, it is equally important that the urban planning system established by the DDA Act is also amended to institute LAP as the legitimate third level of planning.

CHAPTER 1 Background and Context of the Project

The Municipal Corporation of Delhi (MCD) has been concerned about unauthorized and illegal development in Delhi and has been in the process of assessing approaches to deal with the issue. Two major causes were identified, the first being the complexity and irrationality of many provisions of the building regulations and the second being the high incentive for illegal development created by fundamental flaws in the development controls (height and bulk of buildings). While the first cause is being addressed through a revamping of the building regulation system, the second needed to be addressed through an intervention in the urban planning system.

The demand-supply mismatch in the urban land market of the city has been identified as one of the causes for this. The shortage in supply results in high property prices, increasing the incentive for illegal development. Moreover, the “illegal” or “unauthorized” status of large number of properties prevents the Government and infrastructure service provider agencies from providing municipal services to such developments and securing revenues such as stamp duty, taxes and user charges from the owners and users.

Of the total geographical area of 1483 sq. km. as per 1999 IRS satellite data, 701 sq. km. is urban. Adding another 115 sq. km. of Dwarka Phase II, Narela and Rohini Sub-city, the total urban area of Delhi is around 816 sq. km. as per the following break-up.

| | Area | Area (in sq. km.) |
|---|----------------------------------|-------------------|
| 1 | Municipal Corporation of Delhi | 431.00 |
| 2 | New Delhi Municipal Council | 42.74 |
| 3 | Delhi Cantonment | 42.97 |
| 4 | Notified Development Area of DDA | 300.00 |
| | Total | 816.71 |

Delhi’s “urban fabric” comprises of the following distinct typologies:

Organically evolved settlements

- Urban villages – for example, Shahpur Jat, Masjid Moth, Kotla Mubarakpur, etc.
- Walled city – Shahjahanabad.
- Urbanizing rural villages – for example, Ghitorni, Chattarpur, etc.

Planned developments

- Delhi Cantonment
- Lutyen’s Bungalow Zone
- Commercial/business areas – for example, Nehru Place, South Extension Market
- Residential areas
- Plotted/low-rise buildings – for example, Ashok Vihar, Sarita Vihar, etc.
- High-rise buildings – for example, Mayur Vihar, Dwarka, Indraprastha Extension
- Industrial areas – for example, Okhla Industrial Area, etc.
- Transport infrastructure areas – for example, Metro Rail Corridor, flyovers, etc.

Spontaneous developments

- Mixed use areas – for example, Karol Bagh, Paharganj, etc.
- Unauthorized colonies – for example, Khirkee Extension, Sangam Vihar, etc.
- Squatter settlements

Monuments/heritage areas

- Historic areas - for example, Purana Qila, Humayun's Tomb, Mehrauli, etc.

As per the 2001 Census, the number of households in Delhi was 25,54,149. With 4.5 lakh premises assumed to be under non-residential uses (commercial, offices, industrial, institutional etc.), there may be about 30 lakh properties in Delhi, falling in the category of “planned” and “unplanned” areas or old settlements.

The “unplanned settlements/old areas” may be accounted for as follows:

| | Area | Area (in ha) | No. of Households |
|---|--------------------------------|--------------|-------------------|
| 1 | Old City/Special Area | 2600 | 2.6 lakhs |
| 2 | 150 Urban Villages | 2500 | 2.1 lakhs |
| 3 | 2300 Unauthorized Colonies | 9000 | 6.4 lakhs |
| 4 | 1200 Clusters/J.J. Settlements | 1000 | 5.0 lakhs |

Except for 50 villages and 238 unauthorized colonies, these fall within the jurisdiction of the Municipal Corporation of Delhi.

1.1 Planning and regulation in Delhi – key issues

Unplanned non-residential uses in predominantly residential areas have resulted in serious land use compatibility issues in different parts of the city. While prima facie, this appears to be a simple matter of compliance, the fact that it has been happening over a period of time and in many parts of the city, points to systemic flaws that need to be addressed.

It has also been pointed out in recent times that the provisions of some zonal plans contradict and supersede previous ones. Moreover, a recent Government of India notification refers to the preparation of Local Area Plans (LAP). This is the third tier of planning for the city (included in the amendments to the DMC Act), which has not been given legal status as yet.

Rectification of this anomalous situation has been severely constrained by various factors such as multiplicity of laws, authorities and their overlapping jurisdictions, poor quality of maps and base data on the existing development, lack of application of modern and high quality professional planning methods and the inadequacy of stakeholder participation and ownership of the planning process.

1.1.1 Building regulation system

The building regulation system in Delhi is severely stressed. The key urban governance issue is enforcing compliance to urban laws dealing with misuse of designated land use, building more than permitted, corruption and abetting violation and unauthorized occupation of Government lands.

The prime reason for this situation is the complexity of procedures and building byelaws as well as poorly defined roles and responsibilities. Besides, the byelaws are not suitably nuanced to local context and become irrelevant to special areas such as urban villages, specially notified zones, slums, etc. The enforcement agencies do not have the capacity to ensure compliance and professionals do not share responsibility for enforcement.

While these issues warrant a revamping of the regulatory system, it was also deemed necessary to reduce the incentive for violation by ensuring that the supply of legitimate real estate keeps pace with demand in a sustainable manner and by ensuring that development controls at the micro-level are responsive to the context. Since development controls fall in the domain of urban planning, it was necessary to take a look at the planning system.

1.1.2 Planning system

The planning system of Delhi consists currently of two levels of planning – the Master Plan of Delhi and Zonal Plans. The Master Plan deals with the city as a whole and lays out the broad land use and transportation structure. In other words, it specifies land use zoning, road network and development controls. This is a broad brush, macro-level plan. At this scale, the perspective is citywide, which renders it difficult for the Plan to respond to micro-level imperatives of real estate demand, people's aspirations and physical constraints and potentials. The Zonal Plans are expected to detail out the Master Plan. However, of the 16 zones delineated for planning, zonal plans have been 'sanctioned' for only six. Moreover, the content of the Zonal Plans is still too broad brush to address the need for context specific development controls. This situation pointed towards the need for a third level of planning, hitherto referred to as Local Area Planning.

1.1.3 Institutional framework

Multiplicity of organizations – The Delhi Development Authority (DDA) has been mandated to plan for the city, while the MCD implements the plan. The MCD has very little ownership or involvement in the planning process and the DDA's approach to Master Planning does not incorporate modern methods of planning or respond to the existing status of development. While the MCD is mandated to implement the Master Plan, land is under the purview of the DDA.

Delhi being the capital city, the involvement of the central government, the state government (mandated with many duties but limited powers for urban development/regulation) is of little concession to the situation.

1.2 MCD's initiative for reforming the system for building regulation

Though the entire regulation system seems to be dysfunctional, most problems stem from inadequate building byelaws and ineffective enforcement both being rooted in inadequate legislation. Realizing this, MCD initiated an exercise to amend its Municipal Act and rewrite its building byelaws.

MCD took up the reform in three phases, starting with a Consensus Paper reviewing the Delhi byelaws in 2004. In the second phase, ending July 2005, MCD drafted revised Building Byelaws and amendments to the DMC Act, 1957. In the third phase, which this report documents, the MCD proposed to establish a system for preparation of LAP and a SPV for chartering professionals.

1.2.1 Phase I – Policy agenda and legislative intentions

In December 2003, the Municipal Corporation of Delhi constituted a study group sponsored under the Indo-USAID FIRE (D) II Project and commissioned by the National Institute of Urban Affairs (NIUA), New Delhi. This study group identified the key inadequacies in Delhi's existing Building Byelaws and the enforcement model. The causative inadequacies in the enabling legislation were also identified.

A Consensus Paper for amending the Delhi Municipal Corporation Act, 1957, and for framing new Building Byelaws for Delhi was prepared and circulated in a Consultative Workshop. The paper observed that the existing regulation is not sensitive to local context, and emphasized that all parts of the city cannot have identical regulations.

Specifically, the paper stated the following¹:

The Building Byelaws document should be restructured into three distinct sections – Procedure Byelaws, Performance Byelaws, and Planning Byelaws.

Procedure Byelaws need to be simpler. Roles and responsibilities of all agencies involved need to be clearly defined and compliance responsibility shared among them. Performance standards should specify only what affects the public domain. Planning Byelaws should be area-specific. To prepare area-specific building byelaws, MCD should institutionalise a process for preparing and implementing LAP.

1.2.2 Phase II – New regulatory framework for building regulations in Delhi

Continuing the reform process, MCD proceeded to Phase II of the project, sponsored under the Indo-USAID FIRE (D) III Project. This phase of work consisted of (1) Reformulation of Building Byelaws, (2) Preparation of Draft Guidelines for Preparation of LAP, and (3) Drafting of Amendments to the DMC Act, 1957, to enable the framing of new Building Byelaws as well as preparation of LAP. About the same time, the MCD also commissioned the preparation of a business plan for a special purpose vehicle for listing and chartering professionals.

Proposed Amendments to the Delhi Municipal Corporation Act

Following the review of the legal and institutional framework and preparation of the policy agenda and intentions, the following amendments were proposed to the Delhi Municipal Corporation Act, 1957:

- Chapter III (functions of the Corporation) section 42 was amended to include preparation of Municipal Area Plans and regulating of development within the jurisdiction of such plans.
- Substantial portions of Chapters XVI, XXI and section 113 of Chapter XV were replaced as follows:
 - Definitions have been clarified so that there are no built-in conflicts.
 - The jurisdiction of the municipal area plans, preparation of plans at various scales, timelines, etc. have also been clearly outlined.
 - The section on preparation of plans for development, redevelopment and urban renewal has been based on the land reconstitution model practiced in Gujarat and Maharashtra.
 - Provisions empowering the Corporation and procedures and protocols for obtaining development permissions have been detailed out.
 - Conservation of heritage areas has been addressed.
 - A system for accrediting professionals has been laid out.
 - Enabling provisions for constituting a Municipal Building Tribunal have been included.
 - Transition arrangements for the interim period before shifting to the new institutional arrangements have also been specified.

Redrafting the Building Byelaws for Delhi

Delhi's Building Byelaws were framed in 1983, twenty years ago. Since they were framed building technology has significantly changed; population pressure on the existing building stock has increased; rising aspirations and requirements have brought redevelopment pressures to the forefront; new types of building uses and activities have emerged; and, the

¹ Bimal Patel, R.M. Kapoor, et al; "Policy Agenda and Legislative Intentions for Replacing the Chapter on Buildings and Other Relevant Chapters in the Delhi Municipal Corporation Act, 1957 and for Framing New Building Byelaws for Delhi".

role of developers in building provision has enlarged. In addition, concerns such as: heritage protection; need for community control over neighborhoods; ecological sustainability; access for the disabled; and the importance of seismic safety have also come to the forefront. Moreover, the need for more decentralized governance and the need for increased participation of civil society institutions in governance are also now felt more acutely. Delhi's Building Byelaws are framed along with its Master Plan. Since no mechanism for periodic, comprehensive, interim review and revision exists, the 1983 Building Byelaws have not been comprehensively updated.

Delhi, like all cities, consists of very diverse neighborhoods; for example: the walled city, urban villages, New Delhi, planned developments, industrial areas, cantonment, slum colonies etc. This diversity is crucial to making Delhi function. It cannot, and should not be wished away or eliminated. Despite this, the present system of regulating building construction, with a few exceptions, seeks to impose a uniform set of building byelaws over the entire Master Plan Area.

In view of this ignoring of ground realities, it is not surprising that enforcement of building byelaws is extremely difficult. It is also not surprising that the public views the present set of byelaws to be unfair or irrelevant. Making byelaws practically enforceable will definitely require area-specific building byelaws which take into account Delhi's diversities and their ground realities in a very detailed manner.

The Building Byelaws have been re-written. They have been simplified and divided into three sections with sub-components as follows:

- a. **Procedure Byelaws** - Roles and responsibilities, procedures for securing building permit, procedures during construction, and occupancy certificates.
- b. **Graded Building Performance Byelaws** - Structural strength and stability, seismic safety, means of escape and facilities for fire fighting, public health and sanitary accommodation, electrical installations and plumbing services, ventilation and lighting, access for disabled, advertisement hoardings and signage, and maintenance/upgradation of existing buildings.
- c. **Area-Specific Building Byelaws** – laws specifying height and bulk of built-up area, relationship of built to open spaces, urban design principles, etc. based on preparation of LAP.

Professionals and Service Providers' Rating Agency (PASPPRA)

The new approach vests far greater responsibility on the professional combined with commensurate power, autonomy and privilege. To ensure a commitment to continuous improvement in quality of services and ethical use of the power, autonomy and privilege vested in the professionals, a state-level special purpose vehicle for testing and chartering professionals and monitoring their performance has been established.

1.2.3 Need for LAP

From the above process, the need for area-specific Building Byelaws/Development Controls clearly emerged. It also became clear that the formulations of area-specific height and bulk controls required detailed study and analysis at the micro-level. Any proposed change in development controls at the local level may also entail implementation of projects to mitigate the impacts of such changes. For example, if an area under very high commercial development pressure is to be redeveloped as a high intensity commercial district, it would require provision of a higher order of infrastructure. If a heritage area is to be deprived of development rights,

compensatory transfer of development rights may be required. If an unauthorized colony is to be regularized, municipal services may need to be provided.

The Delhi Master Plan, at the scale of 1:20,000, is prepared at a very high level of abstraction. Its scope limits it to adequately address ground realities at this level. To address ground realities and formulate practically enforceable building byelaws, it will be necessary to focus on smaller areas with more or less uniform character and concerns. These areas will need to be studied, analysed and planned in detail with involvement of the residents. It will then be necessary to prepare three-dimensional urban design plans for development or redevelopment of these areas.

Considering the above factors, it was decided to propose the institutionalization of new, third level of planning known as Local Area Planning. Area-specific Building Byelaws/Development Controls would be formulated as part of a comprehensive and integrated LAP. The enabling legislation for preparing such LAP has been drafted as a replacement for Chapter XXI of the DMC Act (currently dealing with "Improvement"). A draft set of guidelines for the preparation of such LAP was also prepared as part of the second assignment.

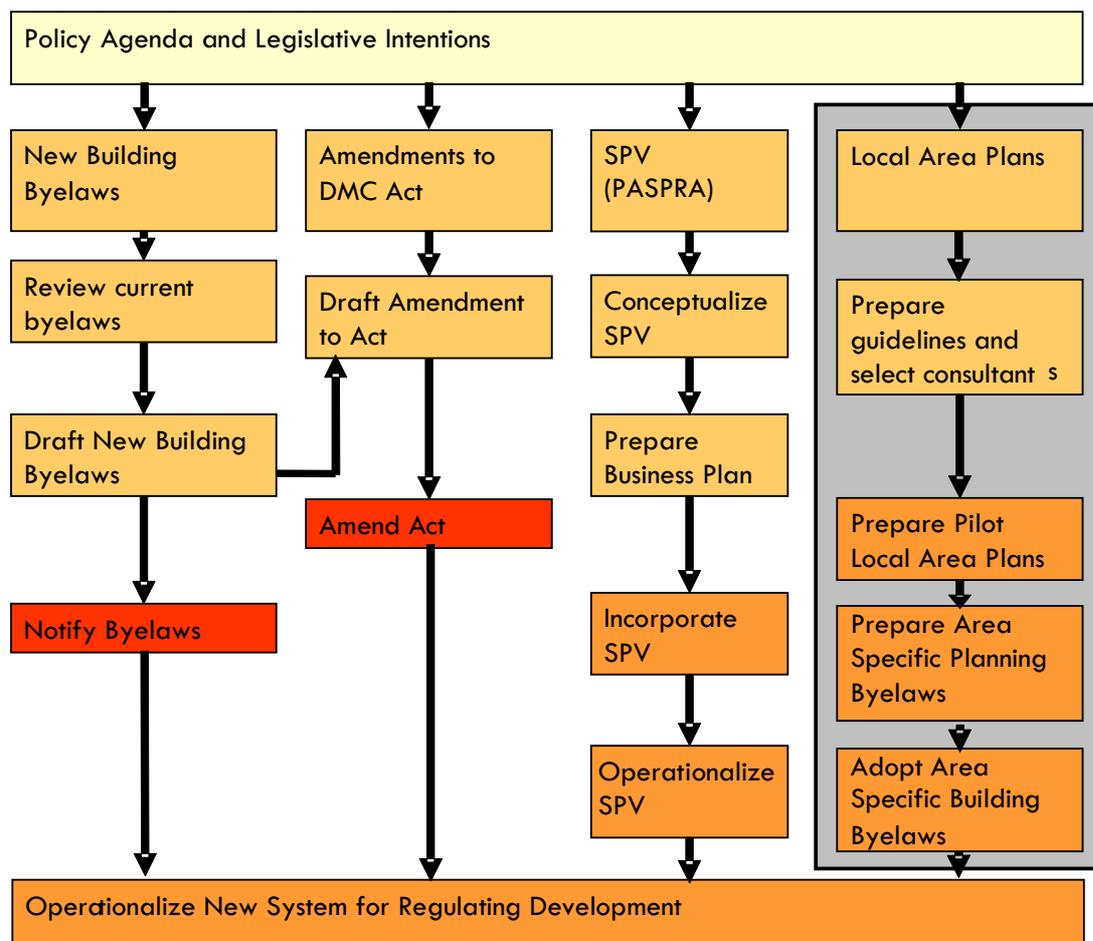
1.2.4 Phase III: Pilot project for establishing and demonstrating a system for preparation of LAP

After the Consultative Workshop, MCD initiated the third phase of work. In October 2005, under the sponsorship of the Indo-USAID FIRE (D) III Project, Environmental Planning Collaborative (EPC) was commissioned to undertake the following tasks:

- Assist the MCD in commissioning and supervising the preparation of pilot LAPs.
- Based on the experience of preparing pilot plans, conceptualize a system for preparing such plans on a regular basis and outline the capacity building needs for the same.
- Revise the guidelines for LAP preparation based on the experience of the pilots.

1.2.5 Overview of the entire process

The flow chart given below gives an overview of the entire building regulation reform process in Delhi. The last box on the right side shows where the subject matter of this report fits in the overall process.



1.2.6 About the Report

This report is a documentation of the process of preparation of five LAPs in Delhi, over a span of more than nine months. This chapter has adequately set the background for the work undertaken in the preparation of LAP for Delhi.

Chapter 2 describes the conceptualization of the pilot project. The consultant's scope of work and specific tasks involved are enumerated. The objectives, content, scope and methodology for preparation of LAPs are highlighted here.

Chapter 3 details the process and outcomes of the five pilot LAP projects. It discusses institutional arrangements, the process of selection of locations for pilot LAPs, selection and briefing of consultants, various stages of work involved in the preparation of LAPs (topographical and cadastral survey, studies and analysis, preparation of Conceptual Plans and draft LAPs), and the present status of the pilot LAPs.

Chapter 4 contains a review of the three case studies. Extracts from the draft plan report of the Vasant Vihar LAP and Concept Plan reports of Karol Bagh LAP and Yusuf Sarai LAP are presented in this section, carrying a brief description of each area, key issues and broad recommendations provided by the consultant in each case.

Chapter 5 elaborates the problems, limitations and learnings in the entire process. Where and how the LAP process currently figures in the revised Master Plan of Delhi and in proposed legislative amendments is highlighted.

