CHAPTER 1

BACKGROUND, RESEARCH QUESTIONS AND STUDY DESIGN

1.1. Introduction

1.1.1. The concept of Master Plans is central to city planning in India and many cities have developed such plans with a longer perspective. Once approved, they become a legally binding document and a blueprint for implementation. Plan preparation is a step wise process and the whole concept encapsulates planning in all its observable and manifested aspects and hence, this ‘blue print’ character of planning is dominant for urban settlements. From inception to publication as a document, numerous processes are involved in the preparation of master plans. Thus, it provides an insight into planning ideologies to which the plan is anchored and also opens up scope for introspection of the strategies that are adopted for city development.

1.1.2. A city is taken as a representative of the ‘processes and ideas that impact the life of citizen’ and is also considered as the ‘noblest monument of human art and conception’ (Dutt 2009). The twentieth century is viewed as a ‘city century’ and that of ‘urban planning’ (Freestone 2000). Urban places and the city planning processes are increasingly understood as ‘powerful determinants of population’s well being’ (Corburn 2009) with cultural aspects as one of the most ‘enduring element in current planning’ (Freestone and Gibson 2006). In this regard, high density settlements as observed for cities are different from small size settlements with regards to a variety of aspects (Webber1963).

1.1.3. Hence, planning is a multi dimensional exercise in which specific actors and institutions are involved and a teamwork in which socio economic considerations are an important feature. The most popular of planning documents is the Master Plan drawn for the varied contexts containing the variety of aspects of planning propositions. Plan preparation is, hence, termed as ‘an enormous task built on combined vision’ (Shafi 2003).
1.1.4. The role of various actors in the preparation of plans and the political backdrop under which they are prepared, the powers granted and authority vested with implementing agency influence their effectiveness (Simpson 1988). A hierarchy can be drawn for city planning with ‘planning intention’ at the top and ‘planning instruments’ at the bottom and ‘city design and urban ordering’ can be placed in the middle of it (Marshall 2009). These components can be analysed as:

i. Planning Intention-This is concerned with envisioning and maintaining a future state, creating and providing for a desired future state or to create a desired future state for an ‘improved’ society;

ii. City Design- It refers to the planning of a city as a whole unit in a definite form; and

iii. Urban Ordering which is manifested in the creation of order through consistency of urban building blocks (Marshall 2009).

1.1.5. All planning takes place for a population which has certain demographic and economic variables. Town planning is defined as ‘a process by which the use of land is controlled and its development is regulated in public interest with the aim of coordination of human activities in time and space’ (Singh 1978). Planning has also been defined as ‘a prior thought of action aiming at human welfare’ (Singh 1978). Various kinds of planning practices as observed in different parts of the world have been detailed in Chapter 2. The pertinent point is that urban plans lend an overall opportunity to introspect the multiple and interrelated dimensions of urban planning in general and that of a city in particular.

1.1.6. In the Indian context, urban planning has existed since the ancient and medieval periods, but modern city planning is observed only in the mid fifties with the planning of Chandigarh and the undertaking of first exercise of its kind was for the national capital of Delhi through Master Plan (Shafi 2003). Subsequently, planning was followed in Calcutta (Kolkata) and Bombay (Mumbai) and setting up of town planning departments in other cities and towns following which a large number of master plans have been prepared for nearly all major towns and cities (Shafi 2003).
1.1.7. Besides this, there are also city-regional plans for National Capital Region focused around Delhi; ‘regional metropolitan plan’ for Bombay focusing on creation and development of new towns such as ‘Navi-Mumbai’ (New Bombay); Basic Development Plan for Calcutta with a Major Plan for traffic and transportation and master plan for water supply, sewerage and drainage; and an Interim Plan followed by a Comprehensive Development Plan for Chennai (Shafi 2003). An important feature of this planning are the various agencies involved in planning in which the presence of international assistance is observed in cities such as Mumbai and Chennai (Nath 2007) and the dominance of one agency as in Delhi (Shafi 2003; Nath 2007).

1.1.8. Currently, under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), preparation of City Development Plan (CDP) is proposed for the Mission Cities identified ‘indicating policies, programmes and strategies and financing plans’ and also to ‘facilitate identification of projects’ (www.jnnurm.nic.in). “A City Development Plan (CDP) is a perspective and a vision’ for the upcoming development of a city. It presents the current stage of the city’s development- where are we now? It sets out the directions of change - where do we want to go? It identifies the thrust areas - what do we need to address on a priority basis? It also suggests alternative routes, strategies, and interventions for bringing about the change – what interventions do we make in order to attain the vision?” (www.jnnurm.nic.in).

1.1.9. One of the main highlights of CDP preparation are the newer aspects introduced. A CDP is anchored on the Jawaharlal Nehru National Urban Renewal Mission’s (JNNURM) goal of creating ‘economically productive, efficient, equitable and responsive cities’. The Mission also focuses on working on strategies that bridge the gap between ‘where the city is’ and ‘where it is wishes to go’. A City Investment Plan (CIP) is also forwarded to provide an estimate of the level of investment that will be needed to implement the CDP. In these contexts, analysis of Master Plans becomes crucial as the CDP’s mode of operation is to be defined along with the existence of the master plan. Further, it needs to be analysed with reference to similarities and dissimilarities that exist in both documents as both address one city (www.jnnurm.nic.in).
1.1.10. Indian Master Plans have been seen as the last product of planning but are criticized for being focused on certain premises which aim at selected processes and fixed notions making this exercise as ‘an exercise in futility’ presenting an ‘unfortunate lack of understanding of urban phenomena’ (Shafi 2003).

1.2. Delhi’s Master Plans

1.2.1. Delhi was the first city to have a Master Plan in independent India and also to adopt master planning strategy. The first officially recognised Master Plan was that of 1962 and has been termed as the ‘First Comprehensive Plan’ (DDA 1996). The modified document has been titled ‘The Perspective Plan -2001’ (DDA 1996) which is referred to in here as the Second Master Plan. Next in line is the current Master Plan, titled ‘Master Plan for Delhi With The Perspective for Year 2021’ which is referred to in here as the Third Master Plan.

1.2.2. The process of preparation and implementation of Plans is vested in one single authority which is the Delhi Development Authority (DDA). Therefore, a study of the contents, the methodology of implementation in the light of plan objectives is rewarding since Delhi Master Plan was emulated widely by planning agencies in other cities. The evaluation of the Plans is done with reference to the following aspects:

i. Urban Plans and Master Plans: Plans have been described as a decision making process with which the risks of future are minimized by following a method of action (Lein 2002). These were particularly useful when the decisions to be made are interdependent, irreversible, and indivisible and face imperfect foresight (Hopkins 2001). This involves the study of components of urban planning in general and master planning concept in particular. This is further observed with reference to the broad aspects of urban planning practices and master planning strategies in the world. Observations on the concept of master planning in a variety of contexts as a component of planning are given in Chapter 2 along with a critical review of urban planning approaches.
This is done systematically by first outlining briefly the concept of urban planning and its theoretical underpinnings. Further, master planning is observed as a part of urban planning with regards to its contents, observed characteristics, limitations and this is done through the description of evolution of various types of city plans, the concept of master planning, and components of master plans.

ii. Plan Evaluation: Evaluation is a complex task and there is no single method for assessment. Plans can be evaluated in a number of ways for a number of components. This analysis is conducted for the Master Plans of Delhi are discussed in Chapter 3 where plan evaluation has been attempted with regards to their respective background studies and individual content analysis which has been extended to the comparative analysis of plan’s content. This exercise is repeated with a comparison of chosen regional, national and international interface policies. The aim herein, has been, to observe the Plan’s contents vis-à-vis these policies with the assumption that these policies are context specific. Further, it is assumed that the Plans need not comply to these cent per cent. Hence, the main focus is to observe planning as envisaged for the city by these documents through the span of fifty years. Significance is attached to the study of planning contents and the extent to which the Plans have contributed to make the city more liveable or better off.

iii. City and Best Urban Practices in vogue: The practical aspects of a policy are reflected in its application. In this regard, best practices in the urban scenario which are in vogue in urban literature at various hierarchical levels are discussed in Chapter 4 and compared with the provisions of the Plans.

This analysis is supplemented by perception analysis of citizens in Chapter 5 and conclusions are drawn on the basis of these observations as presented in Chapter 6.
1.2.3. The main areas of studying the planning process relate to the planning ideologies, plan preparation and the envisioning of planning for the city in its various aspects. A comprehensive critical review of city plans is hard to come by in research literature. This is also true of urban literature in India. The studies majorly are the ones that observe urban planning practice or the selected provisions. Since the Plan document in itself is the *sum mum bonum* of all advocated planning in the chosen context, its study stands pertinent.

1.3. Review of Literature

1.3.1. Life in cities is observed to be filled with problems and possibilities and offers the best and the worst (Hall 2006). City planning has existed in particular forms since the ancient period and similarities can also be observed in town and village planning (Dutt 2009). Cities in both the ancient and medieval period were planned as their location and layouts were laid consciously and a large proportion of them had formal ground plans (Hall and Jones 2011). The Master Plan is considered as the dominant policy document for planning and regulatory measures of land uses and utilities related to city infrastructure and allocation of activities over space (Singh 1978). It is defined as a “comprehensive set of programmes coordinated and integrated to form a whole aiming at the overall development of an urban area” (Singh 1978). The present study analyses the Master Plan documents of the city of Delhi. Literature review has been attempted for three aspects for the study: Urban planning, concept of master plans with related concepts and the geographical aspect of town planning.

1.3.2. Urban Planning: Planning is defined as ‘the reasoning side of acting’ (Ghallab *et al.* 2004). Despite ideological underpinnings, planning in general and town planning in particular has its roots in human history and all civilisations have carried it on in some form or the other. Population projections, transport, industrial, residential, retail, wholesaling commercial, conforming and non conforming land uses, disaster management, sanitation, community centres, recreation, open spaces and others are kept under consideration of the planning process (Gallion and Eisner 1984).
1.3.3. At the same time it is believed that planners are basically advisors and in a literal sense are often ‘powerless’ and the process of master planning has been termed as more rigid aiming at a the end of planning (Sandercock 1990). Spatial planning is driven by a set of values (Hillier 2010). This aspect has been detailed in the extended literature review in Chapter 2. Of recent, ‘formal reasoning’ to social science and planning ideology are supposed to be a ‘newer phenomena’ with a growing concern for form's function rather than only form (Batty 1985).

1.3.4. Academic writing about cities is guided by theory (Le Gates 2011). Urban planning was considered similar to civic design in the first half of the 20th century and preparation of plan was seen as an ongoing process (Adams 1994) in which a plan is supposed to identify a decision that should be made in the light of other concurrent or future decisions. In the same way, it is noted that plan making is a process separate from other processes of social action (Batty 1985). Theories in planning have been broadly outlined as the theoretical basis of urban planning (Mantysalo 2002). These include:

i. Rational planning theory- It is traced back to Auguste Comte (1798-1857), who is regarded as the 'father of sociology'. This theory considers 'societies as social phenomena'. The focus at this point is on the quantifiable. The notion of 'public interest' was formulated as the goal of this planning which was to be identified by the scientific method. This approach was criticised for being a non-participatory one.

ii. Advocacy planning theory- It was influenced by the ideas of Paul Davidoff, Robert Venturi and Mikkole. It echoed, in the 1960's and 70's by the critics of earlier planning process. This approach emphasises the need for developing 'neighbourhood associations'. Planners were expected to aid in creating such linkages.

iii. Incrementalist planning theory- The theory was popularised by an American theorist of public administration, Charles. E. Lindblom. In his book ‘The Intelligence of Democracy (1965)’. He presented a theory of ‘partisan mutual adjustment' as a model of decision-making in public planning and suggested how to bring interests of different groups into the agenda of public planning to reach an agreement between these (Lindbolm...
1965). Termed as ‘instrumentalism’ in his classic article, ‘The Science of Muddling Through’, the approach advocated was described as 'Synoptic Planning'. It came up as a critique of master plan as an outdated document and suggested managing lack of information by concentrating on short-term problems and relying on existing planning policy and experiences for newer issues.

iv. The Communication Theory- It rapidly started gaining ground in 1980s and 90s which criticised the Pareto Optimum analysis and put forward a set of communication measures as solution to theoretical questions. A framework for such politics was offered by German philosopher and social theorist Jurgan Habermas, whose ‘The Theory of Communicative Action’ (1984 and 87) forms the cornerstone of Communication Planning Theory.

v. Modernism and post modernism - It is put forth that modernist planning remains suspended between modernity and post modernity (Beauregard 1989).

1.3.5. Following Healey et al.(1982), the theoretical propositions may be classified under the following heads:

i. Procedural planning theory: This deals with planning some societal tasks with a problem-solving technique based on a rational method.

ii. Instrumentalism and related decision making methodologies: These emphasise on the market as the decision making factor with the intervening power of political circumstances.

iii. Implementation and policy: The aim here is of implementation. This approach focuses attention on the significance of bargaining over resources and negotiating with the conflicting demands of individuals and groups.

iv. Goal directed planning, social planning and advocacy planning: This approach is sought to have laid emphasis on the promotion of particular values with an identification of sections of people. However, the ability of government agencies to perform is challenged (Davidoff 1965).
v. Political Economy approach: It is for a more socially just society. The inequality is being projected as an outcome of capitalism. Government agencies are suggested to ensure a just distribution. This tradition has been a part of studies by sociologists, political scientists, geographers and regional scientists (Davidoff 1965).

vi. The New Humanism: This approach is considered to have begun with the work of John Friedmann and ideas of Donald Schon and others. The proposition here is on small scale communities which are self organizing and self responsible in which individuals will learn co operation. In this process a planner is an agent (Davidoff 1965).

vii. Pragmatism: It aims at workability and participation. This is basically concerned with increasing the participation of planners in local councils and central government.

1.3.6. The building blocks for the methodology of planning are attributed to Popper who has suggested- ‘situational analysis, critical dualism, and the application of empirical laws in their technological form’ (Faludi 1986). It has been further argued that planning theory has three paradigms: a. Object Centred, b. Control Centred and c. Decision Centred (Faludi 1973). Here, the Object Centred view of planning stands for studying some ‘object’ considered to be ‘requiring concern’ through a multi disciplinary approach; Control Centred view of planning emphasises ‘controls’ as the focal for planning and Decision Centred view of planning defines planning as ‘the formulation of acceptable projects using available uncertain, limited knowledge and limited powers of control’ (Faludi 1973).

1.3.7. The purpose of town and country planning is to intervene in the process of land and property development in order to achieve an outcome which is socially and environmentally preferable which otherwise the process of the private market would not produce (Greed 2000). The key problem in planning for a metropolitan area is considered to be a political (Levy 2000). City planning is viewed as the adaptation of a city to its proper function (Marsh 1974) and is defined as a science and art concerned with the physical growth and arrangement of towns in consonance with their social and economic needs (Singh and Dharajog 1998).
1.3.8. The twentieth century has experienced an unprecedented increase in the number of capital cities (Gordon 2006). Late 1960s saw the emergence of concepts arising out of Quantitative Revolution and the emergence of Post Modernism. Regulation theory originated in France in the 1970s and early 1980s in the works of Marxist economists and was subsequently developed by economists, geographers, political theorists and others (Painter 1998). Current day issues are the ones related to climate change, gender issues, crime, urban poverty and management of urban aspects.

1.3.9. Cities are considered as ‘the geographic concentrations where extended social processes operate’ (Simmie 2001) and a metropolitan plan is defined as ‘a projection of growth of population and economic activities in a city and provides a framework for location in its metropolitan area of housing colonies, industrial units and institutions of higher learning, hospitals and facilities for recreation’ (Nath 2007). A capital city is defined as ‘the seat of government of a nation state, province or supra national organization and have distinct elements that are associated with their administrative status’ (Gordon 2006). The urban design of capital cities is ‘special’ (Vale 2006) and these cities are an important symbol for the whole country (Slack and Chattopadhyay 2009).