In Chapter 6, the three-tier planning process is conceptualized. The purpose, scope and content of Master Plans, Zonal Plans and Local Area Plans are broadly discussed here. The relevance of LAP is put forward through a few illustrations of where and how it may be utilised as a useful planning tool. Key issues to be addressed and the process to be followed, in order to institutionalize a system for the preparation of LAPs, have been examined in this chapter.

Guidelines were prepared for consultants to undertake the LAP process. These have been revised in light of the changing context after factoring in learnings from the pilot projects. Numerous illustrations have been included to make the revised guidelines as informative as possible. Key changes in the guidelines have been highlighted and the revised guidelines are included in Chapter 7.

CHAPTER 2 Conceptualization of the Pilot Project

2.1 Objectives

As elaborated in the background, the pilot project for establishing and demonstrating a system for preparation of LAP was conceived as a continuation of the process of regulatory reform by the Municipal Corporation of Delhi. The specific objectives defined for the project were:

1. Through a pilot project covering the following five areas as selected by the Commissioner, MCD, and duly ratified by the previous Steering Committee, the Consultant Team may contribute to the “establishment and demonstration of a new system for preparation of LAP”:
 - Sangam Vihar – an unauthorized colony
 - Ballimaran – part of the Walled City
 - Yusuf Sarai – an urban village
 - Vasant Vihar – a planned layout under redevelopment pressure
 - Karol Bagh – a “Special Area” designated in the Master Plan for Delhi.
2. This pilot project shall aim to demonstrate the methodology for preparation of LAP which may result in specification of “Area-specific Building Byelaws” and also contribute to the identification of urban planning and urban design interventions for comprehensive improvement of the relevant areas.

2.2 Scope of work

| No. | Stage | Tasks |
|-----|--|--|
| 1 | Selection and appointment of consultants | Assist MCD in the following activities: <ul style="list-style-type: none"> ▪ Invitation for EOI ▪ Evaluation of EOIs ▪ Assistance to MCD in selection of pilot LAP ▪ Issue of TOR and invitation for proposal from consultants ▪ Evaluation of technical and financial proposals ▪ Negotiation ▪ Final selection of consultants |
| 2 | Briefing of selected consultants | <ul style="list-style-type: none"> ▪ Issue LAP guidelines to selected consultants ▪ Conduct methodology workshop |
| 3 | Supervision of preparation of LAP | <ul style="list-style-type: none"> Review topographical and cadastral survey Review the conceptual plan, database, studies and analysis Review draft LAP in a consultative workshop with limited invitees Review final LAP |
| 4 | Proposal for institutionalization | <ul style="list-style-type: none"> ▪ Prepare revised LAP guidelines ▪ Institutional framework design |

2.3 Conceptualizing LAP for the Delhi context

As explained in previous sections, the main purpose of the Local Area Plan was to adequately address ground realities at the local level and formulate practically enforceable building byelaws. For this, smaller areas with homogeneity of character needed to be identified and studied, analysed and planned in detail with involvement of the residents.

2.3.1 Objectives of LAP

In any Local Area Plan, the prime objective is to prepare Area-specific Building Byelaws. A Local Area Plan is by definition based on local needs and characteristics and therefore other area-specific objectives need to be framed for the plan. To illustrate:

- In a relatively open area in the urban periphery, the objective may be to provide access to plots/properties, regularize their shapes and provide for basic amenities.
- In an already existing built-up area whose functions are changing due to market forces, change in trends, change in people's needs, impact of globalization, etc. the objective may be based on the need to provide infrastructure support along with change in character to cater to the changing functions.
- In an old and dilapidated area the focus may be to provide traffic management, improve infrastructure, and provide access to all plots, thereby improve living conditions.
- In a disaster-prone part of the city, to provide safe housing and infrastructure may be the objective.
- In an area that has vacant and underused land, the objective may be to develop it.
- In an area where there is a heritage site being deteriorated by the surrounding environment, the objective might be to conserve the heritage site along with improvements in the surrounding areas through physical interventions.
- In an urban village area, for the purpose of providing regular shapes for plots/properties and basic amenities while maintaining the traditional cultural styles of the inhabitants.

2.3.2 Content of LAP

All LAP will necessarily include the preparation and implementation of Area-specific Building Byelaws for their jurisdiction. In addition, based on the objectives, the proposals may include, but are not limited to, the following:

- The laying out or relaying out of land, either vacant or already built upon.
- Layout of new streets or roads, construction, diversion, extension, alteration, improvement and closing up of streets and roads and discontinuance of communications.
- The allotment or reservation of land for roads, open spaces, gardens, recreation grounds, schools, markets, transport facilities, public purposes of all kinds.
- The reservation of land for sale by Municipal Corporation of Delhi for residential, commercial or industrial use depending upon the nature of development.
- Urban design provisions for the area which would include height of the buildings, built-up area, build to line details, setbacks, floor space index (FSI), margins, façade controls and circular patterns, parking space and loading and unloading space for any building and the sizes or locations of projections and advertisement signs.
- The construction, alteration and removal of buildings, bridges and other structures.
- The filling up or reclamation of low-lying, swampy or unhealthy areas, or leveling of land.

2.3.3 Scope and methodology for preparation of LAP

The preparation of LAP consists of the following steps:

- Delineation of the LAP jurisdiction
- Define objectives of the LAP
- Topographical and cadastral survey
- Property database
- Preparation of final base map and database
- Urban design and urban planning studies
- Structured public consultations
- Preparation of Conceptual Plan
- Preparation of draft Local Area Plan
- Preparation of final Local Area Plan

The scope of work so prepared emphasized integration of participatory planning approaches at every stage. The preparation of Local Area Plans in a participatory manner opens up a world of opportunity, not just to fix the problems of safety, quality of life and urban character plaguing the city of Delhi, but also to provide a new model for urban planning and urban design to the rest of the country.

CHAPTER 3 The Process and Outcomes

This project was conceived at a time when the MCD was very much in a reform mode with respect to the regulatory system. At about the same time, several cases related to violation of building regulations were being heard in the courts of law. The proceedings of these cases initially gave a strong impetus for continuing the changes proposed in the initiative supported by FIRE (D) Project. However, as the situation evolved, the project underwent substantial changes in content, time frame and outcomes. This chapter documents what actually happened at various stages in the project.

3.1 Institutional arrangements

Key aspects of the institutional arrangement for the project are as follows:

- The Municipal Corporation of Delhi was owner and key driver of the project. It decided the locations of the pilot LAPs and appointed the consultants for preparing the LAPs. The MCD bore the cost of preparing the plans, including the consultancy fees of the consultants.
- The Indo-USAID FIRE (D) III Project sponsored the technical assistance to MCD. It appointed a consultant team led by Environmental Planning Collaborative (EPC), Ahmedabad, in association with Sudhir Vohra Consultants (SVC), Delhi.
- The role of the EPC-SVC team was primarily to conceptualize the initiative and facilitate its implementation by providing oversight. They were to then capture the learning from the initiative in a process document.
- Any facilitation required by the consultants appointed by MCD in carrying out data collection, stakeholder consultation, etc. was to be provided by MCD.

3.2 Selection of locations for pilot LAPs

EPC-SVC advised MCD on selecting appropriate areas for undertaking preparation of model LAPs and on delineating boundaries for specific LAPs. Thus EPC-SVC and MCD identified five typical areas as pilot areas for LAP as follows:

- Vasant Vihar – an already developed area, which is proposed for redevelopment
- Ballimaran – a heritage area, which is a part of the walled city
- Karol Bagh- a Special Area
- Sangam Vihar – an unauthorized colony
- Yusuf Sarai – an urbanized village

3.3 Selection of consultants

At the outset, it was decided to hire professional urban planning/design consultants to prepare pilot LAPs. The EPC-SVC team, in consultation with the MCD, established a process to invite proposals from consultants and based on the predefined selection criteria and credentials submitted, to help MCD select the consultants. This process involved the following steps.

3.3.1 Invitation for Expression of Interest for preparation of LAP

On behalf of the MCD, EPC-SVC drafted an invitation for Expression of Interest (EOI) for consultants for preparation of LAPs, detailing out the tasks to be undertaken and pre-qualification criteria. In February 2005, via print media, MCD then invited EOI from consultants to participate in a competitive bid to provide consultancy services to MCD for the task of preparing model LAPs for selected areas in Delhi. Twenty-four firms submitted an Expression of Interest to the MCD.

3.3.2 Evaluation of Expression of Interest for preparation of LAP

EPC-SVC drafted the criteria for selection of consultants and helped MCD in short-listing consultants. Based on credentials submitted by the firms, EPC-SVC and MCD carried out evaluation of the EOIs received and short-listed consultants on the basis of predetermined selection criteria. Ten firms were short-listed at this stage.

3.3.3 Issuance of TOR and invitation for proposal from consultants

Following the short-listing, EPC-SVC assisted MCD in conducting a pre-bid meeting, and also drafted detail Terms of Reference (TOR) to invite technical and financial proposals for the LAP. MCD issued detailed Terms of Reference for determining the activities and tasks with specified time limits to the 10 short-listed consultants and invited technical and financial proposals from them and conducted a pre-bid meeting with them. The consultants were asked to submit the following documents as part of the technical proposal:

- Order of preference from the suggested Local Areas
- Proposed approach, methodology and work plan
- Team constitution
- Details of the lead firm and all firms of the consortium
- Details of projects relevant to the preparation of LAP
- Curriculum vitae of key personnel
- Details of the office infrastructure
- The consultants were also asked to submit a financial proposal for preparation of specific LAP.

3.3.4 Evaluation of technical and financial proposals

Based on the evaluation of technical and financial bids on the predetermined criteria, EPC-SVC and MCD selected consultants. The selection process was quality-based as there was no precedent for this nature of work, and since the pilot LAP will set the methodology and the quality standards for future LAP. The technical score (TS) was calculated as weighted scores. The Evaluation Committee graded presentations by all consultants on the basis of the proposed approach, methodology and work plan. Based on documents, information submitted and presentations by the consultants EPC-SVC and MCD finally selected four firms with more than 50% technical score for the negotiation process for specific LAP.

3.3.5 Negotiations and final selection of consultants

After detailed negotiations with the firms MCD and EPC-SVC finally selected three firms for preparing five LAP.

- Vasant Vihar and Karol Bagh – Urban Planning Consortium (EFNRA & RCE)
- Ballimaran and Sangam Vihar – Feedback Turnkey Engineers
- Yusuf Sarai – Ramky Infra Consulting Pvt. Ltd.

3.4 Briefing selected consultants

3.4.1 Guidelines for preparing LAP

EPC-SVC prepared draft guidelines prescribing the step-by-step process to prepare LAPs from the conceptualization stage to finalization stage, including the financial details. The guidelines were issued to the selected LAP consultants as a reference for the preparation of pilot LAPs. Based on the pilot process, the final guidelines have been prepared, which will set a methodology and process to be followed to prepare future LAPs.

3.4.2 Methodology workshop

A methodology workshop was conducted by EPC and MCD for training the consultants in preparing LAPs. The aim of the workshop was to finalize the LAP guidelines prepared by EPC-SVC and MCD. This was significant as it was the first time that such a Local Area Planning process was being undertaken. A detailed methodological framework for the step-by-step process of preparing LAPs was presented. The consultants made presentations and raised concerns and issues of significance for the process.

3.5 Supervision of preparation of LAP

The actual process of preparation of plans up to the draft stage has taken more than twelve months. During the process, the EPC-SVC team scrutinized submissions of the consultants, participated in the presentations at each stage and provided MCD with a review report after each stage of work. The following section describes what the consultant was expected to do, the actual process, and the outcomes of each stage.

3.5.1 Stage 1: Topographical and Cadastral Survey

Preparation of base map

In consultation with MCD, the consultants were asked to precisely delineate the boundary of the LAP based on the broad delineation provided by MCD as per guidelines and the objectives.

The consultants were required to carry out a detailed and accurate survey of the LAP jurisdiction using total station equipment. The survey had to capture all physical features above ground, as well as cadastral information such as plot boundaries. This task was considerably delayed due to difficulties faced on the ground by the consultants and due to the fact that this nature of work was being undertaken for the first time. A preliminary base map was submitted by the consultants at the end of October 2005. The EPC-SVC team carried out field checks of the survey work in the presence of the team members of the consultants and gave detailed feedback

Compilation of database

The consultants were asked to compile a database of information on all plots/properties in the LAP jurisdiction. This database was to include the following information:

- Legally valid identification number such as Plot Number or Survey Number or Property Number or other relevant identification number used by MCD or other government agencies to identify the property
- Names of owner(s)
- Land area
- Built-up area
- Estimated value (where possible this should be based on records of recent transactions)
- Number of floors
- Type of construction
- Current use of property (residential/commercial/industrial/institutional, etc.)
- Whether legal/illegal or authorized/unauthorized as per official records
- Any information available on legal contests regarding ownership
- Any other information considered relevant to fulfilling the objectives of the LAP.

The consultants were asked to highlight the discrepancies between the output from the topographical and cadastral survey with existing official base maps available with the authorities. The property database and the base map were to be linked by common identification numbers such as Plot Number for further analysis.

The consultants faced stiff resistance from residents/occupants in carrying out the survey. While in the case of places like Vasant Vihar, the resistance was due to understandable security concerns, the resistance in places like Ballimaran and Sangam Vihar was due to concerns about demolition of “illegal/unauthorized” construction. For property data, the only source that was readily available was the Property Tax database of the MCD. The Property Tax Assessments (PTAs) were significantly lower than the actual number of properties in places like Ballimaran, while in the case of unauthorized colonies like Sangam Vihar, practically nothing was available. Moreover, even in regular layouts like Vasant Vihar, all transformations/mutations in ownership were not captured in official records. Tenure issues were also unclear, particularly in old city areas/urban villages and unauthorized colonies.

Preliminary stakeholder consultations

As mentioned earlier, the LAPs are meant for formulation of Area-specific Building Byelaws and for defining related planning interventions. It is now widely recognized that as enshrined in the 74th Constitutional Amendment, urban planning is as much a democratic process as it is a technical one. The Plan is a tool to realize the collective vision of the stakeholders in an area. Therefore MCD mandated the consultants of each area to carry out a systematic stakeholder consultation process while preparing the LAP.

The stakeholder consultation process was expected to generate a correct understanding of ground realities. It was anticipated that the process will help to precipitate and resolve conflicts between competing interests in the LAP area. Through stakeholder interactions, the consultants could understand people’s aspirations and articulate a collective vision for the area. The process would also help MCD to build consensus on Area-specific Building Byelaws and related planning proposals.

During the planning process, the response to stakeholder consultation has been muted, partly due to lack of awareness and partly due to the fear of issues related to illegal/unauthorized development. Some stakeholders have been under-represented. For example, the EPC-SVC team felt that the residents of Vasant Gaon were under-represented in the Vasant Vihar planning process.

Unlike in the other areas, the residents of Karol Bagh were forthcoming and receptive to the LAP process. They fully supported the consultant’s efforts and provided useful suggestions on configuring the redevelopment strategies.

In the case of Ballimaran and Sangam Vihar, stakeholder consultations were difficult to organize because of the prevailing scenario of sealing and demolitions of illegal and unauthorized buildings, as well as illegal conversion of residential buildings to commercial uses. In both these locations, eventually the LAP exercise had to be abandoned as the consultant withdrew from the project.

3.5.2 Stage 2: Conceptual Plan

Studies and analysis

Study and analysis of existing land uses, built form, densities, social and physical infrastructure provisions and its carrying capacity, traffic movement, heritage and important structures, culture and overall character of the LAP area were to be carried out. The studies were to take into account the physical, cultural and social link of the LAP area with its surroundings. It was important to understand that the LAP area is part of a large urban fabric, which must fit into overall requirements of the city.

The studies and analysis for Ballimaran and Sangam Vihar were severely constrained due to the inability of the consultant to produce a credible base map and database, given the volatile political environment. However, whatever studies could be carried out revealed extremely densely populated areas with a very poor level of service provision. The built form in both areas is chaotic. In the case of Ballimaran, the original traditional neighborhood formations have been drastically altered through several decades of fragmented, unplanned redevelopment of individual properties, much of it in violation of even basic principles of design and construction, let alone compliance to building regulations.

The studies and analysis carried out for Vasant Vihar, Karol Bagh and Yusuf Sarai yielded very interesting results. In the case of Yusuf Sarai and Karol Bagh, both highly commercialized areas, it came to light that the actual consumed FSI was far higher than what was mandated by the Master Plan. The mix of land use existing there and the trends observed pointed both to the risks involved in maintaining the status quo and to the potential for planned redevelopment. In both cases, the current pattern of ownership/tenancy is complex and could lead to haphazard development. However, in both cases, the proximity of proposed Metro stations, as well as their strategic location in the city's overall structure, makes them ideal cases for planned redevelopment through consolidation of land and properties.

Vasant Vihar being one of the most upmarket residential areas in the city, the general sentiment of the residents was to retain the character. However, the studies revealed that the real estate market pressure was so high that the adjoining Vasant Gaon had a population density nearly twenty times that of Vasant Vihar, in large measure due to the demand for informal sector services generated by Vasant Vihar itself and other adjoining areas.

Preparing a Conceptual Plan and draft LAPs

Based on the study and analysis, as well as preliminary stakeholder consultations, problems and potentials of the area were to be identified, for e.g. existing infrastructure and its carrying capacity and potentials for improvement, unauthorized properties and potential to regularize, existing land uses and potential to redefine land use zones, heritage structures or significant public places and their potential to improve the surroundings. SWOT (Strengths Weaknesses Opportunities Threats) analysis and a meeting with stakeholders were recommended at this stage itself.

Of the five pilot LAPs undertaken, the conceptual proposals for Ballimaran and Sangam Vihar simply lacked a systematic approach and analytical rigour. Proposals were fragmented and did not propose comprehensive redevelopment strategies. The other LAPs fared better, comparatively.

Initially, a Conceptual Plan, broadly outlining the proposed interventions was to be presented to MCD. Based on the objectives defined for the LAP, the Conceptual Plan was to include proposals for urban design, allocation of land for public infrastructure, circulation pattern and traffic management, land use pattern, landscaping and conservation. The draft LAPs were then to be prepared detailing out proposals, including schematic estimates of the cost of implementation, as well as proposals for cost recovery such as betterment levy, use of land as a resource, sale of development rights, user charges, enhancement of property tax base, etc. The consultants were also to demonstrate the financial feasibility of proposed investments through a schematic financial structuring/cash flow analysis.

The EPC-SVC team had hands-on sessions with each of the consultant teams working on the LAP. A hands-on session was also carried out with Feedback Turnkey Engineers, the consultants preparing Ballimaran and Sangam Vihar LAP, on the preparation of concept proposals. The consultants had reconstituted their team, made a fresh work plan and gave MCD a written

statement that they would complete the project to the client's satisfaction, as per terms of the contract. However, after a few weeks, quite unexpectedly, they backed out from the entire exercise. They also submitted a letter to the CTP to this effect. Therefore, the Ballimaran and Sangam Vihar LAPs were abandoned mid-way in the process.