1.3.10. Three vital factors are believed to judge the adequacy of the form of the metropolis as per Lynch (1960). These are: ‘magnitude and pattern of structural density, capacity, type, and pattern of the facilities for the circulation’ and the third factor is the ‘determination of the location of fixed activities such as department stores, factories, office and government buildings, warehouses, colleges, hospitals, theatres, parks, and museums and a plan is emphasised to show the extent and form of town at some specified date in future’ (Lynch 1960). Plans have been described as a type of decision making with which the risks of future are minimized by following a course of action (Lein 2002). As per Greed (2000), three important factors make a plan comprehensive which are: inclusion of all land area, inclusion of all subject matter and a long time horizon.
1.3.11. Concept of Master Plans: The phenomena of the city as bringing in change is viewed in the context of the Industrial Revolution (Blackhall 2005) and before modern town and city planning became formalised in the period before post-War reconstruction era, the social and economic systems were more dominant in town city planning (Evans 2001). The 1950s and early 1960s observed the emphasis on preparing a blue print for towns which were the Master Plans or Master Planning. Master Planning became the dominant form of spatial planning after World War II (Todes et al. 2010).

1.3.12. A Master Plan has been described as an “Impermanent Constitution” by Haar (1955) in his famous article ‘The Master Plan: An Impermanent Constitution’. In this article, he reiterates the view that development programmes of the ‘New City’ require a sound legislation and ‘within this legal matrix the Master Plan is an established element’ (Haar 1955). Master Plan provisions are reinforced by prominence. The four broad areas are traditionally assigned for impact by the master plan: Public works, Zoning, Subdivision and Streets (Haar 1955).

1.3.13. Master Plans are also observed as a component of urban planning theory (Greed 2000) and in this regard three components can be identified in town planning (Taylor 1998). These include town planning as physical planning, design as a focus to town planning and the assumption that town planning necessarily involves the production of ‘master plans’ or ‘blueprint plans’ as the ‘end state’. The Master Plan is expected to evolve standards from a consideration of local along with contemporary town planning philosophy, practice and recommendation of various stakeholders and study teams (Singh1978).

1.3.14. The objectives of a master plan can be ‘specific such as removal of overcrowding, clearance of slums, planned urban expansion, reclamation of low lying areas and waste lands, segregation of industrial areas from residential areas, provision for integrated road system, provision for an integrated water supply system, provision for an integrated drainage and sewerage system, provision for metropolitan green belts, provision for open spaces in built up areas, development of residential areas on neighbourhood principle, reservation of suitable areas for various community needs, utilization of natural amenities, stoppage of ribbon development,
preservation of historical monuments, and any other proposal bearing on health, convenience and comfort of the people of the locality’ (Singh 1978).

1.3.15. The preparation of a Master Plan for any place or region includes following stages (Singh 1978) although not necessarily in the same order:
   a. Formulation of goals;
   b. Collection of data;
   c. Analysis of data and diagnosis of problems;
   d. Preparation of the Master Plan;
   e. Preparation of capital budget and improvement programme;
   f. Preparation of sectoral layouts; and
   g. Implementation of schemes on priority basis.

1.3.16. Master Plans and Related Concepts: A master plan has a variety of meanings depending on the context. This Plan is recommended for an area’s development based on the needs and the resources available. It is also considered significant for property interests. It has also been defined as an ‘intelligent prophesy’ as to the ‘probable reaction’ of the government authorities to any development which in turn is considered significant in solving the public private issues (Haar 1955).

1.3.17. Depending on the purpose and context, it has been connoted that ‘Master Plan’ has a variety of meanings. ‘Comprehensive Plan’, ‘General Plan’, ‘Municipal Plan’, ‘City Plan’, ‘Long Range Plan’, ‘Just Plan’ are also used as terminologies (Haar 1955). The term Master Plan was first used in a report, ‘Recenty New York Legislation for the Planning of in Built Areas: Regional Plan of New York and Environ (1976)’. A master plan has also been termed as a ‘Development Plan’ in the British Town and Country Planning Act, 1947. It is pertinent to note that Master Plan contents vary historically overtime for a nation or a number of nations.

1.3.18. The purpose of Master Plan is depicted as diverse. According to Haar (1955), the uses of a Master Plan are envisaged into six categories as follows:
   i. Source of Information- It furnishes the present state of conditions in the city, is a reference to make careful and comprehensive surveys and studies of present conditions and probable future growth of the community. Planning is a process rather than a rigid blueprint so that the purpose of
analysis becomes accurate. Master Plan is defined as a balance sheet of the planning process drawn up at a particular moment in time.

ii. A Program for Correction- It serves to indicate the issues and deficiencies of an area. This is essential so as to direct municipal services.

iii. An Estimate Of The Future- In accordance with present and future needs, future growth of municipality, some premises are based an emerging conditions. Consequently, to realize full potentialities, periodic modifications of the general plan are required.

iv. An Indicator of Goals- Objectives should be set in purview of community needs. The plan can never be a total solution, but is a statement of values at a moment in time.

v. A Technique for Coordination- The inter relationship of various land-uses and structures within the city are required to be studied through a plan. So, coordination between different agencies is required.

vi. A Device for Stimulating Public Interest and Responsibility- Preparing the plan can be an effective channel of communication. Here, full use of the democratic process is advised to achieve an understanding and acceptances by the people who are affected by planning and who have to maintain it (Haar 1955).

1.3.19. Thus, comprehensiveness concerned with the interaction of the elements of ‘physical development, projection and policy’ are its major premises in which some basic principles are explained to govern the development of a land use plan (Kelly 2010). As per Kelly (2010), these are: Existing uses, use compatibility, land demand, environmental opportunities and constraints, ethical principles, transportation influences, trip generation, development capacity analysis, downtown plan, neighbourhood plan, land for economic development, integrating redevelopment plans, agricultural uses, historic preservation, plans for resort areas, showing areas not likely to develop, land uses around airports, showing floodplains and hazard areas and coordinating with Institutional Development Plans. Dunham (1958) views the master plan as a reflector of the following:
i. “General location of streets and other means of communication;
ii. General location of public parks, recreation facilities and open spaces;
iii. General location of public buildings and other public properties;
iv. General location of public utilities, and terminals both public and private;
v. Change or abandonment of any of the above locations; and
vi. Zoning Plan for the control of height, area, bulk, location and use of buildings and premises.”

1.3.20. Master Plans are a guide to orderly city development to promote the health, safety, welfare, and convenience of the people of the community, thereby coordinating the complex urban relationships. The term Master Plan has been applied to all such schemes (Haar 1955). A master plan as a document appears to be the prime source of do’s and don’ts in the urban landscape of a city. The urban planners are commonly believed to utilize master plans and zoning as tools to alter and make the physical environment of the city (Freudenberg et al. 2009).

1.3.21. The whole concept of master planning usually involves the definition of some future state of urban development (Walters 2007). Once a specific strategy is adopted or specified as a way of solving problem, the next identified step is that of turning it into a string of activities or action plans and with regards to contents, the concepts of zoning and subdivisions are intricately related to the master planning strategy.

1.3.22. Concept of zoning: Zoning is defined as the practice of allocating different areas of a city for a particular use and imposing limitations on some (Relph 1987) and is believed to have existed since as long as land and buildings in cities have been regulated, meaning thereby that zoning started with the growth of cities (Hagman 1975). Zoning ordinances are put forth as the first widely adopted form of regulatory implementation of planning (Kelly 2010). Zoning is defined to be carried on in consonance with the comprehensive plan’s provisions and it is also observed in this regard that the planning commissions and master plans came after the zoning ordinances (Fischel 1987). It is put forward, by far, as ‘the most common means by which communities have sought land use control’ (Gallion and Eisner 1984).
1.3.23. King Philip of Spain outlined the procedure for establishing communities in the New World and instructed his explorers to orient streets in manner. In 1810 certain Napoleonic decrees and the Prussian codes of 1845 are also examples of contained land use regulation. Zoning is said to be a ‘carefully guarded arsenal’ of urban planners (Kayden 2006). The zoning document is prepared by planners and it acquires a legal force when the legislative body of the community passes it. It is believed to have considerable power in achieving goals that the community favours, particularly in areas where urban development has taken place or is expected to.

1.3.24. Some ancillary measures suggested with zoning are: Transfer of Development Rights (TDR), Inclusionary Zoning, Planned Unit Development (PUD), Cluster, Development Agreements and Performance Zoning. Zoning is also characterized as cumulative and non cumulative (Kelly 2010), performance based, exclusive and reverse zoning which is characterized by defining the maximum rather than minimum standards for lot areas and coverage (Lewis 2007). Regulating intensity through zoning includes four measures of intensity in zoning.