The Concept Plans for the remaining three LAPs: Yusuf Sarai, Karol Bagh and Vasant Vihar were presented to the representatives of MCD, FIRE (D) project and EPC-SVC team on the 17th of August 2006. The consultants also submitted copies of the Concept Plan report as per the contract, to be reviewed by the EPC-SVC team. After receiving comments the consultants revised and submitted the Concept Plan Reports.

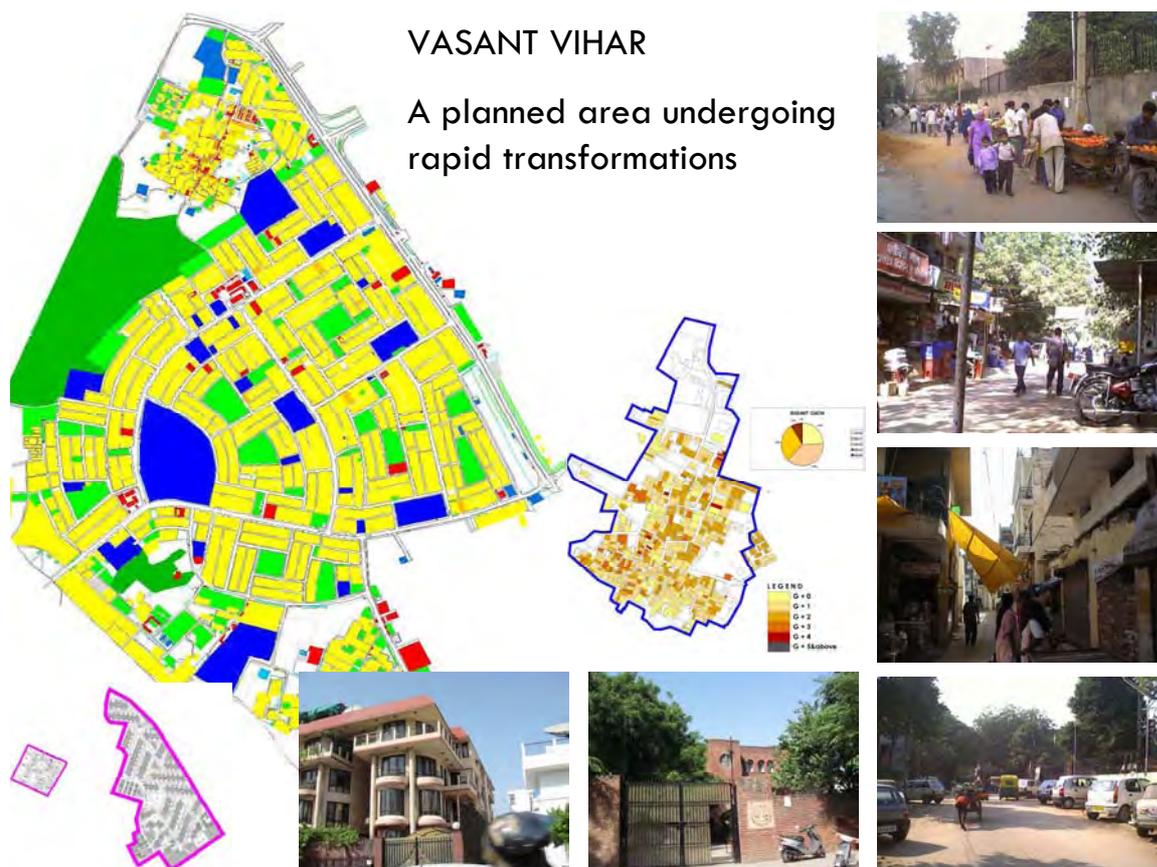
3.6 Present status of LAP

After the Concept Plan stage, it was decided to review the overall experience of the project and capture the learning in this process document. Currently, the draft LAPs for Vasant Vihar and Karol Bagh are in the final stages of submission to MCD. The EPC-SVC team continues to give inputs to the consultants. The draft LAP for Yusuf Sarai is yet to be submitted to the EPC-SVC team for review.

CHAPTER 4 Case Studies

Extracts from the draft plan report of the Vasant Vihar LAP and Concept Plan reports of Karol Bagh and Yusuf Sarai LAP are presented in this section. The extracts contain a brief description of each area, density and land utilization, key issues from surveys and public consultations, as well as broad recommendations provided by the consultant in each case.

4.1 VASANT VIHAR LAP



4.1.1 Location

The Vasant Vihar Local Plan area falls within the Vasant Vihar Tehsil of the South West Administrative Zone of Delhi, and as per the MCD Zonal Setup, comes under Ward No. 16 of the South Zone. The LAP boundary covers an area of 2.45 sq. km. with population of approximately 0.41 lakh (Census 2001) and density of 16,735 persons/sq. km. Based on the 1991-2001 Census data, the decadal growth rate is 65% (in the study area). The total population is expected to increase to 0.65 lakh by the year 2010 and 0.89 lakh by 2020.

The Vasant Vihar area is located in southwest Delhi along Old Palam Marg or Rao Tula Ram Marg - an important arterial road connecting different parts of the city to the airport. Across the road is the planned residential area of R. K. Puram. Secondary roads connect it to Vasant Gaon and Vasant Enclave.

The socio-economic profile of inhabitants in the plotted development has changed from a largely retired population and people in government service/officials to more affluent businessmen or executives, and nuclear families. The DDA housing as well as the cooperative housing always had predominantly middle and upper middle class sections of society. Vasant Gaon on the other hand has transformed from a small urban village to a very high density, poorly served settlement of economically weaker sections, comprising of domestic helpers, construction workers, watchmen, etc. who serve Vasant Vihar and other adjoining areas

4.1.2 Urban structure - land use and road network

The Vasant Vihar neighbourhood is comprised of three distinct areas, each with its own residential characteristics and housing typologies. These are listed below along with the percentage share of land under each.

| S.No. | Name of Distinct Area | Housing Typology | Area (ha) | % to Total Area |
|-------|-----------------------|---|-----------|-----------------|
| 1 | Vasant Vihar | Plotted development | 151.7 | 70 |
| 2 | Vasant Enclave | DDA-built housing and staff cooperative group housing | 49.1 | 24 |
| 3 | Vasant Gaon | Urban village | 12.1 | 6 |
| TOTAL | | | 212.9 | 100 |

a. Vasant Vihar plotted development (70%, 151.7 ha)

The Vasant Vihar plotted development is a well planned colony with wide roads and a hierarchy of open/green spaces. Residential plots sizes vary from about 200 - 2000 sq. yards, but about 77% of the plots range between 400 - 800 sq. yards. Ground coverage ranges from approximately 26% for larger plots to 61% on small plots, and FARs achieved are between 0.82 - 1.43. The building structures are mostly G, G+1 or G+2. Land use is largely residential (42%), and commercial land use constitutes only 1% of the total area. About 18.61 ha are under green or open spaces. However these are slowly being converted into schools and other amenities. There are also over 35 foreign missions, embassies or cultural centers of foreign countries in the area. Transformation, both in terms of intensity and nature of use, has taken place in the recent past. Residential uses have converted into commercial (small shops, guest houses) or institutional (embassies, nursing homes, etc.), and single family units have converted into multiple dwelling units. However, expansion is mostly vertical as subdivision of plots is not allowed. Both physical and social infrastructure is adequate with a few management issues. Commercial centres, which were local market places, have increased in intensity of use and have become important community centres in the larger context.

b. Vasant Enclave – DDA-built Housing (4%, 8.78 ha) and Staff and Co-operative Group Housing (20%, 40.4 ha),

In Vasant Enclave and Vasant Apartments the building typology is predominantly G+2 flats, with ground coverage of 26.6% and FAR of 0.83. It has its own convenient shopping centre. The staff and group housing area (for RBI, CBI, Indian Airlines, Air India, etc.) is composed of G+3 blocks. The overall condition of these buildings is quite poor and as per prevalent group housing norms, the density achieved is very low. Ground coverage is 14.19% and FAR 0.51. Almost no transformations or increased intensity in use has been seen in these areas.

c. Vasant Gaon, an "urban village" (6%, 12.1 ha)

Categorized as an "urban village", Vasant Gaon is an organic, unplanned neighbourhood within the LAP boundary. It has seen substantial growth in comparison to the surrounding localities. Land use is primarily mixed, with many small shops along the main spines. Both

physical and social infrastructure is inadequate and living conditions are extremely poor. Space standards are extremely low and people are known to sleep in shifts.

4.1.3 Issues

- Land prices are very high and transformations are unavoidable. At present, density of use is quite low. Transformation must be planned for.
- Traffic congestion is a problem as the use and intensity is undergoing transformation. Too many entries into the Plan area have led to the main roads becoming thoroughfares, which is affecting the quality of public space.
- Parking has become a major issue in the area. On-street parking has also reduced the effective road width. Parking problems are further compounded around institutional and commercial areas. Servicing of shops has become difficult.
- Pavements generally lack consistency in height (varying from a few inches to a foot), are often encroached upon by vendors/hawkers, dhobi stalls or security cabins of residences, and have now even become a common option for parking. With no footpath left for walking, pedestrians are forced onto the carriageway.
- Public conveniences like public toilets do exist around the market areas, but these are inadequate and poorly maintained. Such civic amenities are especially required given the high floating population in the area (drivers, guards, etc.).
- Water scarcity and excessive reliance on ground water has led to depletion. Condition of the transmission mains is poor, with numerous authorized and unauthorized tapping directly on the mains. Besides a few schools, rain water harvesting systems do not exist in any of the buildings.
- Household waste is not segregated and large quantities find their way directly into the storm water drains. There is a lack of public awareness and proper campaigns to address solid waste management and sanitation issues.
- Problems of power cuts for long durations (a condition for most part of the year in many parts of the city), poor condition of high tension cables, and over ground cables in market areas/service lanes.

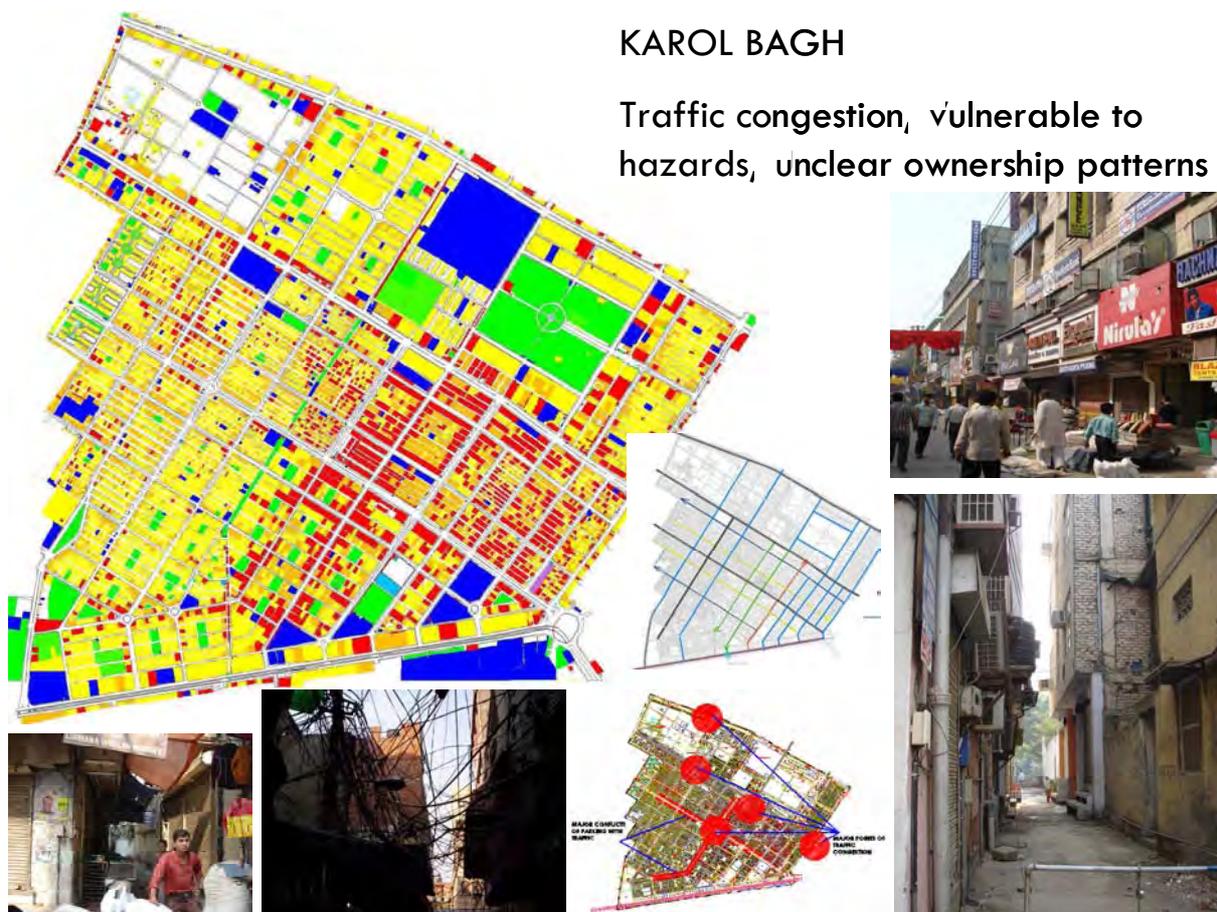
4.1.4 Strategies and recommendations

Strategies are primarily intended for Vasant Vihar plotted development. Given the time, the budget constraints and wide variety and complexity of issues it was difficult to conceptualize strategies for all the pockets within the LAP area. The aim was to retain the character of a high quality residential location for the elite in the plotted development.

The salient features of the recommendations are as follows:

- In the residential areas, other compatible commercial and institutional uses will be allowed only on roads with 18m (or more) right-of-way.
- Street and traffic movement to be redesigned. Three out of five access points from Rao Tula Ram Marg will be sealed and entry will be prohibited. Streets will be redesigned to encourage pedestrian movement.
- In the case of redevelopment, on roads with right-of-way less than 18m, if more than two dwelling units are to be constructed, the building will be constructed on stilts and ground floor will be utilized for parking. In the case of 18m (and more) wide roads both ground floor and basement will be utilized for parking. On-street parking will not be allowed.
- FAR, ground coverage and height limit to be capped at present levels.

4.2 KAROL BAGH LAP



4.2.1 Location

Karol Bagh is a part of the Special Area for urban renewal (along with the Walled City and its extension), which has been identified for comprehensive redevelopment under the MPD 2001. This is because of its similar characteristics such as mixed land uses, compact high density built-up, narrow circulation spaces, etc. It is strategically located between the heritage area of Shahjahanabad and the New Delhi area of Connaught Place. It was planned on a grid pattern of road network. It is now likely to become an important hub for the Delhi Metro.

The delineated LAP area consists of portions of two wards of the DMC – no.129 and no.130; with a total area of 277 ha. The population of the LAP boundary is approximately 98,923 and the average density is about 357 persons per hectare. However, there is substantial floating population of workers employed in the commercial establishments in the area (approx. 15,000 people). The residential population, however, has shown a declining trend over the last few decades.

Karol Bagh is now a city level commercial area, next only to Chandni Chowk in popularity. One of the prime spines of the LAP, the Ajmal Khan Road, is an important shopping destination. The transformation from residential to commercial, in the last four decades, has been regularized from time to time, with the hope to streamline haphazard development and improve the area.

The studies and analysis as well as proposals were undertaken based on the following sub-division of the study area.

| S.No. | Name of Distinct Area |
|-------|-----------------------------|
| 1 | Urban renewal zone |
| 2 | Residential zone |
| 3 | Commercial upgradation zone |
| 4 | Mixed land use zone |
| 5 | Conservation zone |
| 6 | Vacant land/slums |

4.2.2 Urban structure - land use and road network

The land use in the case study area is predominantly commercial and mixed use. The residential use is over 23% of the area. About 7% of the area is under open/green spaces and a staggering 35% of the area is under roads. While the area is laid out on a grid pattern, the road hierarchy is poor. There are numerous roads of very small right-of-way, making the place congested despite alternate routes. Parking is also a major issue on most roads and one often finds two or three rows of cars parked on the street. Real estate prices vary from Rs.3500 to Rs.5500 per sq.ft.

The FAR utilized varies from 2.5 in the commercial and residential zones to 3.17 in the mixed use zones. The structures are predominantly G+3 and the percentage of ground cover is 92% to 99%.

Karol Bagh can be classified into retail market streets (Ajmal Khan Road, Arya Samaj Road, Saraswati Marg, etc.), wholesale market streets (Gaffar Market, footwear market, leather market, etc.), specialized markets (Rohtak Market for sanitary ware, Naiwalan for motor repairs, etc.) and informal markets (on the pavements and street sides). Besides these markets, there are several home-based industries, guest houses and hotels.

4.2.3 Issues

Additional water resources for firefighting are not available. Traffic congestion in the case study area is a major concern. The informal market is substantial and contributes predominantly to traffic problems in the area. In the absence of planned interventions, commercial development will continue to grow in a haphazard manner, which will in the long term not only become more difficult to manage, but will also encroach upon those heritage zones that require to be conserved.

4.2.4 Strategies and recommendations

In a bid to simplify the basic land management issues, the area has been divided into six zones based on their inherent character. These are:

- Urban renewal zone (area bounded by PUSA Road, Arya Samaj Road, and up to the covered drain parallel to Saraswati Marg).
- Residential zone (areas within the erstwhile Western Extension Area, bordering PUSA Road, with the covered drain on the eastern side, Tank Road on the north, and Ganga Mandir Marg on the west).

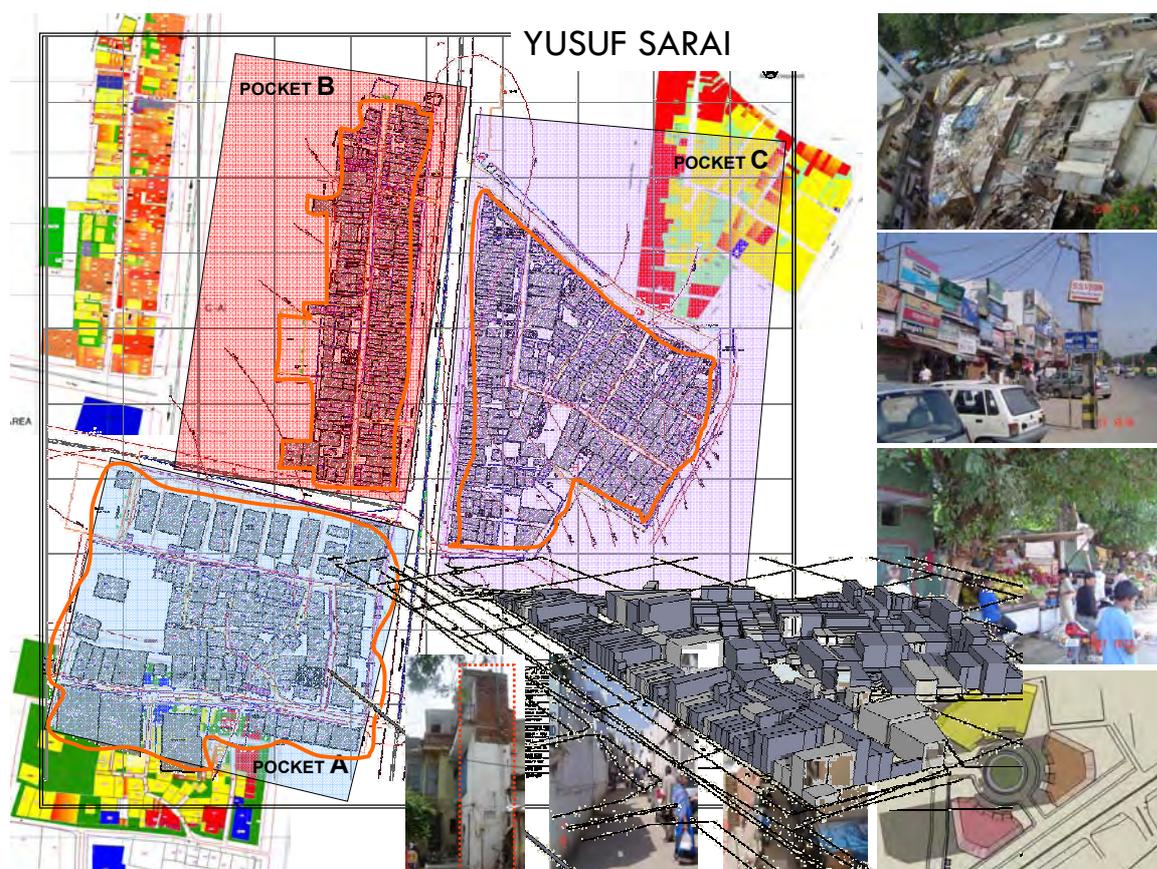
- Commercial upgradation zone (areas bounded by AryaSamaj Road, Faiz Road, D B Gupta Road inclusive of one plot depth beyond D B Gupta Road and Saraswati Marg and inclusive of Gaffar Market and its environs).
- Environment upgradation/decongestion, mixed land use zone (areas that are bounded by D B Gupta Road, Saraswati Marg, Arya Samaj Road, the covered drain, Tank Road, Ganga Mandir Marg and up to the western LAP boundary; areas adjoining Faiz Road, between D B Gupta Road and New Rohtak Road and up to Abdul Rehman Marg).
- Conservation zone (area bounded by New Rohtak Road, Abdul Rehman Road, Maharana Pratap Road, and one lane behind D B Gupta Road).
- Vacant lands and jhuggi colonies.

The salient features of the recommendations are as follows:

- Traffic movement and parking strategies have been formulated. These include strategies for pedestrianization of certain alignments (for example, Ajmal Khan Road). A medium-capacity Mass Transit system comprising a Light Rail Transit System (LRT) and a battery-operated bus system may be considered on selected routes based on feasibility.
- An alternative alignment by extending Arya Samaj Road through Anand Parbat to connect existing roads leading to Patel Road and Shivaji Marg may be conceptualized.
- A plan for streamlining hawker zones has been prepared.
- For the urban renewal zone, FAR in the range 4 to 5 with a strategy for amalgamation and reconstitution of plots has been recommended.
- For the residential zone, compatible mixed uses such as hotels and guest houses are allowed on streets with right-of-way 9m and above with a cap on size of plot.
- In the commercial and mixed land use zones, amalgamation of plots and improvements to right-of-way of adjoining roads has been proposed with incremental FAR.
- In the conservation zone, amalgamation of plots, enhancement in FAR, and change in uses have been prohibited. Proposals for landscaping and dedicated parking are included.
- The encroachments on the DDA land are to be removed in the mid-term after suitable provision of housing for the existing slums.



4.3 YUSUF SARAI LAP



4.3.1 Location

The project area lies in the MCD 'South Zone' and is a part of ward nos. 13 and 14 and zones III and IV of the Public Works Department. The Yusuf Sarai LAP is located on Aurobindo Marg, which connects the Inner and Outer Ring Road, between the Green Park Extension and the All-India Institute of Medical Sciences. It is detailed under Zone F3 and 4 (South Delhi-1) of the Zonal Development Plan and falls under the Influence Zone along the MRTS route (Phase-II).

Categorized as an 'urban village', today Yusuf Sarai has become a part of the rapidly expanding metropolis. It serves as an area providing budget accommodation or cheap lodging facilities to those visiting or working in the nearby areas. The population of the LAP area is about 7,500 in an area of 7.6 ha with an average density of about 986 people per ha. The socio-economic profile varies from high income settlements in the pocket A to middle class and low income settlements in pockets B and C.

4.3.2 Urban structure - land use and road network

The area exhibits space characteristics of narrow streets with open drains, compact habitations and congested living condition, *kutchha* houses, unregulated built forms, bare minimal services, informal real estate finance mechanics (*pagdi* system), etc.

| S.No. | Name of Distinct Area | Housing Typology | Area (ha) | % to Total Area |
|-------|-----------------------|--|-----------|-----------------|
| 1 | Pocket A | Large plots, commercial on street front and residential inside | 3.4 | 45 |
| 2 | Pocket B | Medium-sized plots, predominantly commercial | 1.6 | 20 |
| 3 | Pocket C | Small plots, mixed use | 2.65 | 35 |
| TOTAL | | | 7.65 | 100 |

Pocket A is predominantly residential (up to 54%) with commercial development on plots adjoining the Aurobindo Marg. Pocket B is 55% commercial and 30% mixed use, with only 14% residential areas. Pocket C commercial establishments cover about 46% of the area, while residential use is about 35%. Transformation has been in the form of subdivision of plots and conversion from residential to commercial and mixed uses. High-end retail commercial is seen along the Aurobindo Marg, while small shops, guesthouses, informal markets, etc. are seen along the inner lanes. Ownership issues are contentious as the 'pagdi' system is prevalent here. Almost 40% of the properties are tenant occupied, which could deter redevelopment strategies.

The road structure is more or less defined with a visible hierarchy. The Aurobindo Marg was widened last year; however inner streets have very narrow carriage ways (3' in some places) and are encroached upon. The FAR consumed ranges from 1.5 to 2.5 and structures are mostly G+2 or G+3.

4.3.3 Issues

Unplanned transformations and increase in intensity of uses have stressed on-site infrastructure to a large extent. Water supply systems are old and dilapidated and are in need of repair. The Pocket C overlooks a *nala* on the eastern side, which is unpleasant and polluted. Open defecation is common in these areas.

The Yusuf Sarai area is accessed by the *Aurobindo Marg* (36 m wide) which branches into a 15 m wide road leading to Green Park, which further branches into a 4 m wide road inside Pocket B, where the street is predominantly commercial. Internal streets are narrow (some as small as 2 feet wide) and of fluctuating width, resulting in traffic congestion and bottlenecks at many places, especially near the informal vegetable market in the north. This coupled with encroachments and on-street parking, reduces the effective right-of-way and leaves little area for circulation.

4.3.4 Strategies and recommendations

Pocket C has been taken up for detailed redevelopment strategies. Strategies include:

- Encourage redevelopment through amalgamation of plots and reconfiguration of real estate spaces and prescribe height and bulk regulations factoring in market demand.
- Rework the road network and traffic movement through the redevelopment plan.
- Use redevelopment strategy to lay new infrastructure lines or upgrade existing ones where feasible.
- FAR in the range of 3 to 4 has been recommended with 30% ground cover.

CHAPTER 5 Problems, Limitations and Lessons Learned

The process of facilitating the preparation of the LAP has been rich in learning at various levels. To begin with, the exercises reconfirmed the fact that urban planning is as much a political process as a technical one. Ultimately all planning proposals have a direct or indirect impact on land – its use, the associated development rights and, consequently, land values. Therefore, the stake holding in the process is as wide as it is varied. The issues thrown up due to the changing political environment are dealt with first in this section. Urban planning has long been less than a top priority in most administrative structures across the country and, consequently, the capacity enhancement for undertaking urban planning has been lagging behind the pace of urban growth. The second section in this chapter deals with the issue of MCD capacity for urban planning functions. Whatever limited efforts have indeed happened have by far been carried out in-house by government agencies. Therefore, the capacity in the private sector also has not developed adequately. This issue is also discussed here. There has also been considerable learning about the nuances of Local Area Planning process and the content of LAP. The guidelines earlier prepared and the Terms of Reference of the LAP consultants were both structured on the basis of previous experience in the country, the bulk of which is in Gujarat. How to adapt the methodology to the realities of Delhi is discussed last, covering delineation of LAP boundaries, base map preparation, stakeholder consultation and conceptualization of interventions.

5.1 Changing environment

From mid-2005 onwards, a series of litigations in the High Court of Delhi and the Supreme Court dealing with illegal/unauthorized construction and change of use led to both the Courts taking the government to task on its failure to effectively regulate construction and land use. Delhi being a complex urban governance entity, MCD, Government of the National Capital Territory of Delhi, and the Government of India were all made party to the proceedings. The Supreme Court ordered the Government to seal all properties being put to non-residential uses illegally in residential areas. Likewise, the Court also ordered demolition of all illegal constructions. The Court appointed a monitoring committee to ensure that its orders are implemented.

In order to implement the Court's orders, the MCD launched a drive to seal/demolish illegal properties. This action, which went on over a long period of time, polarized public opinion. The residents of neighborhoods that have been marred by illegal commercial activities supported the drive, while those living in unauthorized colonies and other illegal/unauthorized structures opposed it. Trade and industry representatives resisted the move and lobbied for regularization of all illegal/unauthorized construction. Many architects and urban planners contended that the Master Plan needs to be modified to allow more commercial development in the right locations.

All three governments – MCD, GNCTD and GOI – were actively engaged in finding a long-term solution. On one side, the sealing and demolition drive started, but at the same time, they also looked at the possibility of changing the regulatory regime to regularize the existing developments. One such action was to modify the Master Plan to designate the most 'commercial' streets or areas as official commercial zones. The Master Plan was modified and notified more than once during the crisis period. Amnesty schemes for regularization of illegal/unauthorized development against a penalty were also explored.

The Courts were also involved at every stage, often issuing orders *suo moto*. The judiciary was not in favor of *ad hoc* actions to resolve the deeper systemic problems that created the

situation. During the deliberations in the Courts, the Government presented MCD's initiative for reforming the building regulations system, including the proposed approach of LAP to frame Area-specific Building Byelaws. A general consensus appeared to emerge that the Master Plan for Delhi has fallen short in estimating and meeting the city's real estate needs.

Another important and related area of emerging consensus is that all three Governments – MCD, GNCTD and GOI – recognized LAP as the only rational way of accommodating both citizens' views and real estate market needs in a realistic urban development strategy at the local level. This constituted one of the most important achievements of the FIRE-funded initiative.

Though the changing environment eventually ended up endorsing the FIRE-funded initiative of MCD for regulatory reform, in the short-term it had a negative impact on the LAP initiative. During the sealing and demolition drive of the MCD, there was widespread public unrest. Citizens at-large and occupants of potentially 'illegal' buildings specifically, completely mistrusted activities related to MCD. This made the initial stages of work – survey and data collection – difficult if not impossible in most of the LAP areas.

Moreover, the officials of MCD responsible for the oversight of the pilot LAPs were also involved in various activities arising from the implementation of Court orders. They hardly had time away from this task to devote to the pilot projects. This meant enormous delays in review of reports, scheduling of meetings and processing of payments. The delay in payments led to further delays in the work of the consultants.

One of the anecdotal evidences of the appropriateness of the LAP approach came from Karol Bagh, where the stakeholder groups got actively involved in the process and in fact lobbied the government for their LAP.

5.2 Lack of institutional capacity in MCD

The base maps and property databases currently available in Delhi are inaccurate and out dated. This is not exceptional to Delhi. All over India, urban settlements have not been resurveyed since independence. Therefore, the system of mapping urban areas and maintaining property databases has atrophied and is, for the purpose of micro-level planning, practically dysfunctional. Therefore, it was necessary to include the task of surveying the LAP area and preparing a credible property database in the scope of work of the respective consultants.

Besides the Chief Town Planner, there are only about two or three dedicated urban planners in the Town Planning Department of MCD. The staffing is grossly inadequate considering the complexity of problems in the city. Through the process, for most of the time, the staff, including the CTP, was involved in resolving issues related to the demolition and sealing, as well as attending Court proceedings. It was, therefore, very difficult to coordinate meetings and presentations and follow-up on the tasks assigned to the consultants.

Procurement as well as payment procedures are time consuming. It took a very long time for the consultants to receive payment for the first stage of work. Thereafter the consultants were also unwilling to work further on the process. Considering that such a process is taking place for the first time, some lags in the schedule of submissions as well as quality of work were expected. The EPC – SVC team recommended part payment to some consultants based on the quantity of work completed. This could not be done as there was no flexibility in the payment mechanism. The completion of a particular stage of work was contingent on MCD staff checking the surveys or helping the consultants reconcile the property database with the

drawings. As the MCD staff was indisposed on many occasions, the process was considerably delayed.

5.3 Lack of experience in planning consultants

As an exercise such as the Local Area Plan is being prepared for the first time in the country, it appears that the consultants may have grossly underestimated the level of effort required in carrying out this task when they embarked upon their work. Neither the conditions on the ground nor the willingness of the consultants were conducive to the process. The inability of the consultants to appreciate the need for a process, as described in their scope of work, was a major deterrent.

Moreover, local survey units seem to have neither the experience nor the competence to carry out this complex task. The consultants too seem to not appreciate the need for accuracy and detail in the preparation of base maps and property databases. For example, in Ballimaran, the entire base map submitted was found to be inaccurate and devoid of detail, while in Vasant Vihar, the building footprints were superimposed from satellite images without ground verification and, therefore, incorrect in many places.

Given the extent of the area being surveyed and mapped, 100% checking/verification was not feasible as part of the supervision. Therefore, sample checks only have been undertaken to identify generic problems. Based on the sample checks, the consultants were asked to carry out 100% checks themselves. When a system is established for the longer-term, 100% check of all such surveys is desirable.

The skill set required for preparing a LAP is multi-disciplinary. Very few (if any) consultancy firms in the country have the required diversity of skills in-house. Therefore, it is inevitable that most firms bidding for a LAP will put together teams of professionals drawn from various organizations. During the pilot LAPs, this approach was in evidence in all the consultant teams. While it seemed to work well in the case of Ramky and EFNR, it was unfortunately not so in the case of Feedback, who could not maintain a consistent team through the exercise. The learning here is that over a period of time MCD has to develop a set of vendors – consulting firms – with stable team compositions so that the quality of planning services does not suffer.

5.4 Delineating the LAP boundary

Proper delineation of the LAP boundary is critical. Planning boundaries are usually delineated as the homogenous extent (homogeneity may be of socio-cultural, spatial, land use or built typology characteristics) between important natural or man-made physical features such as roads, rivers, etc. The delineation is also governed by the scale of the planning process as well as relevant administrative jurisdictions. However, the delineation must also address other complexities.

To illustrate, in the case of the Vasant Vihar LAP, while the planned layout of Vasant Vihar extends over 350 hectares, Vasant Gaon – a high density enclave of the economically weaker section, only covers an area of 20 hectares. However, both have the same population (nearly 25,000 people in each). Clearly the priorities/problems of each pocket are bound to be completely different. Therefore, it was not surprising that Vasant Gaon was under-represented in the stakeholder consultations. In retrospect, Vasant Gaon should have been treated as a separate LAP area.

While establishing a system for preparation of LAPs, it is recommended that LAP boundaries be delineated through a systematic effort for each Zonal Plan jurisdiction based on a definite

set of criteria and not on a case-by-case basis. In other words, each Zonal Plan jurisdiction should be divided into a set of LAP jurisdictions.

5.5 Base map preparation – constraints

Delhi, being the nation's capital, is neither short of world class technology nor talent. However, the culture of cadastral mapping has been lost over the years. Projects in the national capital seem to have been *ad hoc* and isolated in the past. Land and property records are mostly inaccurate, outdated or non-existent.

Vendor development for this task is also badly needed in Delhi. Local consultants have been unable to effectively coordinate the preparation of physical and cadastral surveys. Often interpretation of satellite images has been utilized in place of physical surveys without understanding their limitations.

Satellite images are ultimately photographs and have their issues of accuracy, angular deviation, color presentation, etc. While these are extremely useful in preparing schematic base maps for macro-level planning, they cannot be effectively utilized for micro-level planning exercises such as the LAP, where the intention is to consolidate land parcels, resolve ownership issues, and implement building byelaws and infrastructure proposals on ground. To illustrate, in Vasant Vihar a planned colony where a topographic and cadastral survey would have been the easiest to carry out (of all the LAP areas), consultants in many places inserted building footprints digitized from satellite images. Pan-chromatic images of 0.6m resolution may have been utilized for this purpose. However, inaccurate digitization may result in shifting of building lines by several meters (say if the shadow of a building was misinterpreted as a building line).

The express purpose of preparing LAPs is to formulate Area-specific Building Byelaws, relating to the height and bulk of buildings in the LAP jurisdiction. These have to be drafted in such a way that they are responsive to the urban design context and to the realities of the real estate market. This is required because the actual development in many parts of Delhi is substantially at variation with the Development Controls specified in the Master Plan of Delhi, rendering the enforcement of these controls practically impossible. Therefore, it is imperative to document in drawings and databases, the reality on the ground before even considering the formulation of Area-specific Building Byelaws and concomitant planning interventions that may be required.

Ballimaran and Sangam Vihar were particularly complex. In Ballimaran, sorting out of ownership issues was extremely difficult with multiple ownerships across floors. Properties had changed hands many times without any documentation. A lot of illegal extensions, encroachments, illegal electricity connections, property tax defaults, etc. made the situation extremely difficult to deal with. In the backdrop of the demolition drive, the consultants faced extreme resistance from the residents. Sangam Vihar too presented several problems. As the entire colony was unauthorized, there was no real data on the settlement. Issues of actual population residing in the area also cropped up. Till date this settlement with more than six lakh people is not acknowledged in the Master Plan of Delhi.

Further, the numbers on the city survey maps were not coordinated with the property tax information. The consultants found it extremely difficult to reconcile the two. Properties were often fragmented in ownership and this may not have been reflected in the survey maps. As the MCD officials were unable to spare time and coordinate with the consultants, this issue could not be resolved in some cases.

Considering that accurate land records constitute a fundamental requirement both for effective urban governance and an efficient real estate market, and considering that a parallel effort has been initiated by the Delhi Government to streamline land records, it may be a good idea to separate the preparation of cadastral base maps from the LAP exercise. The scope in the LAP exercise may be limited to updating the base maps prepared independently by the appropriate authority and adding layers of information critical to the Local Area Planning process.

In the case of the walled city and old village sites, the complexity of the built form presents a unique challenge. The experience in Ballimaran and Yusuf Sarai reveals that resurvey of an old city area is a project in itself. Old cadastral maps of these areas do exist, but the mutations of property ownership over several decades have not been updated in these maps. Unauthorized colonies like Sangam Vihar are a different ball game altogether. This settlement alone is as big as a medium-sized city, but totally unauthorized – therefore, no legally valid land records exist to show the rights of thousands of property owners.

The initial studies and analysis in Sangam Vihar revealed that legal and policy implications of cadastral mapping in such a situation makes the stakeholders extremely wary of the process. Therefore in such a situation, perhaps, the planning exercise needs to be carried out in two stages. In the first stage, a preliminary base map may be prepared using remote sensing methods, studies and stakeholder consultations carried out, and a broad approach/strategy developed with regard to the development of the area. The legal/policy issues may be sorted out with the involvement of all the key government departments/agencies and discussed with the local stakeholders. In the second stage, once the confidence of stakeholders is won, then a proper cadastral survey can be carried out and proposals detailed out on the basis of the new, accurate base map.