1.3.25. These are identified as: residential intensity measured in dwelling units per acre; minimum lot sizes for single family homes, which create an inverse calculation for the number of dwelling units per acre; commercial and industrial intensity measured in Floor Area Ratio (FAR), which is the maximum number allowed for the ratio of the floor area of the proposed building to the land area of the lot on which it will be built and indirect intensity regulation through maximum height restrictions (Kelly 2010). Zoning ordinances are generally divided into two parts (Levy 2000): maps and text. Categories and subcategories of land uses are identified through zoning (Kelly 2010).

1.3.26. The zoning power has ‘its purposes, sources, enabling acts and general and specific provisions to maintain property values, stabilize neighbourhoods, homogenized areas, traffic movement, limiting densities, minimum plot size, minimum floor space, controls, aesthetics, architectural control and preservation of cultural, historic, national and government areas’ (Hagman 1975). Within each area, the local governments are supposed to typically control the following through zoning (Kelly 2010):
i. “The use of land or buildings;
ii. The intensity of that use, regulated by lot size, height limits, and in some cases, direct regulation of intensity through floor area ratios or limits on the number of dwelling units per area; and
iii. The extent of that use regulated both directly and indirectly through requirements that portions of the lot be maintained for yards or setback.”

1.3.27. In its criticisms, zoning has been termed as static, serving parochial interests and a policy that cannot ensure high quality development (Porter et al. 1988; Miller and Spoolman 2006); creation of not liked commercial development (Kelly 2010) and in direct conflict with planning itself (Hall 2002). It is put forward that no compensation need to be paid to property owners for reduction in property prices due to the limitations imposed by the zoning ordinance (Levy 2000).

1.3.28. Concept of Subdivisions: Subdivisions are defined as a kind of landuse control and are considered next to zoning in importance as a land use regulation (Hagman 1975). These are defined as ‘any land, or portion thereof shown on the last preceding tax rolls as a unit or as contiguous unit which is divided for purposes of sale, either immediate or future’ (Gallion and Eisner 1984) and are considered to be an old form of land use control dating back to the early nineteenth century (Gallion and Eisner 1984). In relation to planning, it is considered as being more close to the planning process because of nearness to policy implementation (Hagman 1975). The purposes of subdivision ordinance are defined as:

i. “To encourage the orderly, efficient, and economic use of land;
ii. To discourage scattered and premature subdivision of land;
iii. To promote harmonious development;
iv. To arrange and coordinate streets within and outside of subdivisions;
v. To ensure open and common space;
vi. To ensure that adequate access, drainage and utilities are provided to the lots, and
vii. To protect the health, safety and prosperity of a community” (Lewis 2007).
1.3.29. Although no two subdivision provisions are alike, but contain some common features such as:

i. “A general provisions section detailing the jurisdiction, authority fees, enforcement and relationships to other land use regulations and general laws;

ii. A definitions section containing the description of many words and terms that are used frequently in real estate practice such as parcel;

iii. A section explaining the subdivision application procedures and review process;

iv. A design standards section for describing appropriate landscaping, buffer yards, streetscapes, drainage system, water and sewerage facilities, sidewalks, bikeways, public areas and natural areas;

v. A section delineating the responsibilities of the jurisdiction and developers;

vi. There may also be sections for PUD’s, impact fees, adequate public facilities, school and park land dedication, affordable housing, premature subdivision amendments and subdivision variances” (Lewis 2007).

1.3.30. Subdivision regulations are believed to control the manner in which blocks of land may be converted into building blocks. The importance of subdivision is also observed in the fact that it can enable the community to force the developers to pay for some of the community infrastructure arising out of development (Fischel 1987). Subdivisions are believed to give a community substantial power in new residential development. They are stated in the form of maps, standards and recommendations for future development (Hagman and Misczynski 1978). Zoning and subdivisions are identified as interrelated concepts with unclear boundaries (Cullingworth and Caves 2009) but exhibiting the control of local governments in both the cases (Wine 2003).

1.3.31. Master Planning has been criticized for being rigid (Sandercock 1990) focussed on spatial dimension (Healey 1997; Gottdiener and Budd 2005; Peterson et al. 2008; Davoudi and Strange 2009) and being static (Friend and Hickling 2002; Cerreta et al. 2003) on the question of its sustainability (Riddell 2004; UN Habitat 2007; Cumming 2011; Rosenzweig et al. 2011).
1.3.32. Master Plans ‘need to be innovative so as to successfully link them to infrastructure development’ (UN Habitat 2007). To overcome the problems in Master Plans, local governments are now preparing other kinds of development plans in which the concept plan offers more flexibility (Wu et al. 2007). Master plans have been criticized for being inflexible and merely focussing on buildings and constructions (Stren and Halfani 2001). Master planning is also advocated as one of the strategies for strengthening response preparedness (Matsuoka et al. 2009).

1.3.33. Current master planning ideology is based on the dominant assumption that a ‘rational’ master plan could solve the problems of metropolitan areas (Rao and Prasad 2007). Currently, geographical information database and planning through GIS are gaining strength (Batty and Densham 1996; Stillwell et al. 1999; Obermeyer and Pinto 2008). On the basis of emphasis and purpose, other kinds of plan terminologies can be identified in literature.

i. General Plan: The term ‘General Plan’ identifies a long range, comprehensive planning by or for a government agency as a foundation for overall land development policies within specific limits (Gallion and Eisner 1984). A land use plan is its important component. It outlines to what uses the land in the city is devoted to for reaching the goals of planning and describes the general location of utilities, provisions for zoning and changes involved (Dunham 1958).

ii. Comprehensive Plan: Synonymously used with the master plan, a Comprehensive Plan or master plan of city, town, region, state, is considered as a part of creation of social values (Wantrup and Parsons 1967) and that a good master plan is expected to reduce the possibility of ‘fraudulent deals’ (Vassoler 2007) although its implementation and effectiveness is as altogether a different issue as compared to its preparation.

iii. Structure Plan: A structure plan is intended to set the strategic planning framework for at least 15 years ahead and attempts to maintain a balance between development and conservation with a more realistic planning in consonance with the policies (Adams 1994) and particularly when a
national plan is considered rigid (Cullingworth and Nadin 2004). A written statement with a key diagram and an ‘explanatory memorandum with justification of policies and proposals’ are parts of these plans. Its preparation is supposed to have scope for public comment and consultation (Adams 1994) and suggests that these policies should be based on reason (Ashby 1983).

iv. Local plans: These are put forward to contain detailed and specific proposals for the development and use of land and also allocation of land for particular purposes. The policies to guide development control on a day-to-day basis and designation of workable areas with development and redevelopment are forwarded for a period of ten years in this kind of plan (Adams 1994). These plans are highlighted to be in conformity with the structure plans and have a written statement and proposal on the basis of an ordnance survey. These might not apply to all areas and a survey, sufficient publicity and confirmation by the administrative authority are required (Bruton and Nicholson 1987).

v. Development Plans: These plans are considered as products of ‘conflicts and compromises’ and other issues of operational ability that exist in these contexts. These are supposed to combine the functions of structure and local plans (Adams 1994). These types of plans can also be ‘statutory development plans’ which are prepared in accordance with planning legislations (Adams 1994). The development plan is suggested to be required not only for future development but also for the preservation of city character. Zoning and subdivisions are considered as a tool of land use control regulation (Galion and Eisner 1984). The zoning plans should have rationality and impartiality for the fulfilment of the existing administrative conditions of a state’s provincial power (Haar 1955).

vi. Urban Development Plan: A Strategic Urban Development Plan lays down the visions, mission, goals, objectives, strategic priorities and general development direction for a city and is based on the analysis of the existing situation and inequalities in the geographical, sectoral and social distribution of resources, infrastructure and services (UN Habitat 2007).
vii. Action Plans: Action plans are outlined to have the following (UN Habitat 2007):

a. “List sequence and time frame of activities to be undertaken in order to implement a selected course of action;
b. Person or organization responsible for conducting these activities;
c. Resources required to implement the selected course of action;
d. Preliminary commitments to ensure that money and other resources will be delivered when needed and as agreed;
e. Co-ordination mechanisms to ensure that any activities performed separately by the various actors are co-ordinated and complementary; and
f. Monitoring mechanisms, including a gender perspective to keep track of progress in the implementation process”.