5.6 Stakeholder consultations – collective thinking in the urban context

As explained earlier, the pilot LAP exercises started off in a hostile environment and met with substantial resistance from a variety of stakeholders. Even otherwise, stakeholder consultations are complex in an urban context. Most stakeholders focus on their immediate terrain and their stakes/interests. For example, concerns of stakeholders in Vasant Vihar included perceived security threats from adjacent Vasant Gaon, an enclave of the urban poor, as well as the nuisance of pet dogs excreting on footpaths when taken on walks; whereas, the residents of Vasant Gaon don't have enough drinking water. To give another example, residents of Yusuf Sarai were concerned about the disaster vulnerability of their dense settlement when the consultants presented their analysis, while the traders were more concerned about issues like parking.

Such diversity of views can be reconciled and a clear vision for the area articulated only through a systematic public awareness campaign and strong facilitation of discussions. Consultants employed various methods. While Ramky used street plays in Yusuf Sarai, Feedback got a specialized team to carry out participatory appraisals through community mapping and focus group discussions. In Karol Bagh, EFNR held a series of intense discussions with the key stakeholder groups.

Despite all these efforts, it was difficult to build consensus. One of the main reasons was the relatively weak presence of the MCD at the stakeholder meetings, further weakened by their own uncertainty at being able to address stakeholder concerns. Many of the issues that need to be addressed stem from the Master Plan and the consequent illegality of the existing development. The MCD is not yet in a position to make a firm statement as to what they can and cannot do in such cases. However, this is an issue which will hopefully be put to rest when

the appropriate amendments to legislation are in place, giving the MCD a proper mandate for the LAP.

5.7 Conceptualizing interventions – the limits of a local area plan

As explained at many places in this document, the Local Area Plan has been conceived as the third tier of planning in a three-tier system, with the Master Plan and the Zonal Plan as the first and second level. For such a system to be effective, lower levels have to conform broadly to the intent of the higher levels. For example, if the Master Plan delineates an area around a Metro station as a high density business district, the Local Area Plan for that area should logically not come up with a proposal for a quiet residential neighborhood. To give another example, if the Master Plan has identified mass transport corridors for high density development, then the Local Area Plan for an area designated in the Master Plan as low density should not come up with a proposal for high density development that will compete with the corridors.

All three levels of planning are integrated and comprehensive in nature, addressing a host of planning issues such as land use, transportation, economic development, social infrastructure, physical infrastructure, etc. However, the proposals at the different levels will differ in terms of the degree of detail. They will also differ in terms of the flexibility of proposals in the next level of planning, during implementation.

The planning of the road network can be used as an example to illustrate the above point. The Master Plan will show with a reasonable level of accuracy, the exact alignment of the structural road network at city level – say, all arterial roads greater than 30 meters in width. These roads having been conceived with the overall structure of the city in consideration, the Zonal Plans and LAP may not be given the flexibility to change these alignments except for minor variations based on local conditions. The Zonal Plan will then take the structural road network as given and propose, within the zone, the next level of roads say, from 15 meters width to 30 meters width taking into considerations the requirements at the zonal level. Once again, minor variations may be permitted in these proposals in the LAP, but nothing major. The Local Area Plan will then take the Master Plan and Zonal Plan road network as given, and work out all the remaining roads based on local conditions.

Where there is a strong case for making major changes to proposals at the higher levels of planning, there should be a due process by which the higher level plan is revised to reflect these changes.

Similarly, in the case of development controls, the broad range of FSI for different elements of city structure, such as transportation nodes and corridors, may be specified in the Master Plan. The Zonal Plan may deal with finer variations within the zone and the Local Area Plan may specify, to the last detail, the characteristics of height and bulk of buildings on every parcel of land in its jurisdiction.

Thus, the vision for the city's overall structure and form is enshrined in the Master Plan and taken towards implementation in the Zonal Plans and LAP by further detailing, refinement and where needed, change. It is clear that in such a system, the onus for clarity of vision continues to rest heavily on the Master Plan. The Local Area Plan cannot ever substitute or compensate for a faulty Master Plan.

5.8 Lessons learned from the process

An attempt is made here to summarize the lessons learned as follows:

- In a radical reform process such as the one attempted in the case of LAP, it is important to take the political process at the larger level into account. The political leadership needs to be taken into confidence at every stage.
- In retrospect, perhaps the pilot LAPs needed to be insulated from the established administrative procedures of MCD in the expedient interest of completing them quickly and presenting the results to the appropriate decision-makers. Looking to the future, it is important to establish modern procedures in the MCD for commissioning and managing such planning exercises on a regular basis.
- Once the detailed guidelines for LAP preparation are finalized, a formal vendor development process for private consultants may be carried out including perhaps, training and certification.
- A systematic exercise for delineation of LAP boundaries on a rational basis needs to be undertaken for all of Delhi based on the provisions of the Master Plan and Zonal Plans.
- Preparation of accurate, detailed and legally sanctified cadastral maps, in the context of Delhi, is more appropriately taken up as a separate exercise by the government and not as a part of LAP. In the LAP process, mapping may be limited to updating of available maps using high resolution satellite images and filed checks.
- The stakeholder consultation process has to be led by the MCD as it is the official face of governance at the local level. Legitimate platforms such as Resident Welfare Associations may be officially recognized for this purpose.
- The hierarchical structure of planning from Master Plan through Zonal Plans to LAP has to be cast clearly in legislation and procedure in order to determine the appropriate amount of control and flexibility at each level.

The key lessons learned from the list above, particularly those relating to process and content of LAP, have been incorporated in the revised Guidelines for LAP submitted along with this document.

5.9 Looking forward

Some recent events have significantly increased the relevance of the concept of Local Area Plan promoted through the FIRE-funded initiative. These include the recent revision of the Master Plan for Delhi and the anticipated Amendments to the DMC Act, 1957.

5.9.1 The Revised Master Plan of Delhi endorses LAP

At the time that work commenced on the pilot LAP, the Master Plan for Delhi 2021 had just been published for eliciting responses from interested citizens and organizations. In the version that was published, there was a cursory reference to LAP, which may be prepared by the 'urban local body'. However, there was no indication as to how this would work in terms of the scope, content and jurisdiction of these plans.

In response to the Supreme Court orders that resulted in the sealing and demolition drive, the Master Plan was revised again twice. The latest version published in February 2007, refers to LAP in the introduction itself as a major highlight of the Plan (page 3: "(b) Public Participation and Plan Implementation: Decentralized local area planning by participatory approach"). In the list of definitions, "Local Area Plan" is defined (page 123: "2(3) Local Area Plan means the plan of a Ward/Sub Zone to be prepared and approved by the concerned local body."). The operational aspects of the preparation and sanctioning of LAP are referred to on page 124: "3(13) Wherever required, the Technical Committee of the DDA shall formulate policy guidelines for the sanctioning of LAP, layout plans, comprehensive schemes, re-development schemes, urban renewal schemes and multi-storeyed buildings in all land use categories. The

Technical Committee shall be empowered to call for the plans from the development organizations/Local Bodies and would give directions/recommendations wherever necessary”.

There is an entire section on planned redevelopment of already developed areas falling in several categories such as mass transport nodes and corridors, walled city and its extensions, “Special Areas” like Karol Bagh, “under-utilized areas”, etc. The planned redevelopment of these areas constitutes an opportunity for using the Local Area Plan as a tool to facilitate the redevelopment. Indeed this has been amply demonstrated by the Conceptual Plans for Karol Bagh and Yusuf Sarai prepared under this project.

There is a section on Mixed Use Regulations. The provisions of this section deal with the sort of situation where a Local Area Plan would find greatest utility. This section also provides a mandate for public participation, suggesting consultations with registered Resident Welfare Associations.

In conclusion, the provisions of the revised Master Plan for Delhi have not only legitimized the concept of Local Area Plan, but also offer many urban planning opportunities for using the LAP as a significant and powerful tool for the realization of the Plan's objectives.

5.9.2 Legislative amendment

The proposed Amendments to the Delhi Municipal Corporation Act, 1957, drafted in the second phase of the reform initiative have been steadily moving ahead in the due process for legislation. It is now in the final stage and will soon be presented in the Delhi Assembly for discussion. A small, but highly significant change has been made to the draft Amendment for enabling preparation of LAP by MCD. This change now makes it possible for Resident Welfare Associations to prepare LAPs and present them to the MCD for consideration and sanction. While the intention of encouraging proactive involvement of RWAs is laudable, the delineation of LAP boundaries is best carried out as a systematic planning exercise in itself.

Amending the DMC Act to enable LAP preparation by MCD is an extremely important step in the right direction. However, it is equally important that the urban planning system established by the DDA Act is also amended to institute LAP as the legitimate third level of planning.

CHAPTER 6 Institutionalizing Local Area Planning

6.1 Conceptualizing a three-tier planning process – a brief overview

It needs no further elaboration that urban growth management and demand management in delivery of serviced land and real estate are two of the most critical issues in Indian towns and cities. Though not yet widely recognized, these are also essential components of any strategy to make a city inclusive in its growth process, creating legitimate space in the urban fabric for the economically weaker sections of society. Urban planning and enforcement of development control regulations are important tools in the hands of urban planners for efficient growth management. The urban planning process must be futuristic and coherent with the land market dynamics in a city. Plans must be prepared and updated at various scales, with varying degrees of detail at regular time intervals.

Historically, Delhi has had an excellent approach to spatial planning and infrastructure provision. A good portion of the city has a well structured road network with a ring-and-radial pattern. The land use pattern was organized systematically, with a clear hierarchy of commercial centers from city level to neighborhood level. The residential areas were designed to prevent through traffic. Large public spaces and parks were created.

However, the Master Plan for Delhi failed to respond to the burgeoning growth of the city in the last two to three decades, getting stuck with end-state-design conceptions of the city. The land use zoning failed to keep pace with demand and enforcement was never strong enough to constitute a significant dampener to the vibrancy of the real estate market. As development marched inexorably into what continued to be wistfully referred to as the 'green belt', the road network failed to keep pace, likewise infrastructure networks.

Moreover, the Master Plan also failed to transition effectively from a growth management approach where government acquires and develops land, to one where government facilitates and regulates development by the private sector, while restricting its own role to protecting public interest and promoting equitable development. The Delhi Development Authority, which was used to realizing their urban planning and urban design objectives by planning and developing land itself, failed to put in place a system for making more detailed plans that can accommodate and regulate private developments. Even the official city maps have not been updated to show the rapid changes happening on the ground. The entire planning establishment went into a state of denial.

Over time, spatial planning has been completely compromised. The Master Plan has become a 'policy document' with plenty of wishful thinking and no drawings to translate the wishes into reality. While there is no excuse for not having an updated map of the existing development, one may concede the fact the Master Plan cannot get into sufficient detail at that scale of planning. However, if we concede the limitations of the Master Plan, then it follows that more detailed plans are required. For long, Zonal Plans were expected to provide this degree of detail. Sixteen zones have been delineated for this purpose (much too few for 1,400 sq.km.), but only six Zonal Plans have been sanctioned. And now the concept of Local Area Plan seems to have been accepted in principle.

The events of the last two years, and the discussion and debate they have generated in professional circles and the media, point towards a three-tier system of urban spatial planning as a dire necessity to put Delhi back on track as a well-planned city worthy of its status as the capital of the nation. The highest level is the Master Plan at city level, the second is the Zonal

Plan encompassing large portions of the city, and the lowest, the Local Area Plan, at the micro-level. From MP to ZP to LAP, the degree of detail should increase, so should the level of public participation.

6.1.1 Master Plan

The Master Plan of Delhi has provided the city with a unique character that needs to be strengthened. However, over the years since the first Master Plan for Delhi was formulated in 1962, the demand for land and built-up area for various uses such as residential, commercial and institutional has far outstripped the supply mandated by the development controls in the Master Plans. Though the Master Plans have been reviewed and revised many times since then, even the last version has very little documentation on the ground situation or deliberation on real issues relating to land, density and infrastructure gaps. This undermines the actual role of master planning, which is to facilitate coherent land market action by systematic supply of serviced urban land.

The pilot projects for preparation of the LAP initiated by MCD with the help of the USAID FIRE (D) III have revealed the extent of disconnect of the then prevailing MPD, as well as MPD 2021, from the situation on ground. For example, in both Yusuf Sarai and Karol Bagh, more than 20% of the properties have a FAR between 3 and 4. However, the MPD provides for only about 2.25 FAR in Yusuf Sarai and Karol Bagh, simply delineated as a Special Zone, has no development regulations. This is one of the major drawbacks of the MPD. The density regulations are broad-brush as well as uniform across space, completely contrary to market logic.

A master plan is a vision for the future development of a city. It is a pro-active effort on the part of the local government to manage growth through systematic supply of serviced urban land. It is a macro-level plan that gives directions for future growth and renewal, while accommodating changes required for sustaining functional efficiency of the city. The master plan lays out city level roads, land use and density. The land use given at this scale is usually the pre-dominant land use advocated for an area and may consist of a mix of compatible uses. The density regulations may also be schematic and the actual height and bulk may be determined by micro-level planning. One of the key intentions of the master plan is that it allows for consolidation of land for city level infrastructure, open spaces, etc. This must be carried ideally out by the urban local body and must have a horizon of about 15 to 20 years. Ideally it should be prepared/revised every ten years and must be reviewed every 3 years.

While strategic planning and city level policy formulation are important components of the Master Plan, the spatial planning component can be ignored only at the city's peril as evidenced by experience of the last two decades. The structural road network and mass transit alignments have to be coordinated with land use zoning and density zoning at the Master Plan level. This will provide the framework for more detailed spatial planning at the Zonal and Local Area levels. The Master Plan should also delineate all the zones for Zonal Plans on the basis of a sound set of criteria. The MPD should define the basis for delineation of LAP jurisdictions, even though the actual delineation may be part of each Zonal Plan.

The project identification at this level should consist primarily of city level infrastructure projects, initiatives for economic development at city level, and large-scale interventions for alleviating urban poverty. At this scale, many projects are bound to cut across jurisdictions of NDMC, MCD and other government bodies.

6.1.2 Zonal Plans

Zonal Plans constitute the second tier of planning for the city. These plans are intended to provide a further layer of detail to the provisions of the Master Plan. In Delhi of the 16 zones delineated for planning, Zonal Plans have been 'sanctioned' for only six. The entire area marked as 'urbanizable' in the MPD falls into one zone and has been treated as though no development has happened there. The existing Zonal Plans do not provide a substantially greater degree of detail to the provisions of the Master Plan as intended.

Moreover, some of the Zonal Plans also have anomalies. For example, one of the Zonal Plans, having designated an area as commercial in one version, attempted to change this back to residential in a later revision. In the logical sequence of evolution of uses in an area (where no proactive intervention for redevelopment has been carried out), land is usually converted from residential to commercial uses. This phenomenon of conversion starts with the 'zones of better access' in a neighborhood and then spreads to other zones. This is because in the urban land market commercial uses are able to pay a greater premium for the use of prime urban land as compared to residential uses. A reversal in the conversion sequence from commercial to residential does not usually happen. Therefore, one Zonal Plan denoting a particular area as commercial cannot be superseded by another denoting the same area as residential use. It must be understood that land use zoning denotes the predominant use of land in a particular area. The zoning is not absolute and the desirable mix in the use of land under a particular zone must be determined.

As the city grows larger, the need for a meso or middle level of planning becomes important. A metropolis is, in effect, a continuum of many cities. The popular description of a "multi-nucleated" or "poly-centric" urban complex is a bit misleading as it is not so much the many 'centers' that is important, as the continuity of pattern. An easy to understand example of this continuity is the pattern of the road network. At the macro-level, Delhi's ring roads and radial roads form a grid providing alternate routes of movement. The same grid topology needs to be carried through to the micro-level. While the principle remains the same, the physical form has to necessarily change as the scale changes. This is where an intermediate level of planning becomes important. In most of the larger (two million plus) Indian cities, this intermediate level is missing, but the grid topology reappears at the very micro-level. The only exception is the city of Ahmedabad, which has some semblance of a coherent pattern at all levels.

The principle mentioned above applies not only to the road network, but also to land use patterns, other infrastructure networks and to social infrastructure systems. Delhi, by virtue of the proactive spatial planning interventions in place till two decades ago, has continuity and coherence in its urban pattern up to the Outer Ring Road. Beyond this ring, the pattern breaks down and reappears in individual layouts at the micro-level.

Zonal Plans in Delhi need to be prepared in as much detail as Master Plans of smaller cities. The second level of road networks, other infrastructure networks, land use zoning and proposals for consolidation of land for public infrastructure and open spaces at the Zonal level are critical components of the ZP. The Zonal Plan should delineate the boundaries of all LAP within its jurisdiction on the basis of well documented rationales. Ideally, the Zonal Plans should be prepared/revised every five years and reviewed every two years.

6.1.3 LAP

The next degree of planning required, which articulates area-specific conditions and demand, is the **Local Area Plan** stage. At present there is no system for the preparation of LAPs in Delhi. Therefore, development at the Local Area level is not coherent with the larger planning framework and appears as isolated plotted developments. This further complicates the

possibilities of planning infrastructure. Here, serviced urban land is dispersed and intermingled with areas of little or no infrastructure, leading to lopsided densities and land values.

Thus, the third tier of the planning process is the preparation of LAP or micro-level plans. Here, the final layer of roads and infrastructure is planned, which affects the quality of a neighborhood. Local issues can be addressed at this stage and meaningful area-specific development control regulations can be formulated. Plot sizes and, therefore, the grain of the urban fabric is determined at this stage. The scope and content of LAPs have already been discussed in detail. These should be prepared every three years and reviewed annually.

6.2 Relevance of Local Area Plans

A Local Area Plan may be prepared for any land that is vacant, in the process of development or already built upon. The following situations provide a few illustrations of where LAPs can be utilized as a useful planning tool.

6.2.1 For planned development of an urbanizing periphery or urban village

The expansion of cities outward, converting agricultural land for urban uses, is a matter of concern in all growing cities including Delhi. When an organic plot layout is developed for urban uses in an unplanned haphazard manner, the urban area that results becomes difficult to service with appropriate infrastructure. Even though Delhi has largely become urbanized in almost its entire jurisdiction, there are still some pockets of open land. LAP can be used in peri-urban areas for providing regular shaped plots, infrastructure and social amenities, while maintaining the traditional culture and built environment of the inhabitants. It also helps control haphazard development and densities.