1.3.34. A detailed Action Plan is supposed to have a clear definition of purpose, inputs and outputs, activities, arrangements, roles and responsibilities, budget and financial plan, time frame and a monitoring and evaluation process (UN Habitat 2007). The Master Plan is taken as the authoritative text guiding development. Master planning approach is put forward as a traditional one with emphasis on urban and neighbourhood development and the actions and policies being linked to physical information (Sanoff 2000). Based on a scientific understanding of the laws of growth and change and for almost half of the 20th century, it, as a ‘modernist project’, has dominated thinking about planning and its practical aspects (Sandercock 1990). These plans are sought to present at least ‘five opportunities’ pertinent to resources which include background information, resource inventory, goals, objectives and policies, other elements and implementation context as well (Arendt 1999).

1.3.35. Geographical Aspects of Urban Planning: All types of interactions ‘must’ occur through space (Webber 1963). The city of today is as ‘a strategic site for new types of operations’ and is ‘foremost in the emerging new geographies’ (Sassen 2006). The urban settlement is ‘the spatial adaptation to demands of dependent activities and hence planning needs to be understood fundamentally as spatial ethics’ (Upton 2002). Cities are suggested to articulate two types of geography...
which relate to the city in its regional aspect and hinterland and the city and in this process the city accumulates surplus form the hinterland (Sassen 2006).

1.3.36. It is helpful, therefore, to view the city as a communications system (Webber 1963). Krike, Enquist and Rapaport (2010) have given ‘nine principles’ for Twenty First Century city building as: Sustainability, Accessibility, Diversity, Open Space, Compatibility, Incentives, Adaptability, Density and Identity. Urban geography observed paradigms of environmentalism, positivism, behaviouralism, humanism, structuralism, managerialism and post modernism (Pacione 2009).

1.3.37. Davoudi and Strange (2009) note that in interpreting the contents and processes of spatial planning, approaches in the current scenario can be outlined as – positivism, structuralism and post-structuralism with positivism aiming at ‘survey before plan’, structuralism as a ‘rationalist approach to scientific knowledge’ and post-structuralism as ‘a study of culturally produced space’ (Davoudi and Strange 2009). These approaches can be analysed for the master planning strategy as follows:

i. Environmentalism: It prevailed as a paradigm in the first half of the twentieth century with the major concerns being the ‘geographical interest in the relationship between people and environment with morphological analysis, transport, locational economics and urban ecology’ being the main focus (Pacione 2009). Environmentalism paradigm is supposed to have three forms as notions (Gregory et al. 2009). These are the ones related to the notion of ‘Earth as design fitted for some purpose for humanity’; second notion is that of the ‘major influence of environment on human affairs’ and third is an attempt of ‘understanding human-environment relations in a more dynamic and co evolutionary way’. For analytical purpose in the current context, this approach is directly relevant because of the significance attached to the natural assets of the city. Further, the study of people-environment relationship also necessitates planning of city morphology in relation to its environment.

ii. Positivism: Positivism is sought to have helped in another definition urban geography as ‘the science of spatial relationships followed by a shift in emphasis away from exceptionalism as the study of unique and particular
towards a nomothetic approach’. Logical positivism was developed by Vienna Circle in the 1920s and 1930s. It was emphasised that the scientific method used in the traditional sciences could be applied directly to social issues and that social behaviour could be measured and modelled through laws in the same way that natural phenomena are examined (Hubbard et al. 2005).

According to Hacking, this approach has six different key features (Hacking 1997). These are:

a. “An emphasis on the importance of observation as the foundation for all non mathematical knowledge. Scientific statements were to be grounded in immediate and accessible experience of the world through the five senses. Such immediacy guaranteed that facts were pure, unwanted by theory or value judgements, they represented the world as it really was incorrigible and inviolate.

b. A belief in either verification or its variant, falsification. Verification and falsification is undertaken formally, using common methods and employing rigorous techniques such as statistical inference to scrupulously determine the truth or falsify a statement.

c. A conviction that reality seen in nature and society is nothing more than the repetitive concurrence of one event followed by another. Positivism rejects the usual interpretation of cause reckoning it obscures metaphysical baggage. The alternative is a formulation tethered only to experience, the constant conjunction of observable events.

d. A suspicion of theoretical entities that by definition are non observable.

e. A faith in the unity of the method allowing positivism to be as ‘efficaciously applied to the humanities and social sciences as to physical and life sciences. This is known as naturalism: one method fits all.

f. The ardent denial of metaphysics.” (Hacking 1997).
iii. Behaviouralism: This approach developed to overcome the shortcomings of positivism by emphasizing the role of ‘cognitive processes and decision making’. It is suggested that behaviouralism infuses ‘realism in urban geography by its focus on social construction of urban space’ (Pacione 2009) and ‘examining the spatial characteristics of behavioural process rather than the form or pattern of spatial behaviour’ (Golledge 2006).

iv. Humanism: This approach emerged in the late 1960’s and is based on the aspect that views ‘individual as a powerful agent of change in the city rather than a passive respondent’ (Pacione 2009). Although not a new approach, the principal aim of twentieth century humanism is the ‘reconciliation of social science and man there by giving it more clear philosophical base’ (Ley and Samuels 1978). This approach is useful in studying social issues considered in city plans particularly in relation to the policies formulated for housing, target groups, and targeted social arenas.

v. Structuralism: It is a generic term for a ‘set of principles and procedures designed to expose the underlying causes of revealed patterns of human behaviour which must be sought by examination of existing social, economic and political structures’ (Pacione 2009). Observations on the structural approach are indicative of bringing out the causes of patterns as visible in the city landscape. Along with this, the significant principles of everyday flows and processes and representations of space as reflected in plans are very important aspects. These lend a deep insight into the planning processes as well as the manifestations of planning phenomena in the light of plan’s evolving content over time. The views in structuralism are attributed particularly to Henri Lefebvre who has put forward that the production of space or ‘spatialisation’ has three complementary levels. These can be identified as:

a. “A set of spatial practices which include everyday processes and flows;

b. Representations of space which make sense of space of which plans are a representation; and
c. Spaces of representation which are perceived by people” (Hubbard et al. 2005).

vi. Managerialism: This is defined as an approach in which social groups seek to ‘maximize their benefits by restricting access to resources and opportunities to limited groups’ (Pacione 2009).

vii. Post structuralism: Post structuralism is defined as an intellectual movement that countered the ‘perceived rigidities, certainties and essentialism of structuralism with its significant influence on social sciences in general and human geography in particular’ (Gregory et al. 2009). In the wake of post structuralism, the pertinent aspect is not just ‘what’ is studied but ‘how’ is it studied and this investigation is extended to a broader range of socio spatial phenomena by using ‘innovative methods’ (Murdoch 2006). Observing plans in the light of post structuralism is to have a thorough glimpse of the evolving strategies in planning. It is to be pertinently seen which features have changed or altered or have shifted focus. Its significant impacts have been observed in four aspects in geography. These include:

a. “A rethinking of relationship between the production of space and its representation, especially through reconfigured concepts of cultural landscape;

b. New concepts of what power consists of, where it is located and how it operates;

c. A destabilisation of foundationalism;

d. Accounts of identity and difference, a question of binary between nature and culture; and

e. A suspicion towards older and less reflexive understandings of objectivity and a somewhat more recent reversal of post structuralists’ tendency to privilege epistemology over ontology in accounts of social life” (Gregory et al. 2011).

viii. Post Modernism: This approach as a theory began to exert its influence in urban geography in late 1980s and 1990s with rejection of a ‘grand theory’ and an emphasis on human differences (Pacione 2009).
1.3.38. Urban planning is put forward as heavily drawing content from social sciences (LeGates 2011). Geography is believed to affect politics in the city too (Mc Allister 2004). The geographical study is particular since space is the fundamental stuff of geography (Thrift 2009) and this space is an important component of urban research as well (LeGates 2011).

1.3.39. Geography also captures people’s perceptions (Gregory 2009). Simultaneously, it also examines the intensity of the changes that have operated in the city during different time periods (Conzen 1960). Thus, the ‘best representation’ is spatial (Hall and Jones 2011) and ‘applied spatial analysis’ is one of the best examples of application of the discipline (Frazier 2004). While ‘traditional spatial planning’ is said to have originated for ‘order and predictability’ (Schretzenmayr et al. 2004), geographical information is now fundamental to the practice of urban planning and also has social utility (Klosterman1997). Geography as a discipline along with sociology and political science is considered by academicians as ‘a discipline engaged in planning but with prime interest not in planning itself’ (Healey et al. 1982).