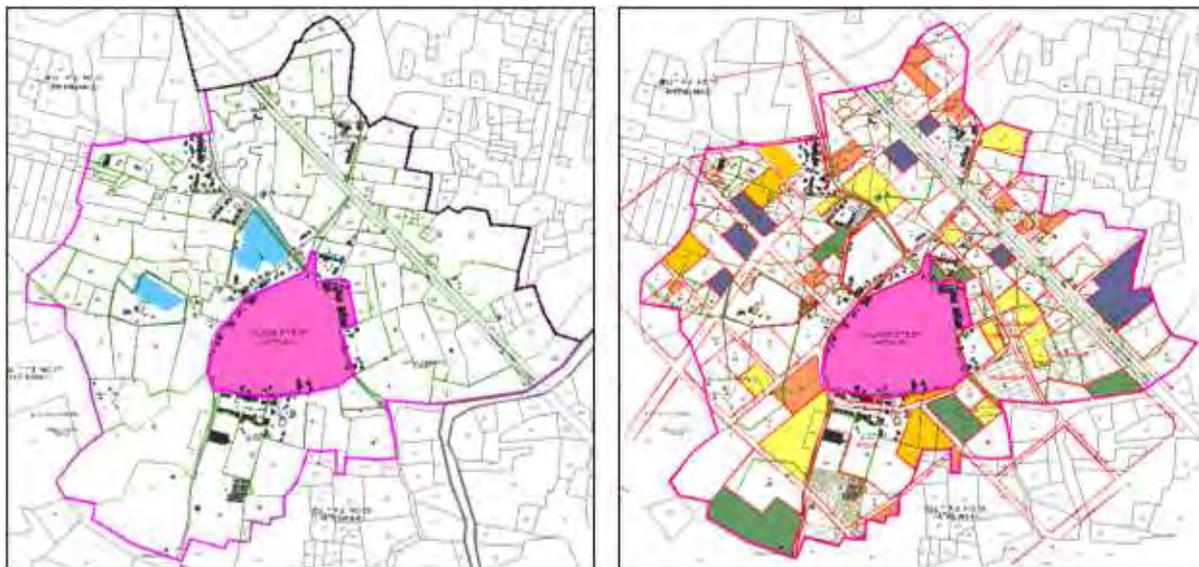


Figure 1 Converting peri-urban land into usable plots (TP scheme in Ahmedabad)

6.2.2 In already developed areas

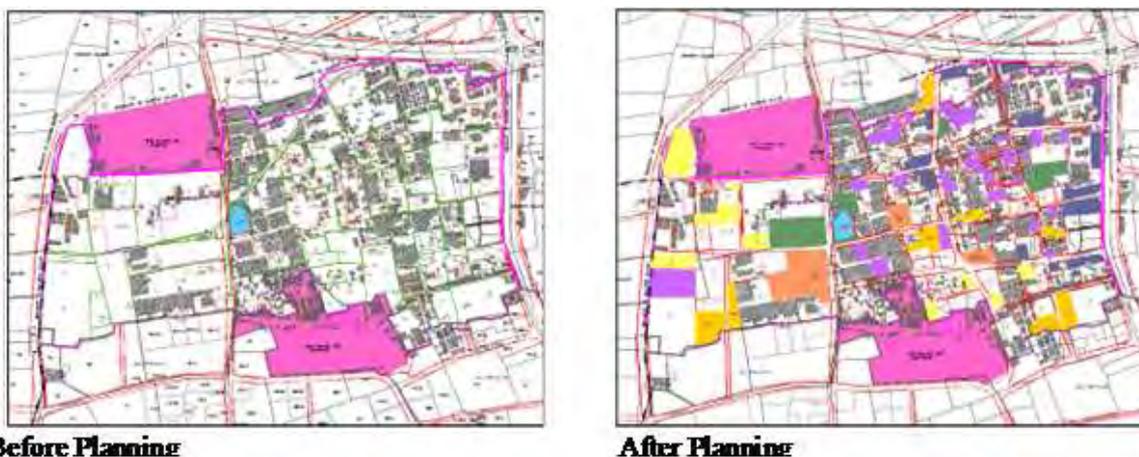
In an already existing built-up area whose functions are changing due to market forces or economic restructuring, a change in people's needs, or even large-scale forces of globalization, etc., the objective of LAP may be based on the need to provide or improve infrastructure support to cater to the changing functions and to appropriately manage the change in built character. In some cases, old building stock may be in the process of replacement and such redevelopment must follow certain guidelines.



Figure 2 Karol Bagh - A fully developed area in Delhi

6.2.3 In old, dilapidated and unauthorized areas

LAP could be used for urban redevelopment, revitalization or regeneration. The focus in dilapidated or unauthorised areas may be to introduce better traffic management, improve infrastructure, provide access to all plots, conserve heritage structures and thereby improve living conditions. LAP also may regularize the development by framing viable norms, appropriation of land for public purposes, and levy of betterment/development charges/penalties.



Before Planning

After Planning

Figure 3 Integrating already developed areas into the urban fabric (TP scheme Ahmedabad)

6.2.4 In a disaster-prone part of the city

LAP may be used in an area vulnerable to disaster to provide safe housing and infrastructure. For example, in an earthquake-prone area, mainly wide streets and open spaces may be the objective whereas for a cyclone-prone area, avoiding straight streets and big open spaces is crucial. In the case of Delhi, fire safety may be a big concern in some areas and LAPs have to take the risk due to fire into account. LAPs can also frame detailed area-specific development regulations keeping in sight disaster norms.



Figure 4 Post-disaster planning in Bhuj

6.2.5 For a heritage site being impacted by the surrounding environment

The objective might be to conserve the heritage site and its cultural and natural landscape, along with bringing about improvement in the surrounding areas, through interventions like appropriation of land for public purposes and other allied activities and improved street sections.



Figure 5 Narrow streets of Old Delhi - vulnerable to risks

6.3 Stakeholder participation

There is now widespread consensus in the planning fraternity that urban planning isn't and shouldn't be the exclusive territory of technically qualified urban planners alone. If they are to be implemented, plans must be realistic and must respond to market conditions. They must factor in the aspirations of people and must promote an equitable society for sustaining a harmonious living and working environment. Therefore, a structured method of including stakeholder participation in each tier of the planning process is critical.

At the Master Plan level, the issues addressed are primarily city level issues. The vision articulated is that of the city as a whole. Therefore, it is important that the discourse be raised to that level. This does not mean that the discussion be made elitist and exclusive. In fact, the effort must be to explain city level issues in a manner that the lay citizen understands and is empowered to respond to.

At the zonal level, a more structured and representative stakeholder consultation is needed to ensure that issues concerning all areas encompassing a zone are covered. At the LAP level, which is closest to the individual, intense stakeholder involvement is necessary as each proposal at this level has a direct and tangible impact on every resident, property owner and other stakeholders.

6.4 Implementation strategies

Project proposals at each tier in the planning process can be arrived at by careful consideration and analysis. Analytical tools such as SWOT have been proven to be simple and useful. These help derive a set of strategies and action plans. Each sector of projects must be segregated – capital investments, repairs and upgradation, and support measures. Support measures may consist of projects such as preparation of detailed project reports, training and capacity building, policy interventions, institutional structuring/restructuring, etc. Cost estimates may then be arrived at for each type and sector of projects. Further indications of cash flows, implementing agency, potential for BOT or PPPs, responsibility for O & M, etc. are useful inclusions in detailing out implementation strategies.

6.5 Capital investment planning and budgeting

Master plans and other plans prepared until recently had no strategies for implementation. A formal process of converting these plans into actions and projects was absent. Therefore, there was no structure for integrating these plans into the cash flows of the governing body in a systematic manner. However, in the present paradigm of urban planning, it is possible to prepare a capital investment plan indicating the phasing of projects along with a schematic representation of cash flows. These can be integrated into the municipal budgeting after identifying various sources of funds and determining the loan-grant mix. A financial operation plan (essential a projection of receipts and expenditure) is then made.

6.6 Institutional capacity for local area planning

The quantum of urban planning work required to fully implement a three-tier planning process, as described above, is massive. As of today, the capacity to undertake this quantum of work exists neither in the government nor in the private sector. There is also a lack of capacity in civil society organizations for informed and meaningful participation in the planning process.

Therefore, a multi-pronged strategy is required: (1) to build the management capacity in MCD (and DDA?) to handle the entire cycle of procuring professional planning services, supervision of the plan preparation, project identification, project development and implementation; (2) to develop vendor planning consultancy firms; and (3) to carry out awareness campaigns to empower civil society for effective public participation.

MCD needs to build a team of urban planners and managers who have the capacity to handle the procurement and supervision of at least ten planning teams at a time. This would probably require a team of about five qualified urban planners and a similar team of managers. This team has to be independent of routine regulatory functions.

The procedures for procurement of services, and certification and disbursement of payments at MCD needs to be simplified and streamlined to enable efficient functioning. The work environment at MCD's office building at Kashmere Gate is abysmally poor and breeds endemic inefficiency. A professional team can be productively engaged only in a professional work environment. Drastic action is required to create a pleasant work place.

The vendor development process will involve development of standardized and detailed guidelines for preparation of plans at various scales. There is a severe shortage of trained urban planning professionals in India today. Therefore, short-term training programs for engineers, architects and other professionals from related fields needs to be considered to build multi-disciplinary teams that can deliver the plans under the leadership of qualified urban planners.

6.7 Setting timelines for the planning cycle

At all three levels of planning, the process broadly involves the activities of plan preparation, public notification, incorporation of feedback, official government sanction, implementation, review and revision, and repeating the cycle. Going by recent experiences in Gujarat, where urban planning processes have been considerably modernized and streamlined, the planning cycle for a Master Plan can be brought down to about 24 months and those of Zonal Plan and LAP to about 18 months in ideal conditions with full backing and involvement of the government.

Periodic review and revision of these plans should ideally be synchronized with the capital investment planning and budgeting process. Spatial plans at the LAP level are unlikely to undergo drastic changes in less than ten years. However, capital investment proposals emerging from these plans are quite likely to need review on a shorter cycle.

CHAPTER 7 Revised Guidelines for LAP

The key aspects of Local Area Planning include understanding of roles and responsibilities. Ideally the urban local body should undertake the exercise and involve consultants on specific tasks. The express purpose of preparing Local Area Plans is to formulate Area-specific Building Byelaws relating to the height and bulk of buildings in the LAP jurisdiction. These have to be drafted in such a way that they are responsive to the urban design context and to the realities of the real estate market. This is required because the actual development in many parts of Delhi is substantially at variation with the Development Controls specified in the Master Plan of Delhi, rendering the enforcement of these controls practically impossible. Therefore, it is imperative to document in drawings and databases the reality on the ground before even considering the formulation of Area-specific Building Byelaws and concomitant planning interventions that may be required.

A set of draft guidelines, for preparation of LAPs, was formulated in the second phase of the reform initiative funded by the FIRE (D) project. The contents of these guidelines included the following sections:

- Proposed planning system
- Purpose of LAP
- Delineation of LAP boundaries
- Setting the objectives of the LAP
- Preparation of base map
- Compilation of database
- Preliminary stakeholder consultations, studies and analysis
- Articulating a vision for the area, formulating strategies and action plans through stakeholder consultations
- Preparing a Conceptual Plan capturing the spatial implications of proposals
- Consistency with Master Plan and Zonal Plan
- Formulating projects for capital investment
- Preparing and publishing a draft Local Area Plan
- Responding to formal objections and suggestions from stakeholders
- Finalization of the Local Area Plan, notification
- Implementation
- Review and revision

7.1 Key changes to the guidelines

The earlier sections of this report dealt with process-related issues in preparation of LAPs. Based on these experiences the guidelines for preparation of LAPs have been modified. The following sections have been modified (revised guidelines have been included as a separate section).

7.1.1 Local Area Plan in the context of macro-level plans

It must be reiterated that the LAP can be prepared and implemented efficiently only if the first two tiers in the planning process have been carried out. The vision and objectives of a Local Area Plan must be coherent with the vision of the Master Plan and Zonal Plan.

7.1.2 Delineation of LAP boundary

The scale of the LAP boundary will vary with the nature and complexity of issues involved. The size of an LAP area may be delineated based on the extent and complexity of development as follows:

| Nature of Development | Size of LAP (ha) |
|---|-------------------------|
| Open/green field areas/planned layouts | 100 to 250 |
| Development with medium-density built-up | 50 to 100 |
| High-density compact development with complex titles/ownership issues | 20 to 50 |

7.1.3 Preparation of base maps

The preparation of an accurate base map is the function of the land records system. Both cadastral and topographic surveys require skill sets different from those of a planning exercise. Consultants are not equipped with the skill sets or the authority to resolve issues related to tenancy, ownership, legality, etc. Therefore, this process should not form part of the LAP process. In the context of Delhi, the land reforms initiative undertaken by the Government is coherent with this concept.

From the experiences of the LAP, it has been found that having proper maps and databases prepared before embarking on the planning exercise is ideal. If these cannot be prepared in advance then high resolution satellite images/aerial photographs may be considered and the process of survey and preparation of base maps may be commissioned simultaneously. However, the degree of accuracy of proposals from the LAP will not be adequate to implement them and detailed drawings/revisions will have to be made once the base map is prepared. One way or the other, time will have to be spent on cadastral and topographic surveys.

7.2 Revised guidelines

The process can be captured in three broad phases as follows:

- Phase 1 – Preparatory works
- Phase 2 – Studies and analyses
- Phase 3 – Urban planning and urban design proposals

Each of these phases has been elaborated below.

7.2.1 Phase 1 – Preparatory works

The preparatory works should, ideally, be carried out by the Municipal Corporation of Delhi in consultation with the other government stakeholders (DDA, NDMC, state government, central government, service provider agencies, etc.). However, consultants may be utilized in the preparatory phase for individual tasks.

Step 1 Delineation of the LAP jurisdiction

The jurisdiction of Delhi is already divided into many zones. Ideally boundaries of LAPs should be delineated within each zone so as to further strengthen the hierarchy in the planning process. However, for special purposes, it should be possible to delineate LAP boundaries across zones. To illustrate, a water front may require development or renewal and this may cut across various zones. In such a case, an LAP should be delineated all along the water body. Another illustration may be the requirement of urban design regulations around a monument of heritage value. Here again, it may be necessary to delineate an LAP boundary across one or more zones.

The following factors may play a role while delineating the boundary or selecting areas under a LAP:

- Existing and envisioned characteristics
- Extent of physical, social or economic influence zones

- Any physical, social, or cultural issues/concerns
- Boundaries, for example administrative boundaries, those framed by arterial roads, or natural boundaries like water body, ridge, etc.
- Vulnerability, or physical extent of damage or effect of disaster
- Zoning in the Master Plan

The scale of the LAP boundary will vary with the nature and complexity of issues involved. The size of an LAP area may be delineated based on the extent and complexity of development as follows:

| Nature of Development | Size of LAP (ha) |
|---|------------------|
| Open/green field areas/planned layouts | 100 to 250 |
| Development with medium-density built-up | 50 to 100 |
| High-density compact development with complex titles/ownership issues | 20 to 50 |

Step 2 Declaration of intention

Declaration of intention is a starting point for preparation of a LAP. This is an official announcement made by the Municipal Corporation of Delhi to undertake the Local Area Plan for a specific area. This can be done through publication in local newspapers or by other means.

Step 3 Detailed base map and property database

Conduct topographical and cadastral survey

A detailed and accurate survey of the LAP jurisdiction using total station equipment must be carried out. The survey has to capture all physical features above ground, as well as cadastral information such as plot boundaries. For detailed information on the requirements of the survey, please see Annexure B.

From the experiences of the pilot LAP projects, it has been found that having proper maps and databases prepared before embarking on the planning exercise is ideal. If these cannot be prepared in advance then high resolution satellite images/aerial photographs may be considered and the process of survey and preparation of base maps may be commissioned simultaneously. However, the degree of accuracy of proposals from the LAPs will not be adequate to implement them and detailed drawings/revisions will have to be made once the base map is prepared. One way or the other, time will have to be spent on cadastral and topographic surveys.

NOTE: Satellite images cannot be used in lieu of total station surveys. Satellite images are ultimately photographs and have their own issues of accuracy, angular deviation, color presentation, etc. While these are extremely useful in preparing schematic base maps for macro-level planning, they cannot be effectively utilized for micro-level planning exercises such as the LAP where the intention is to consolidate land parcels, resolve ownership issues, and implement building byelaws and infrastructure proposals on ground.

To illustrate, in Vasant Vihar (one of the pilot LAPs), a planned colony where topographic and cadastral survey would have been the easiest to carry out (of all the LAP areas), consultants in many places inserted building footprints digitized from satellite images. Pan-chromatic images of 0.6m resolution may have been utilized for this purpose. However, inaccurate digitization may result in shifting of building lines by several meters (say if the shadow of a building was misinterpreted as a building line).

Property database

A database of information on all plots/properties in the LAP jurisdiction must be prepared. A “property” in this context shall be defined either as an individual plot/parcel of land (or part thereof) or a building (or part thereof) bearing a unique identity in the official records of MCD or any government agency, which is the custodian of land records for the area in consideration, or a distinctly identifiable construction/structure of any type without such an identification. This clearly implies that ALL properties irrespective of ownership are to be included in the database.

This database shall include the following information:

- Legally valid identification number such as Plot Number or Survey Number or Property Number or other relevant identification number used by MCD or other government agencies to identify the property
- Name/s of owner/s
- Land area
- Built-up area
- Estimated value (where possible this should be based on records of recent transactions)
- Number of floors
- Type of construction, as pucca, semi-pucca or kachha
- Current use of property (e.g. residential, commercial, industrial, institutional)
- Whether legal/illegal or authorized/unauthorized as per official records
- Any information available on legal contests regarding ownership
- Any other information considered as relevant to fulfilling the objectives of the LAP

| Area Statement | | | | | | | | | | | |
|----------------|-----------|---------------|----------------------|----------------------------------|---------------|-------------|---|---|-------------------------------|------------|------------|
| Sr No. | Block No. | Survey No. | As per D.S.O. Record | As per Last K.J.P./ DURASTI Area | As per 7 X 12 | As per Site | Difference Between DSO or KJP & as per site | Difference Between 7 x 12 & as per site | DSO Record Or KJP & on site % | Final area | Remarks |
| 1 | 2 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | 199 | 460 | 50788 | 46788 | 46842 | 46584 | 204 | 258 | 0.44 | 46788 | K.J.P.-13. |
| 2 | 200 | 457/11 | 4957 | - | 4957 | 4770 | 187 | 187 | 3.92 | 4957 | |
| 3 | 201 | 458 | 3743 | 3727 | 3743 | 3787 | -60 | -44 | -1.58 | 3727 | K.J.P.-13. |
| 4 | 202 | 442/1, 459 | 8296 | 4744 | 8296 | 4571 | 173 | 3725 | 3.78 | 4744 | K.J.P.-13. |
| 5 | 203 | 455/4 | 1518 | - | 1518 | 1571 | -53 | -53 | -3.37 | 1518 | |
| 6 | 204 | 455/3 | 1720 | - | 1720 | 1646 | 74 | 74 | 4.50 | 1720 | |
| 7 | 205 | 455/2a, 457/2 | 7690 | - | 7690 | 7518 | 172 | 172 | 2.29 | 7690 | |
| 8 | 206 | 455/1 | 3035 | - | 3035 | 3003 | 32 | 32 | 1.07 | 3035 | |
| 9 | 207 | 456 | 2428 | - | 2428 | 2513 | -85 | -85 | -3.38 | 2428 | |

Figure 6 A Sample property database



Figure 7 Final base map - Yusuf Sarai

Preparation of final base map and database

Any discrepancies between the output from the topographical and cadastral survey and the existing official base maps should be highlighted. Reconciliation of such discrepancies should then be done by relevant authorities after consultation with stakeholders. The property database and the base map should be given common identification numbers such as Plot Number so that they can be linked together on a spatial platform (GIS applications are extremely useful in detailed analyses).