1.3.40. This proposition, however, appears highly debatable as the traditions of urban geography have planning as an important component. In fact, it holds significance to mention that urban and regional planning have been interlinked to the planning process and both are one of the bulwarks of the discipline of geography and the practice of urban planning is highly sensitive to the kind of society it takes place in (Lichfield 1997). The relationship of geography as is with other academic subjects of social science is of a nature related to planning in general and urban planning in particular. Urban and regional planning is spatial or physical and it uses the general methods of planning to produce a physical design. Here, three vital factors are believed to judge the adequacy of the form of the metropolis (Lynch 1960).

1.3.41. These are—the magnitude and pattern of, both, the structural density (the ratio of floor space in buildings to the area of the site) and the structural condition (the state of obsolescence or repair); second factor is the capacity, type, and pattern of the facilities for the circulation of persons, roads, railways, airlines, transit systems, and pathways of all sorts and the third factor is the location of fixed
activities. They are identified as the manifestations of the geographical arrangement of urban area in which each combination of elements derives uniqueness from its site and ultimately develops a character (Conzen 1960).

1.3.42. A geographical analysis focuses around the concepts of depiction of space and place as reflected in the plan, whose conception of space and place dominates, and influences the content of the plan, what mechanisms and institutional frameworks exist, and what compromises and bargains are made and why (Davoudi and Strange 2009). In the light of these developments, books such as Harvey’s ‘Social Justice and the City’ (1973) suggested that the planner was but a ‘pawn’ in the game (Harvey 1973).

1.3.43. Regional planning is considered to have begun with Sir Patrick Geddes (1854-1932), who is defined as an ‘unclassifiable polymath’ (Hall 2002). His ideas are believed to have developed with his contact with geographers at the turn of the century. Lewis Mumford’s and Howard’s ideas influenced him a great deal. ‘Geddes was in modern times – what Leonardo da Vinci had been four hundred years before’ (Sundaram 2007). He was particularly influenced by Franklin Delano Roosevelt’s New Deal in 1930s, and also with the planning of capitals of Europe in 1940s and 1950s.

1.3.44. Geddes is called ‘the father of planning’ and it is put forward that modern day concepts in urban planning come from Gedessian thoughts. ‘To dispel the fear of cities and mass urbanization’, and to ‘release the creative responses of individuals’, towards solving modern urban problems; a socially oriented approach was highlighted by Geddes. The city in this approach was to be studied in the context of region and the knowledge on urbanization process was needed for enhancement of future. For this, the best method was to begin, on the one hand with its geographical location, and on the other hand, with the evolution of city’s historical and cultural traditions (Munshi 2000).

1.3.45. One of the Geddes’ main contributions is to search the basis of planning on reality of which human geography forms a part and the solutions were regional in nature (Hall and Jones 2011). These ideas are sought to have been taken from the central concepts of the founding fathers of French geography, Elisee Reclus and Paul Vidal de la Blache and from the early French sociologist Fredric le Play (Hall
Planning theory in 1920s was occupied by garden-city movement. This period saw the emergence of modernism.

1.3.46. The concept of ‘garden cities’ rose and some model towns were built, such as that of Letchworth City. Le Corbusier’s plans for the ‘Contemporary City’ (later the ‘radiant city) in the 1920s and 1930s are considered examples of this approach. Town planning at this time was viewed as an exercise on lining and designing the physical form of towns. Keeble’s ‘Standard Text’, an outline on how to plan cities, is of this period (Hall 2002). The period from 1940s – 50’s saw the emergence of a blueprint character of towns plans in the form of a ‘master’. Planning by turns on the basis of a Master Plan or blueprint was the dominant approach.

1.3.47. The famous New Deal policy on regional planning, establishment of the National Resources Planning Board (USA) has been described as ‘the most nearly comprehensive national planning organization USA had ever known’ (Hall 2002). The 1935 report of the National Resources Committee, titled, ‘Regional Factors in National Planning’, recommended regrouping the field districts of various federal agencies in their report titled ‘Our Cities: Their Role in the National Economy’.

1.3.48. It drew attention to the problems of blight, speculation, social disruption, crime, and urban public finance that were affecting the American cities (Hall 2002). The Tennessee Valley Authority (TVA) is regarded as the greatest achievement of New Deal planning in USA. Earl Draper of the Department of Regional Studies termed the regional plan on TVA as “The American Magna Carta of Regional Planning.” Thus, the modernist city stood for the elimination of disorder, congestion, and on the small scale came into the purview of landscaping.

1.3.49. Throughout the late 1940s 1950s and, housing shortages ensued by war destructions led many cities around the world to opt for government housing. Planners implemented the idea of modernist towers with gardens, a combination of preceding and newer ideas. This approach was dominant in all disciplines including geography and town planning. Most practicing town planners in the immediate post-war period were architect planners (Taylor 1998). The reason was lack of cognition to town planning as a fully recognized distinct profession. A great deal of discussion was carried on model-making. Spatial or urban planning
practiced in many countries before and after the Second World War was minute and detailed.

1.3.50. It was during 1960’s that-such detailed plans were attacked and planning was forwarded more to concentrate on broad principles rather than on details and that ‘it should start from a highly generalized and diagrammatic picture of the spatial distribution at any point of time’ (Hall 2002). The central point is that this type of planning was essentially spatial. The post-war New Towns, for example, were designed from a common assumption that, by laying out residential areas in physically distinct neighborhoods, with local shops recreational open spaces, primary schools, etc., there was a greater likelihood that a ‘social neighborhood community’ would develop (Taylor 1998).

1.3.51. This was an evident ideology of social planning during Post War period in Britain. Other planning works that can be cited are that of Arturo Sorio Mata’s ‘La Ciudal Lineal’ in Spain, Georges Benoit Levy’s ‘Le Cite Jardin’ and Le Corbusier’s ‘La Ville Radieuse’ in France and Theodor Fritsch’s ‘Die Stadt der Zukunft’ in Germany, to name a few. In India, after independence, Master Plans were prepared for cities. With the passing of Delhi Development Act (1957), the first plan became operational in 1962 for Delhi. The latter part of the 20th century witnessed a resurgence of strategic spatial planning at various scales (Davoudi and Strange 2009).

1.3.52. During the 1960s and 70s, the global economy entered into economic restructuring. Books dealing with radicalism as a critique against capitalism emerged with changing paradigms in the discipline of geography. Behaviouralism, humanistic and welfare approaches were also present on the scene. The socio-spatial approach to urban analysis is the consequence of a paradigm shift that took place along with the late 1960’s Chicago School (Gottdiener and Budd 2005). The passage to post-modernity is also highlighted to have begun in urban studies in the late 1960s (Hall 2006).

1.3.53. In specific reference to urban geography, structuralist approaches can be specifically recognized through as that social relations and spatial relations are either determined or influenced (Hall 2006). Some core features of post structuralist geography are identified in examining space and place relationships
in which both are observed as filled with multiple aspects, varying spatial practices, outlining of relations and struggles.

1.3.54. Space is therefore not fixed but can be altered (Murdoch 2006). These ideas, considered to be linked to Marxist social theory in 1960s and 70s, were of particular significance, emphasised on urban question and the role of space in economic development and socio-spatial relations. A ‘New Urbanism’ is sought to have emerged encapsulating the ideas of ‘post structuralism’ (Smith 2012). The concepts of New Urbanism, smart growth and liveable communities are also tied to the regional approach (Wheeler 2000). By adopting an evolutionary viewpoint, basics are established for the concepts that are applicable to recurrent phenomena in urban morphology and to lead to an explanation of the arrangement of diversity of an urban area in terms of plan size and resulting geographical divisions (Conzen1960).

1.3.55. A ‘golden age’ of theoretical/philosophical significance is believed to have occurred in human geography thought (Dear 2000). Derek Gregory’s –‘Science Ideology and Human Geography’ (1978), drew attention in particular to the work of critical theorists such as Habermas. The year 1984 is significant because influential article by Fredric Jameson published on spatiality and post modernity. In fact, for solving the conflicts over public goods, spatial analysis stands pertinent (Peterson et al. 2008).