Authentication of base map by appropriate authority

The draft base map should be submitted to the authority for authentication of boundary, plot/property profiles and areas. Once the plot/property shapes and areas are authenticated the base map can be considered final. Ideally in an urban area the city government should be the authority for land records. But currently there is no such provision, hence this involves changes in the legislative framework in the form of amendments in the Act, as well as appointment of relevant staff in the city government for the same.

7.2.2 Phase 2 – Studies and analysis

Plan components of the LAP must first be listed and issues pertaining to each must be identified. Important plan components of any LAP may include (but not limited to) the following:

- Land uses, built form, densities
- Social and physical infrastructure
- Traffic and pedestrian movement, street design, parking
- Heritage/important structures, culture and character

These plan components should also be analyzed in the context of the city as a whole. Spatial analysis such as growth trends, etc. must be carried out to be able to project the transformations within the LAP boundary. A SWOT analysis is then carried out for each of the plan components, and objectives and strategies formulated. It is important to understand at any point in the study and analysis, as well as in the SWOT analysis to follow and then in the proposal stage, that the LAP area is part of a larger urban fabric that must fit into the overall requirements of the city.

Identification of problems and potentials

Based on the study and analysis of the data and situation, problems and potentials of the area would be identified, e.g., existing infrastructure and its carrying capacity and potentials for improvement, unauthorized properties and potential to regularize, land uses and potential to redefine land uses, and heritage structures or significant public places and their potential to improve the surroundings. The SWOT analysis for the LAP area should be conducted and a meeting with stakeholders be organized at this stage itself.

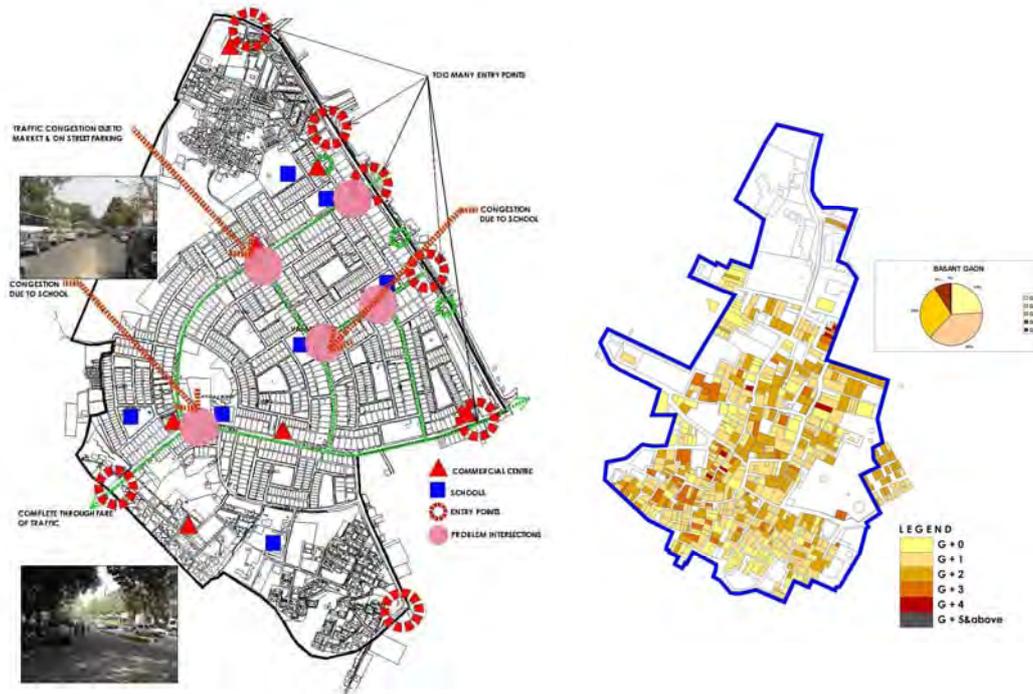


Figure 8 Analyzing traffic patterns (Vasant Vihar) & building topologies (Vasant Gaon) – Vasant Vihar LAP

7.2.3 Phase 3 – Urban planning and urban design proposals

Land uses and density

Based on existing problems and potential for the development, the land use plan will be redefined and a new layout prepared. The land use proposal will define potential areas for transformation in the LAP through land use interventions based on the character of that LAP.

Based on the proposed new hierarchy of streets in that area, the proposal will suggest a hierarchy for densities too. For example, the proposal should identify which streets can have a higher density through a higher ground coverage and higher FAR. The rationale behind providing these higher densities must be clearly worked out.

Different zoning regulations can be created within land uses too. For example, there may be two or three types of residential land uses depending on the street right-of-way and distance from the arterial road. Similarly, other land uses may also have separate density requirements depending on the overall plan and road network.



Figure 9 Lindenville Land Use and Urban Design Plan, South San Francisco & Gandhinagar Development Plan – The grain of buildings on the arterial roads is bigger

Road network

A road network should be designed considering:

- City level and other roads as proposed in the Master Plan
- Existing width of roads and potential for widening.



Figure 10 Establishing a hierarchy in the road network

The road network must follow a definite hierarchy, which must in turn respect the hierarchy proposed in the Master Plan. In addition, the Plan must ensure that all modes of transport, including public and private, motorised and non-motorised, are duly considered in the planning process. The LAP should propose road sections for the different rights-of-way identified in the Plan. Wherever possible, pedestrian and bicyclists must be accommodated in the street design. Informal sector vendors must be accounted for and separate space provided for them in the street design.

Some basic principles must be laid down when the road network is designed such that residents of any particular LAP do not have to travel long distances for daily provisions. As far as possible, such basic provisions should be provided in walking distance for the majority of the residents.

Layout of the basic infrastructure facilities

A feasibility check will help in determination of the extent of need, capacity and financial viability of the services proposed in an area. Services like water supply, sewerage and electricity should be planned in the LAP area keeping in mind the city level provisions, the present services and the area needs. The type and means to provide these services will depend on the objective of the LAP. For example:

- A LAP with an objective to change the functions of an already existing built-up area may need to provide services that support new functions.
- Service provision in an old and dilapidated area may imply the repair of existing services, or would bridge the outstanding service gap, and provide for future requirements.
- In an area, which has vacant, underused land, there may be need to lay out basic services.
- In an area that has a heritage site, the idea may be to conserve and promote the site. In this case the services might need to be augmented for floating population.

Altering plot boundaries and provision of social amenities

Wherever required plot/property should be reconstituted following the urban design guidelines within the framework of the Conceptual Plan. Reconstitution of plot/properties and design of road network are parallel, iterative and mutually dependent exercises, and thus both patterns are liable to change till a balance is achieved.

A general principle for reconstitution can be to regularize the shapes of final plots for optimum utilization of space by the owner and to facilitate the planning process. Other specific principles underlying reconstitution should be based on the objective of the LAP. The following exemplify specific principles for reconstitution:

- Strategically locating public buildings for easy access.
- Strategically locating plots/properties for authorities for high resale value.
- Conserving heritage structures and important cultural landscapes.
- Encourage redevelopment in low density – high value locations.

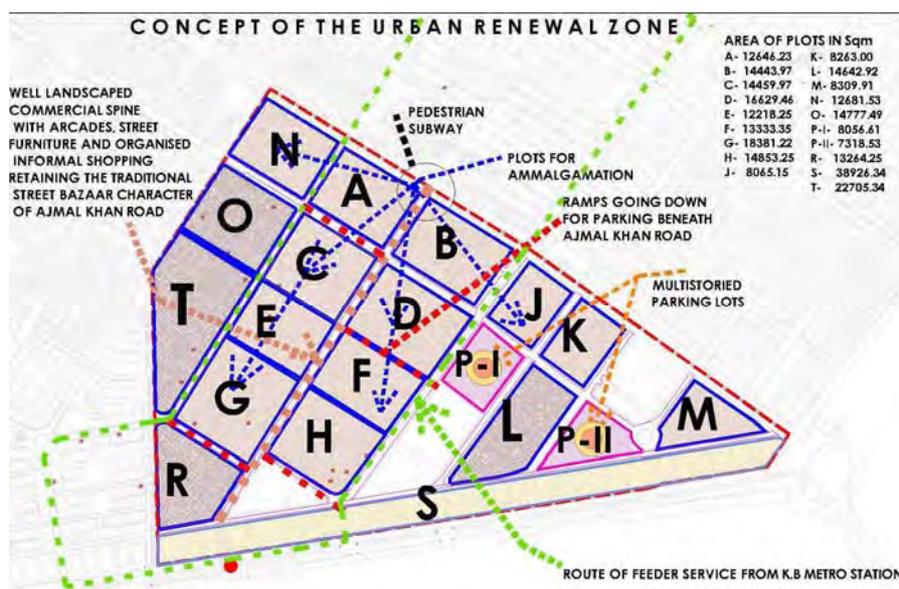


Figure 11 Karol Bagh LAP - reconstituting plot and block boundaries for urban renewal

Area-specific regulatory parameters

The most essential component of the draft Local Area Plan will be area-specific regulatory parameters. These will be framed after analyzing the existing character of the area for which the LAP is being prepared, and then articulating clearly the desired future character of that area through these area-specific regulatory parameters. The desired future character can be achieved by either strengthening the existing character or by altering/modifying the existing character to achieve the future character.

These regulatory parameters or byelaws will specify to the desired detail all building heights and bulk and building uses and other parameters. These may also include urban design guidelines. The following byelaws may be specified in a Local Area Plan:

- Means of access to plots and buildings - define access roads to individual plots and to individual buildings within a plot.
- Minimum and maximum plot sizes - specify the minimum and maximum plot sizes, proportions, and location of plots according to plot sizes and road widths.
- Common open spaces and common facilities - specify common open spaces and common facilities to be provided while undertaking new developments as common areas for parking, playgrounds, community spaces, etc.
- Land and building uses - specify the specific uses that a plot may be put to and the uses that are not permissible on the plot.
- Floor Area Ratio (FAR) - specifies permissible building density on a plot in terms of the total built-up area permissible as a ratio of the plot area.
- Dwelling unit density - defines maximum population density permissible in terms of the number of dwelling units that are permissible on a plot to enable infrastructure design.
- Building height, ground coverage - specify the maximum height and the maximum permissible ground coverage on the plot.
- Setback and margins - specify external open spaces like setback and margins.
- Provisions for parking - specify the minimum or maximum parking requirements on a plot.
- Urban design guidelines - specify urban design guidelines like built-to-line, landscaping requirements, architectural elements, etc. for a particular plot/area.

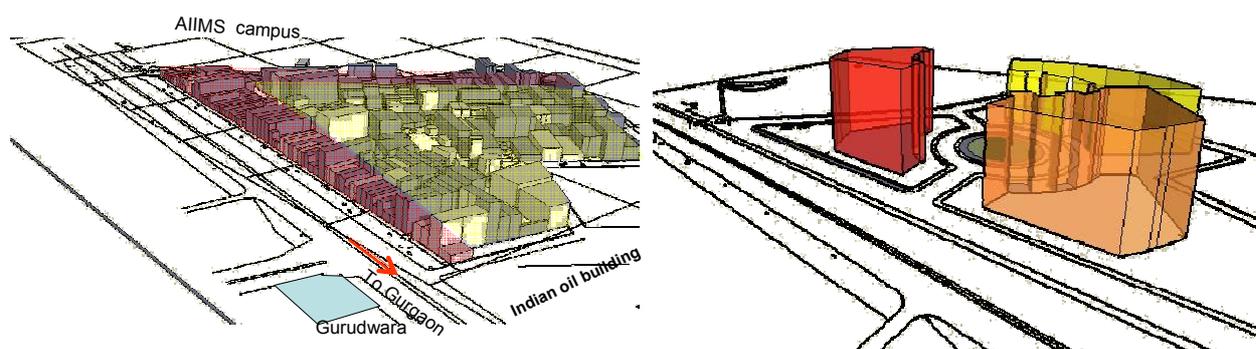


Figure 12 Planning for transformations - Yusuf Sarai LAP

Public consultations

Declaration of intention should come within a week or two once the decision to prepare a LAP is made by MCD. The declaration should also clearly articulate the process of preparation of a LAP with an approximate timeline. Following this the planners/consultants will carry out informal consultations with various stakeholders. They should carry out stakeholder mapping whereby stakeholders are identified for further consultation/s. The stakeholders and citizens would provide some of the survey data needed, as well as help formulate a vision of the LAP area, which would be the basis of the Conceptual Plan. Neighborhood committees, RWAs, NGOs, CBOs, other community and interest groups are envisaged to be a part of the LAP process.

The Conceptual Plan should contain the following:

- Objective of the Local Area Plan
- Conceptual road network, land uses, schematic layout for services, and social amenities proposed in the area to be regularised
- Draft land deduction policy and draft displacement policy, if any
- The benefits of the Plan
- Ways in which properties in the Plan are likely to be affected
- Strategic proposals related to financing and implementation of the Plan.

After publicly displaying the Conceptual Plan and receiving stakeholder comments, the same should be revised to accommodate them before publication of the draft LAP.

A public awareness meeting should be scheduled after the publication of the draft Plan so that queries, as raised by the property owners, can be answered and all suggestions and objections can be incorporated before the finalization of the plan. This statutory public awareness meeting should give out information about the following:

- Draft Plan which is complete in all aspects
- Drafts of policies as proposed
- Draft implementation strategy
- Ways in which properties in the plan are likely to be affected
- Ways in which an owner can submit an objection and develop a format for the same
- Availability of additional information like part plans and the fees for the same.

In the process of preparation of the LAP, the planners/consultants should have a proactive approach towards consultations and engage stakeholders in the process. Citizens and groups should be reached through meetings and surveys, as well as by receiving their inputs in the form of formal objections and suggestions. Planners should also ensure a fair representation and meaningful participation from all sections of society, including traditionally disadvantaged and marginalized sections (even when they are not organized as distinct groups).

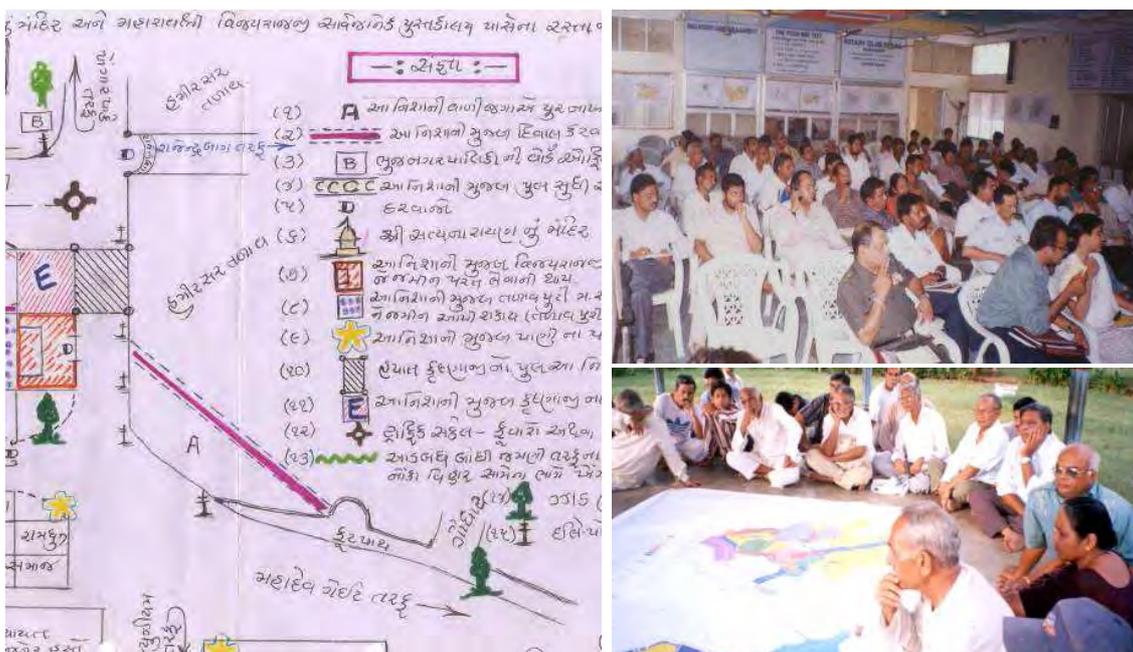


Figure 13 Public consultation - an integral part of the planning process (Bhuj reconstruction)

7.2.4 Projectization and implementation of LAP proposals

Implementation strategy

Once the proposed plans and Area-specific Building Byelaws are drawn up to present the desired transformations in a particular LAP, a set of projects should be developed in order to implement the plan. In some cases capital works may be required and in others a more detailed study may be in order. For example, if the LAP involves development of a water front, more detailed hydraulic analysis may be required. Another example may involve revamping a market place. Each proposal must be articulated as a project with strategies for implementation. It may be necessary to consider various forms of public private partnerships and define roles and responsibilities clearly. The strategy for implementing the LAP is to be finalized before publication of the Conceptual Plan, and a draft of the proposals is to be included with the draft Plan.

Financial details

The draft LAP must include schematic estimates of the cost of implementation, as well as proposals for cost recovery such as betterment levy, use of land as a resource, sale of development rights, user charges, enhancement of property tax base, etc. The financial feasibility of proposed investments should be demonstrated through a schematic financial structuring/cash flow analysis.

Project cost

- The cost incurred in planning and administration of the project. This consists of the cost in the form of compensation to be paid to the owners for the part of a plot/property taken from the owners for betterment; and cost of infrastructure services to be provided, which could include roads, water supply, drainage, electricity and public amenities.
- Operation and maintenance cost over time.

Project revenues

- Betterment charges - these are one-time charges to be levied on the owners of plots/properties, which would capture a portion of the appreciation of the plot/property values resulting from the improvement of the area.
- Estimated values of plots/properties reserved for the authorities for sale in residential and commercial use.
- User charges and others to be accrued from implementation of infrastructure assets.

Timeframe for statutory planning

| S. No. | Stage | Time |
|--------|---|---|
| 1 | Declaration of Intension by Municipal Corporation of Delhi | Starting date |
| 2 | Preparing and publishing of draft LAP | Nine months from the date of Declaration of Intention + maximum three months extension (in aggregate) |
| 3 | Public meeting for inviting objections and suggestions on draft LAP | Within two months from the date of publication of the draft LAP |
| 4 | Appointment of a panel of experts for hearing public grievances against the draft LAP | Within two months from the date of publication of the draft LAP |

| S. No. | Stage | Time |
|--------|--|---|
| 5 | Invitation and hearing grievances of the parties affected by the draft LAP, by the panel of experts | Within three months from the date of publication of the draft LAP |
| 6 | Recommendations from the panel of experts in writing to the Commissioner for modifications in the draft LAP, based on public hearings and due consideration to all grievances | Within four months from the date of publication of the draft LAP |
| 7 | Considering the recommendations of the panel of experts, making necessary modifications as the Commissioner deems fit in the draft LAP and submission to the Standing Committee for consideration and approval | Within five months from the date of publication of the draft LAP |
| 8 | Review and revision of the LAP by the Corporation | At an interval of not more than three years |

Annexure A. Draft Amendments Proposed to the DMC Act

CHAPTER XXI LOCAL AREA PLAN

This is to substitute CHAPTER XXI of the PRINCIPAL ACT

Local Area
Plan, context,
and
objectives.