1.3.56. Although planning is a complex management procedure and many planners contest the claim of being related to geography, geographical analysis of spatial relationship links it to the discipline. This is relevant since particular types of land uses have areal expressions (Hartshorne 1976) and is closely related to the fact that spatial planning has an intrinsic cultural aspect to it in the form of complex activities (Othengrafen 2010). Electronic solutions are being put forward for urban planning and management (Turner et al. 1990).

1.3.57. Particularly when strategic planning is put as a practical solution to the planning issues (Friend and Hickling 2002; Cerreta et al. 2003), the concept of spatial as well as strategic spatial planning (Healey 1997; Davoudi and Strange 2009) needs a geographical analysis. Plan, building and land use are put forward as interdependent in the geographical entity of a town (Conzen 1960) and it is
observed that city regions are strongly anchored in their geographic space (Freestone 2000). Similarly, the study of Socio- Ecological Systems (SES) is a growing field that is interdisciplinary in nature (Cumming 2011).

1.3.58. Closely related to this is the concern about human health as the space and infrastructure standards are established (Barton and Tsourou 2000). In the last two decades of urban management experience, a growing shift has been observed towards area based approach (Pieterse 2000). As per Hall, one can argue from this that spatial planning, urban and regional planning are essentially related to human geography in these various aspects for the task of action, and hence, planning as a methodology is more related to geography (Hall 2002).

1.4. On Evaluation of City Plan

1.4.1. In the light of above discussions, plan evaluation that necessarily has to be *ex ante* or *ex post* (Lichfield and Pratt 1998) could inform the choice made by decision makers. *Ex post* evaluation involves understanding the seen and unseen changes created by the policy and the processes (Lichfield and Pratt 1998). Evaluation is not stationary (Alexander 2006) and Taylor (1998) has referred to it as a stage in planning. Monitoring and evaluation demonstrate the relevance, compactness and order of the plan and measuring performance is a ‘distinct analytical process’ (UN Habitat 2007). However, no direct studies are available in literature devoted to analysis of city plan although planning is analysed for various parameters.

1.4.2. The studies available in Indian urban literature are attempts at analysis of various provisions of Master Plans. These can be observed in the study of provisions of the Gaya Master Plan (Singh 1978), critical analysis of Guwahati Master Plan (Das 2007), Chandigarh’s Master Plan in analyzing the city’s morphology and urban planning (Shafi 2003; Sarin 1982), critical analysis of Vijaywada and Vishakhapatnam Master Plans in which the redundancy of planning as reflected in the plans is commented upon (Baken 2003).

1.4.3. Delhi’s Master Plans have been analysed with reference to their significance and individual components in the Indian context as first Master Plan of Delhi was the first Master Plan in the post independence period and was emulated as a concept by other Indian cities (Fernandes 2006). A content analysis of the plan document,
however, is not available in research literature. Gupta and Bansal (1994) have analysed the location aspect of industries as reflected in these Plans. Similarly, Jain (2009) has analysed the Plans for Green Spaces and recreational areas. Jain (2009) has also reflected on the plans for transport. Kapoor and Thakur (2008) have studied the concept of land acquisition in Delhi as prescribed in the First and Second Master Plans.

1.4.4. Agrawal (1993) has analysed urban planning of Delhi and has criticised the implementation aspect of these plans. Kundu (1993) has criticized Master Plan provisions for their violation and Basu (1988) has criticized the Plans for their incapability to control squatters. Fernandes (2006) has put forward the inadequacies of the Plan particularly with regard to it inefficiency in making Delhi a world class city.

1.5. **Analytical Framework**

1.5.1. City planning addresses multiple aspects and processes. These operate in the city space and tend to influence the surroundings as well. Therefore, numerous provisions for planning are made which are reflected in the Master Plan document. These provisions are a reflector of the operating processes and also in a way affect them. Thus, the critical observations on the Plan must be holistic. The contents of plans are the exhibitors of all kinds of changes that are anticipated for the city. The questions that arise, therefore, are that:

a. Are the Plans anticipating changes?

b. Are they bringing about changes?

c. Are they mere pawns in the hands of policies identified by a certain group for a certain section to meet their vested motives?

1.5.2. The study has been conceptualized keeping these into consideration from which stem further contexts. All plans carry a vision, on which planning initiatives revolve. Further, focus is required on the analysis of background studies that are conducted for the preparation of these plans. Here, it is to observe what the suggestions are as per these studies are and how consonant are the Plans with them? Next, where do the variations occur? The thrusts of such a comparison are:
1.5.3. In the current context, the evaluation method is that of cross examination of the individual Plans with regards to their content and the chosen contexts of background studies, best interface policies and current documents prepared for the city’s planning. The focus of these is reflected in the visions and objectives of the Plan. It is on these considerations that the study is conceptualized and designed.

1.6. The Background

1.6.1. The city of Delhi has a long history and the present day form is a result of the processes that have operated at various spatial and temporal scales. Delhi has by far had three Master Plan documents. The First Master Plan was prepared to check the city’s unplanned growth and population arising out of the conditions after independence. The twentieth century for the city marks a new period which began with the country’s independence in 1947; the aftermath of which was inflicted on the city in the form of huge influx of refugee population. The outcome of this was haphazard concentrations in the city for which planning was envisaged.

1.6.2. Beginning with the aim of controlling the haphazard development that the city had faced immediately as a result of the country’s independence, the current plan aims to make the city a ‘world class city and a global metropolis’ (DDA 2007). The issues of infrastructure creation and provision of services are immensely huge. Although preceded by an Interim General Plan, the Plan of 1962 is accepted as the

1.6.3. Within these periods, the city has acquired vast magnitude and dimensions; seeming endlessness and issues which have given the city the dubious distinction of being amongst the most polluted in the world. Further, in the regional and national context, the city’s dominance prevails. These situations have grave implications for the city, particularly with regards to infrastructure creation and provision of services. In the light of these observations, the direct question that comes into consideration is – What objectives do the Plans envisage?

1.6.4. This question is extended to the planning vision for the city that emerges from the detailed study of the Delhi Development Act, background studies conducted for the preparation of the Plans. Beginning with an overview of planning strategies available in the literature in general and master planning in particular, the aim is to cross examine the basis of formation of Plan content, variations observed in the background studies and the Plans, emerging and evolving concepts and the Plan’s compliance with the planning policies at the regional, national and international level.

1.6.5. Delhi’s planning in general and plan making in particular is vested with Delhi Development Authority (DDA) which was established as an institution to regulate land use. The sole responsibility and the manner of preparation of the Plan rest with the DDA and the content, nature and method of plan preparation has remained its responsibility. The Plans have been drawn for the city with long term perspectives and the spatial component has been further dealt with by dividing the city into zones for which zonal plans have been formulated.

1.6.6. The process of planning for the city revolves around a common fulcrum which is that of maintaining the heritage of the city. There is a similarity in the plan provisions contained in the First Plan through the Second Plan and the Third one. The vision of making Delhi a global city can be seen in the Third Plan. But at the other end of this spectrum there is many issues that have bogged the city from the First Plan itself. The current study deals with the issues by attempting the analysis of planning strategy and contents through Plans.
1.6.7. The question is carried further to the legal basis of this planning in the backdrop of the Delhi Development Act and compare contents and elements of the three plans. Another aspect of such a comparison includes the regional, national and international context. For this, the policies and documents chosen are Agenda 21, Local Agenda 21, Habitat Agenda, the 74th Constitutional Amendment, the Nagar Raj Bill and Jawaharlal Nehru National Urban Renewal Mission’s City Development Plan (CDP). This has been supplemented with perception analysis wherein a group of people have been interviewed to bring out the perceptions on planning for the city.