425. (1) The Corporation may prepare one or more Local Area Plans for Delhi:

Provided that the Corporation may also prepare, subject to the provisions of this chapter, a Local Area Plan on the basis of any petition by the residents of any area within the jurisdiction of the Corporation.

(2) A Local Area Plan may be prepared in accordance with the provisions of this Act in respect of any land which is -

- (a) vacant, or
- (b) in the course of development, or
- (c) already built upon.

(3) A Local Area Plan

- (a) may be prepared to achieve, and
- (b) shall not be limited to the achievement of,

the following objectives :-

- (i) development or re-development of land, and conservation of buildings, natural features or other physical features,
- (ii) providing improvements in the physical layout, making infrastructure and amenities available and managing the area to enhance health and safety of the occupants to support economic development as well as to enhance the quality of living environment, and

- (iii) preparation of development controls for the area covered by the Local Area Plan.

Explanation. – “development controls” shall include height of buildings, quantum of built-up area, regular lines of streets and building lines, setbacks, floor area ratios, facade controls, parking spaces, loading and unloading spaces, sizes and locations of projections and advertisement signs, and circulation pattern,

- (4) A Local Area Plan, which may be prepared to achieve the objectives referred to in sub-section (3), may provide for, but shall not be limited to, the following matters :-

- (a) preparation of -

- (i) plan for laying out, or re-laying out, of land, either vacant or already built upon,

- (ii) plan showing the layout of new streets or construction, diversion, extension, alteration or improvement, or closing up, of streets, and discontinuance of communications,

- (iii) urban design plans for the area covered by the Local Area Plan which may include development controls such as height of buildings, quantum of built-up area, regular lines of streets and building lines, setbacks, floor area ratios, facade controls, parking spaces, loading and unloading spaces, sizes and locations of projections and advertisement signs, and circulation pattern;

- (b) allotment or reservation of land for roads, open spaces, gardens, recreation grounds, schools, markets, transport facilities, and public purposes of all kinds.

Explanation. – “public purpose” shall mean any purpose concerning, or open to, the people as a whole;

- (c) reservation of land for sale by the Corporation for residential, commercial, or industrial use, depending upon the nature of the anticipated development;
- (d) construction, alteration, or removal of buildings, bridges, and other structures; and
- (e) filling up, or reclamation, of low-lying, swampy, or unhealthy areas, or levelling of land.

426. The Corporation may make regulations providing for the detailed procedure for the preparation and implementation of any Local Area Plan.

427. (1) The Corporation shall declare its intention to prepare a Local Area Plan in respect of such area as it may specify by a resolution.

(2) The declaration of intention to prepare a Local Area Plan shall be accompanied by a map showing the boundaries of the area to be covered by such Local Area Plan.

(3) The declaration of intention to prepare a Local Area Plan shall be open for inspection by the public in such manner as may be prescribed.

428. (1) With effect from the date of declaration of intention to prepare a Local Area Plan under section 427, no person shall carry out any development work within the area covered by such Local Area Plan unless such person has -

- (a) secured a building permit prior to the declaration of intention to prepare such Local Area Plan, or

Procedure for preparation of Local Area Plan
Declaration of intention to prepare Local Area Plan.

Bar to development work.

- (b) by means of an application addressed to the Commissioner, applied for, and obtained, special permission from the Commissioner in the prescribed manner for carrying out such development work.
- (2) Where an application for any development work under clause (b) of sub-section (1) is received by the Commissioner, he shall duly acknowledge the receipt thereof and shall, after making such enquiry as he deems fit, either grant or refuse such special permission or grant such special permission with such conditions as he thinks fit to impose. Such special permission may be given by the Commissioner only for buildings intended to serve public purpose, stating the reasons to be recorded in writing.
- (3) If the Commissioner does not communicate his decision to the applicant within three months from the date of acknowledgement of the receipt of the application, the applicant may prefer an appeal to the Municipal Building Tribunal.
- (4) If the applicant, who has been granted permission for any development work under sub-section (2), contravenes the provisions of sub-section (1) or any of the conditions imposed under sub-section (2), the Commissioner may, by a notice, in writing, direct such applicant to stop such development work in progress and, after making an enquiry in the prescribed manner, remove, pull down, or alter, any building or other development work, or restore the land or the building, in respect of which such contravention is made, to its original condition.
- (5) Any expenses incurred by the Commissioner for carrying out the purposes of sub-section (4) shall be recoverable from the applicant in default and shall be recovered from him as an arrear under this Act.

(6) No person shall be entitled to any claim for compensation in respect of any damage, loss, or injury resulting from any action taken by the Commissioner under sub-section (4) of this section except in respect of a building or work begun, or a contract entered into, before the date on which the declaration of intention to prepare a Local Area Plan is published under sub-section (1) of section 427 or on the basis of any contract entered into between the Corporation and such person.

(7) If the Corporation intends to carry out on or after the date referred to in sub-section (1) any development of land within the area included in any Local Area Plan for its own purpose in the exercise of its powers under any law for the time being in force, the Corporation may carry out such development in conformity with the provisions of such Local Area Plan and the building by-laws as are in force for the time being.

(8) The provisions of this section shall cease to be in force with effect from the date of withdrawal of the Local Area Plan under section 429G.

Preparation
and Publication
of Draft Local
Area Plan.

429. (1) Within a period of nine months from the date of declaration of intention to prepare a Local Area Plan under section 427, the Commissioner shall prepare and publish, in the prescribed manner, the Draft Local Area Plan subject to such specifications as made in the Master Plan or the Zonal Development Plan, as the case may be, for carrying out the provisions of the Local Area Plan :

Provided that the Commissioner may, from time to time, extend the period as aforesaid by such period as may be specified by him by notification, but in no case shall the period of such extension exceed three months in the aggregate :

Provided further that in the case where the Commissioner fails to prepare and publish the Local

Area Plan within the period as aforesaid, the declaration of intention shall be deemed to have lapsed.

- (2) The Commissioner shall consult the public during the preparation of the Local Area Plan in such manner as may be provided by regulations under section 426.

Contents of
Draft Local
Area Plan.

429A. The Draft Local Area Plan shall contain particulars including, but not limited to, -

- (a) development controls for Local Area Plan including building heights, covered areas, building alignments, setbacks, floor area ratios, facade controls, and other urban design provisions;
- (b) plan for laying out or re-laying out of land;
- (c) plan for reconstitution of plots including changes in shape, size and location of plots, allocation of new plot in lieu of original plot, transfer of ownership from original plot to new plot, transfer of ownership of a plot from one owner to another, deduction of land from original plot and allotment of residual plot to the Corporation for public purposes;
- (d) proposed layout of road network and other infrastructure or services;
- (e) proposed plotwise land use plan of new plots;
- (f) financial statement in respect of the Local Area Plan including, but not limited to, -
 - (i) costs associated with the planning and implementation of the Local Area Plan including the costs of infrastructure as planned,

- (ii) compensation to be paid to any owner in consequence of any changes in the size or characteristics of his plot, and

(iii) proposal for recovery of cost under section 429F.

Presentation of Draft Local Area Plan, consideration of objections and publication of revised Draft Local Area Plan.

429B. (1) The Commissioner shall make available copies of the Draft Local Area Plan published under sub-section (1) of section 429 on payment of such fees as may be prescribed.

(2) The Commissioner shall, within two months from the date of publication of the Draft Local Area Plan under sub-section (1) of section 429, present such Draft Local Area Plan at public meetings organized for this purpose, and shall invite objections from any person affected by such Draft Local Area Plan.

(3) The Commissioner shall consider the objections, if any, and may make such modification in the Draft Local Area Plan as he deems fit and publish a revised version of the Draft Local Area Plan.

(4) The Commissioner shall make available copies of the revised Draft Local Area Plan published under sub-section (3) on payment of such fees as may be prescribed.

Public hearing of grievances against Draft Local Area Plan.

429C. (1) The Commissioner shall, within two months from the date of publication of the Draft Local Area Plan under sub-section (1) of section 429, appoint a panel of experts for hearing public grievances against the Draft Local Area Plan as so published.

(2) The panel as aforesaid shall, within three months from the date of publication of the Draft Local Area Plan under sub-section (1) of section 429, give an opportunity to the parties affected by the Draft Local Area Plan to submit their grievances and be heard.

- (3) The panel as aforesaid shall, within four months from the date of publication of the Draft Local Area Plan under sub-section (1) of section 429, on the basis of the public hearing and after due consideration of all grievances, submit its recommendations in writing to the Commissioner for such modifications in such Local Area Plan as it may deem fit.
- (4) The Commissioner shall, within five months from the date of publication of the Draft Local Area Plan under sub-section (1) of section 429, consider the recommendations of the panel as aforesaid and may make such modification in the Draft Local Area Plan as he deems fit before submitting the Draft Local Area Plan to the Standing Committee of the Corporation for consideration and approval.
- (5) Upon approval of the Local Area Plan by the Standing Committee, the Commissioner shall issue a notification stating the place and time for inspection of the said Local Area Plan by the public.
- (6) The Commissioner shall make available copies of the Local Area Plan as approved by the Standing Committee on payment of such fee as may be prescribed.

Transfer of rights and liabilities.

- 429D. (1) All rights and liabilities associated with the original plots or buildings thereon within the Local Area Plan shall be transferred to the owners of the new plots or buildings in the prescribed manner.
- (2) The transfer of rights and liabilities as aforesaid shall include title, ownership, easement, and other rights in respect of such plots or buildings.

Revision of Local Area Plan.

- 429E. (1) The Corporation shall undertake a review of the Local Area Plan at an interval of not more than five years, and shall make such revisions as it may consider necessary, in such manner, and in accordance with such procedure, as may be prescribed.

- (2) For the purpose of carrying out the revision in the Local Area Plan, the Corporation may follow the provisions of section 427, section 428, section 429, section 429A, section 429B, section 429C, and section 429D.

Recovery of costs
by the
Corporation.

429F. The Corporation shall recover the costs associated with the Local Area Plan by using, and not limiting the use to, the following instruments in the prescribed manner :-

- (a) levy of betterment charges which shall be computed in such manner as may be prescribed,
- (b) charges on additional development rights on account of the implementation of the Local Area Plan providing benefits to the persons concerned, and
- (c) proceeds from sale of land reserved for public purposes.

Withdrawal of
Local Area Plan.

- 429G. (1) If, at anytime before the sanction of the Draft Local Area Plan, more than two-thirds of the owners of the land to which the Draft Local Area Plan relates request, for reasons to be recorded in writing, for withdrawal of the Draft Local Area Plan, the Corporation shall review the validity of the request for such withdrawal in such manner as may be prescribed.
- (2) If the Corporation is satisfied that the circumstances exist for such withdrawal of the Draft Local Area Plan, the Corporation shall, by a resolution, withdraw such Draft Local Area Plan.
- (3) The withdrawal of the Draft Local Area Plan under sub-section (2) shall be published in the *Official Gazette*.

- Amendment of section 452. 6. In clause (a) of sub-section (1) of section 452 of the principal Act, for the words and figures “under sections 317, 325, 343, 344 and 345;”, the words and figures “under sections 317 and 325;” shall be substituted.
- Amendment of section 456. 7. In clause (a) of sub-section (1) of section 456 of the principal Act, for the words and figures “section 317, section 325, section 343, section 344, section 345 or section 347”, the words and figures “section 317 or section 325” shall be substituted.
- Amendment of section 461. 8. In sub-section (2) of section 461 of the principal Act, the words and figures “or section 339” shall be omitted.
- Amendment of section 466A. 9. In section 466A of the principal Act, -
- (1) in clause (a), the words, figures, and brackets “or section 332 or sub-section (1) of section 333 or sub-section (1) of section 334 or section 343 or section 344 or section 345 or section 347”, shall be omitted, and
- (2) in clause (b), the words and figures “or section 339” shall be omitted.
- Amendment of section 467. 10. In section 467 of the principal Act, -
- (1) in clause (a), for the words, figures, and brackets “or section 332 or sub-section (1) of section 333 or sub-section (1) of section 334 or section 343 or section 344 or section 345 or section 347”, the words and figures “or section 337 or section 345 or section 347 or section 348” shall be substituted, and
- (2) in clause (b), the words and figures “or section 339” shall be omitted.
- Amendment of section 479. 11. In sub-section (2) of section 479 of the principal Act, for the figures and letter “349A”, the figures and letter “349P” shall be substituted.
- Amendment of Twelfth Schedule. 12. In the Twelfth Schedule of the principal Act, under the heading “PENALTIES”, the entries beginning with the word and figures “Section 332” in column 1 against the entry “Erection of a building without the sanction of the Commissioner” in column 2 and ending with the figures “200” in column 3 against the entry “Section 349, sub-

section (1)" in column 1 against the entry "Failure to comply with requisition to vacate buildings in dangerous condition, etc." in column 2 shall be omitted.

- Saving.
13. Any work in relation to a building, which is under execution in accordance with the provisions of chapter XVI of the principal Act before the coming into force of this Act and is pending on the date immediately before the date of coming into force of this Act shall, on the coming into force of this Act, be continued, and shall be completed, in accordance with the provisions of chapter XVI of the principal Act as were in force before the coming into force of this Act, as if this Act had not been passed.

Annexure B Details to be Included in the Survey

The work shall include a triangulation network using temporary station pegs. The survey shall include an additional survey number adjoining the boundary of the Local Area Plan. Details of all existing features like buildings, structures, places of worship, antiquated structures, monuments, wire fencing, boundary walls, electric lines and poles, telephone lines and poles, H. T. lines and poles, manholes, trees, cart tracks, roads, railway lines, natural/artificial drains, canals, water bodies, culverts, wells, foundation for overhead power cables, etc. shall be marked using total station having an angle accuracy of two seconds.

Survey specifications

The following specifications should be followed during the preparation of a final survey drawing.

A. Buildings

The buildings in the drawing should be categorized as follows:

- Pucca - All buildings which are made of brick or stone with cement or lime mortar and are either Load Bearing or Frame structures
- Semi-pucca - All buildings with brick or stone walls and tile, asbestos or tarpaulin roofs
- Kuccha - All buildings made with mud mortar and tile, asbestos or tarpaulin roof
- In addition to using the hatch/line type specified in Annexure A, the type of building should be indicated in the drawing using the notation 'A', 'B' or 'C'.

B. Roads

The roads shown in the drawing should be categorized as follows:

- Tar roads/metal roads
- Cart tracks
- Highways.

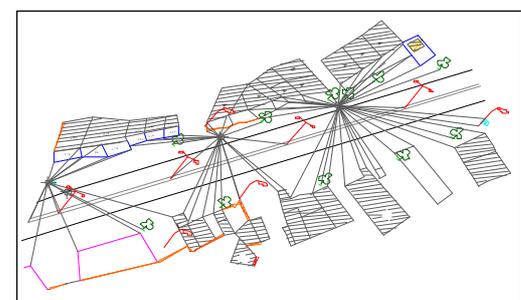
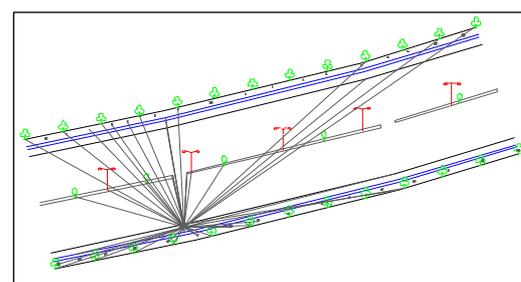
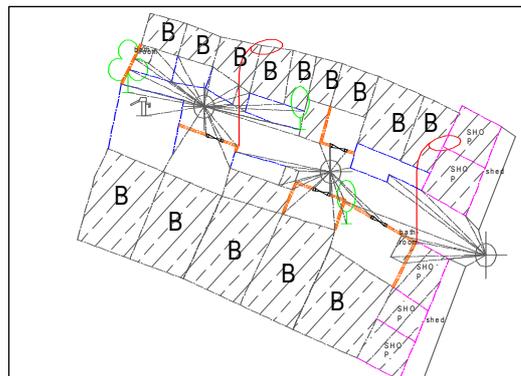
C. Boundary Walls/Fencings

The centre lines of the boundary walls should be clearly indicated. The wall thickness should be shown in the drawing.

D. Trees

The trees shown in the drawing should be categorized as follows:

- Big trees - All trees with a trunk diameter greater than 300 mm.
- Small trees - All trees with a trunk diameter greater than 100 mm.



- Plantation/vegetation/orchards - An orchard with trees should be indicated. Any other plantations or vegetation should be mentioned in the drawing and the remainder boundary of the same should be indicated clearly.

E. Other Features/Utilities

This shall include:

- Survey stones, milestones
- Water supply lines, chambers, and pumping stations
- Drainage lines, manholes, and pumping stations
- Electric lines, poles, DPs and sub-stations, high-tension lines
- Telephone lines and DPs
- Open drains, water *kundis*
- Wells, underground tube wells/boring wells, harvesting or recharging facilities
- Culverts.

F. Bunds

G. Water Bodies

This shall include:

- Tanks, lakes, ponds, canals, bowdis, step-wells

The features shall be represented by a solid hatch pattern indicating the depth of the water body.

H. Text

- LAP boundary
- Survey no./block no./division no./property no.
- Special buildings, e.g., religious places, educational institutions, etc.
- Contour levels
- Village boundary
- Pegs (station and survey points).

Contour Survey

The levelling work shall be carried out by any conventional method. The spacing between two spot levels shall not exceed 15.0 m. in any direction and the contour interval shall be 0.5 m. The contour survey should also capture sharp changes in level such as mounds, cuttings, ditches, etc.



Contour map

Benchmark Transfer

If there is no Survey of India benchmark within 5 km. from the survey area, the benchmark transfer shall be carried out using auto level by closed circuit method. The benchmark shall be transferred onto a permanent structure in absence of a benchmark pillar. The starting and closing of each day's work shall be from a known benchmark. The levelling work shall be connected with S.O.I. benchmark. There shall be a minimum of one temporary benchmark within 5 km. from the permanent benchmark.

Symbols to be used in survey drawings

| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION |
|---|---------------------|---|--------------------------|
|  | ADVERTISEMENT BOARD |  | KM STONE |
|  | SURVEY POINTS |  | LEVEL SYMBOL |
|  | BUS STOP |  | LAMP POST |
|  | CONTROL POINT |  | MANHOLE |
|  | CULVERT |  | OFC STONE |
|  | GRID PILLAR |  | POST BOX |
|  | ELEC.JN.BOX. |  | RAILWAY LINE |
|  | ELECTRIC POST |  | ROW STONE |
|  | ELEC.TRANSFORMER |  | SIGNAL POST |
|  | FENCEING LINE |  | STATION POINT |
|  | GATE |  | TEL.JN.BOX. |
|  | COMPOUND WALL |  | TEMPLE |
|  | HEDGE LINE |  | TELEPHONE POST |
|  | HAND PUMP |  | TUBE WELL |
|  | HIGH TENSION TOWER |  | WELL |
|  | SMALL TREE |  | WATER KUNDI / WATER TANK |
|  | BIG TREE |  | WATER TAP |
|  | EXISTING ROAD |  | BUILDING—PUKKA |
|  | CART TRACK |  | BUILDING—KATCHA |
|  | DRAIN / NALA |  | BUILDING—HUT |
|  | PIPE |  | STONE |
|  | VALVE POINT |  | DIRECTION BOARD |