1.7. Research Questions

1.7.1. The study addresses the following questions:

i. What are the features of urban planning and master planning?

ii. How has the concept of Master Plans and master planning evolved for Delhi and what is the changing context of background studies of the Plans with reference to content and focus’ areas?

iii. To what extent do the Plans comply with the regional, national and international best practices and policies chosen?

iv. What do the Plans envision for the city and what are the outcomes of planning for the city?

v. What is the citizen’s vision with regards to their city?

vi. To what extent are the provisions implemented?

vii. What monitoring and implementing strategies are attempted?
### 1.8. Research Design and Methodology

#### 1.8.1. These are outlined as follows:

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Source of Information</th>
<th>Methodology and Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. What are the features of urban planning and master planning?</td>
<td>Literature on urban planning</td>
<td>Review and analysis of literature on urban planning in general and master planning in particular for developing a background on practices related to the same.</td>
</tr>
<tr>
<td>ii. How has the concept of Master Plans and master planning evolved for Delhi and what is the changing context of background studies of the Plans with regards to content and focus areas?</td>
<td>Literature on urban planning of Delhi, background studies of the Plans and the Plan documents</td>
<td>To bring out a chronology of urban planning for the city, pre and post independence landmarks in planning, critical analysis of the provisions of planning basis and plan contents.</td>
</tr>
<tr>
<td>iii. To what extent do the Plans comply with the regional, national and international best practices and policies chosen?</td>
<td>Agenda 21, Local Agenda21, 74th Constitutional Amendment, Nagar Raj Bill, and the CDP of JNNURM contents</td>
<td>Narrative</td>
</tr>
<tr>
<td>Research Questions</td>
<td>Source of Information</td>
<td>Methodology and Design</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>iv. What do the Plans envision for the city and what are the outcomes of planning</td>
<td>Master Plans of Delhi published by DDA.</td>
<td>Cross examination of Plan’s contents.</td>
</tr>
<tr>
<td>on the city?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>v. What is the citizen’s vision with regards to their city?</td>
<td>Responses from the online conducted survey (details of the survey and sample are</td>
<td>Tabulation of Primary survey results and summary of 4300 responses received by DDA</td>
</tr>
<tr>
<td></td>
<td>given in 5.2.- 5.3.) and analysis of responses (details in 5.5.) generated from DDA</td>
<td>through DDA website.</td>
</tr>
<tr>
<td></td>
<td>Plan Review process from DDA website.</td>
<td></td>
</tr>
<tr>
<td>vi. To what extent are the provisions implemented?</td>
<td>Implementation aspect of the Plans</td>
<td>Content analysis of Plans</td>
</tr>
<tr>
<td>vii. What monitoring and implementing strategies are attempted?</td>
<td>Plan documents and current literature on the city.</td>
<td>Content, trend and outcome analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1.9. **Data Sources:**

1.9.1. The initiation of the study is through a literature review on urban planning theory and practices in the world. This is detailed for master planning strategy and other kinds of plans attempted for city planning. The data source for these is books, journals and online material. The three Master Plans of the city and their respective background studies are observed and critically analysed on various parameters. All these are published documents. This analysis is extended to the interface policies with regards to their respective contents and the contents of the Plans through their respective documents available in published form and also from the internet. The survey has been conducted online and the data source in this case is primary. The sample is drawn randomly with the aim of having at least one response from east, west, north and south Delhi. Details of the sample are in Chapter 5.

1.10. **Presentation of the Study**

1.10.1. The study is presented in six chapters. The current Chapter, titled, **BACKGROUND, RESEARCH QUESTIONS AND STUDY DESIGN**, outlines the content of the study and justifies the context. This is supplemented with literature review and outlines the research questions and methodology attempted for conducting the study. Chapter 2 is titled **EVOLUTION OF TOWN PLANNING PRACTICES AND MASTER PLANS IN THE WORLD**. It deals with the analysis of town planning in general and master planning in particular in theory and practice and extended to the various kinds of plans in the urban scenario in the world.

1.10.2. Chapter 3 critically observes the Master Plans of the city in detail with regards to their background studies and individual contents. This is carried forward with a critical and comparative analysis of the evolving concepts of the Plans and their critical review with regards to prevailing literature. This chapter is titled **ANALYSIS OF DELHI’S MASTER PLANS**. Chapter 4 puts forth an extended analysis of the Master Plans with the Best Practices in urban scenario at the regional, national and international scales. These are attempted in a critical comparative manner. This is followed by a critical comparison with a parallel and
recently created planning document of City Development Plan prepared under the Jawaharlal Nehru National Urban Renewal Mission. It is titled DELHI’S MASTER PLANS: COMPATIBILITY WITH INTERFACE POLICIES. Chapter 5 forwards perception analysis of citizen’s visions for their city in a variety of contexts. This chapter, titled CITIZENS’ RESPONSES is analysis that tends to observe people’s vision on the various issues related to the city on the basis of survey conducted and responses received through the process of Plan review conducted by DDA. In Chapter 6, titled, CONCLUDING REMARKS, the findings of the study are put forward.

1.11. Limitations

1.11.1. The review conducted in the study is a systematic analysis of the Master Plans of the city with regards to their individual, comparative and evolving contents along with their comparison with interface policies at the national and international levels. To broaden the context, the planning practices in other parts of the world have also been observed and analysed. However, comprehensive literature on planning practices is a limitation in this context as urban planning has been carried for different nations and regions of the world from various perspectives. Hence, the interrelated concepts of urban planning in general and master planning or alternative planning are not available in a comprehensive form for comparative analysis.

1.11.2. Further, the selection of interface policies is also a limitation as there can be other policies at these levels. However, the broader ones have been chosen so as to have a representative for each level. A further constraint is observed in the survey conducted. In this regard, the selection of an appropriate sample size is a concern.

1.12. Scope of the Study

1.12.1. All activities operate in space and an urban centre is a focal point in settlement hierarchy. The city of Delhi operates on similar lines in the national, regional and local urban framework. Further, being the national capital and the harbinger of master planning practices, it is fruitful to observe what attention does the space command? Is it even considered in the allocation of activities and functions or is
it just a passive background on which policies and provisions are imposed? Equally important is to observe the activities commanding attention and the ones given attention.

1.12.2. Plans lend an insight into all such provisions. The city of Delhi is ‘planned’ on these master plans which are the end result of planning for the city. Of recent, three master plans have been prepared for the city. While, individual provisions have been analysed in detail as observed in literature in 1.3., a comprehensive evaluation of plans along with a cross examination with the proposed and the one implemented is not observed in literature.

1.12.3. The current attempt is to develop a comprehensive and encompassing a critical analysis of the evolving contents of the Master Plans, the background works on which they have been developed and their critical appraisal with the interface policies which are chosen as that operating at macro, meso and micro levels; thereby offering immense scope for viewing the city over a time span in a comprehensive spatial frame. It is, hence, not only a pre-requisite but a dire necessity to critically observe the capital’s planning strategies in the light of its functional position in the nation’s urban scene and this initiates with the Master Plan documents.

1.13. Remarks

1.13.1. The study is a systematic analysis aiming at a critical appraisal of the content of planning as envisaged for the city through the master planning strategy documented in the Master Plans. After highlighting the significance of this kind of urban planning of Indian cities, it has been shown that this is not uniformly followed across the board. Further, its following, as observed in the present case is strong because of the legalities involved. It is, therefore, a dominant method of planning as followed for the national capital.

1.13.2. The study attempts at analysing whether this kind of planning has yielded any good to the city or is it just a method of improvising and giving perspectives which are nothing but an extended version of similar provisions. This analysis is conducted through the literature survey wherein the concept of master planning is studied with regards to urban planning literature. It is observed that other kinds of
plans exist in the urban scenarios world wide; master planning does dominate the Indian urban planning scene in particular cases although this is not uniformly followed throughout the country. So, even when Delhi was adopting master planning and other cities were emulating it, there were cities such as Chennai and Mumbai that did not go with this approach.

1.13.3. This however, does not mean that the master planning strategy is futile or the other strategy stands at the useful end and is making those cities better off. Rather, what is debated is the fact that in the present case has this strategy delivered in a way that the city acquires a better quality of life, is also able to protect its environment and resolve or may be mitigate issues as is highlighted in the research questions in 1.7.1. and research design and methodology in 1.8.1.?

1.13.4. Similarly, the repetitive points or areas of concern in the documents are pertinent for observation. The analysis is extended to other dimensions as well wherein the contents of the plans are examined with regards to interface policies. The caution in attempting this is that it is not assumed that these policies should be followed verbatim. The Plans are analysed without being judgemental about the efficacy of these policies. Therefore, the observations are conducted in a non judgemental manner. The supplement provided through perception analysis makes it further feasible to observe and analyse the differences as existing in the attempted and the one perceived. The study aims at bringing out the inherent dichotomies, similarities, perceptions and the changing nature of the contents of the Master Plans of Delhi in a comprehensive manner.