Chapter – 1
Chapter 1
Introduction

1. Overview

Next Generation Infrastructure Management is a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for future generations. It is usually noted that this requires the reconciliation of environmental, social, and economic demands—the “three pillars” of sustainability. A primary goal of Next Generation Infrastructure Management is to achieve a reasonable and equitable distributed level of economic well-being that can be perpetuated continually for next generation. Thus the field of Next Generation Infrastructure Management can be broken into three constituent parts i.e. environmental, economic, and social sustainability. It is proved that socio-economic sustainability is depended on environmental sustainability because the socio-economic aspects, like agriculture, transport, settlement, and other demographic factors are born and raised up in the environmental system. All the environmental set up is depended on a piece of land where it exists. Sustainable land management is necessary for the existence of human society. Land is a valuable resource; any infrastructure development going to get the final shape will be on the land, whether; it is a physical, social, or industrial infrastructure. Land is the habitat of man and its wide use is crucial for the economic, social, and environmental advancement of all countries. Although it is part of man's natural heritage, access to land is controlled by ownership patterns. Land is partitioned for administrative and economic purposes, and it is used and transformed in a myriad ways. Without land, there can be no infrastructure (Physical, social, Industrial) and without looking at the issue of land, there can be no meaningful discussion about how to solve the problems of infrastructure for the cities/towns. Learning about people's needs, attitudes, aspirations, ability to pay, desires, priority, possible contributions and help, how they could be affected by growth or changing land use and activity patterns, etc.; required to be plough in for the success of a growth story and win the trust of the community by utilizing people’s knowledge and community resources.

Traditional concerns with land use are being brought into relation with sustainable economic growth, social diversity and justice and spatial equity. Planning for structural change is therefore increasingly understood as a social learning process that requires continuous monitoring and critical reflection on the part of planners and relevant publics. How such planning is to be institutionalized is itself one of the greatest challenges that have to be faced. In this perspective urban reforms are a means to suggest institutional mechanisms for effective, efficient, and transparent governance of urban planning by increasing people's understanding of common problems and their effects on various groups in society and organizations in the community; mobilizing citizen support for public decisions; setting development priorities; keeping people better informed and enhancing a greater understanding about public actions; creating a sense of belonging among all stakeholders; resolving social problems between different groups in society; empowering the poor and marginal groups in society; bringing transparency to decision-making and thus reducing scope of corruption/political volatility.
Urban India today, faces serious challenges of growth and its management. Across geographies, the issues of urbanization manifest in the form of overcrowding, congestion, insufficient infrastructure, inadequate service provisioning, and poor management of rapid growth, affect the socioeconomic development of the country. It is extremely important to initiate more effective and responsive urban infrastructure planning by revisiting the conditions indispensable to its implementation. It is well documented that 90 per cent of India’s urban land titles are weak and are not amenable to the development of a strong mortgage market (ITPI Journal 5: 3 (2008) 60–68). The widespread distortions in land and property markets result in nearly 1.3 per cent loss of growth each year to the GDP (ITPI Journal 5: 3 (2008) 60–68). Infrastructure is the foundation of economic, industrial, and social development. Infrastructure is the core on which entire super structure of communities, states and nation is built and made to stand. It is the base of all human activities. It is the provider of an enabling framework from which all human beings; development activities, industry and institutions draw their sustenance. Infrastructure is also the determinant of productivity and quality of life. The multiplier effect of infrastructure development on the economy is significant and its role as a stimulator of economic growth is indisputable. It is evident that to sustain and accelerate higher economic growth rate in the country, India needs to build, upgrade, and modernize its infrastructure urgently.

Infrastructure is generally a set of interconnected structural elements that provide the framework supporting an entire structure. The term has diverse meanings in different fields, but is perhaps most widely understood to refer to roads, airports, and utilities. These various elements may collectively be termed civil infrastructure, municipal infrastructure, or simply public works, although they may be developed and operated as private-sector or Government enterprises.

It becomes essential that appropriate level of infrastructure is planned and made available to all sectors of society and community in order to make them effectively contribute to the growth and usher an era of prosperity for the state/national. With liberalization & technological upgradation, private sector participation in infrastructure services is gaining momentum. Consequently, apart from augmenting public sector investment into infrastructure, the Government of India has introduced a series of reforms to remove roadblocks and create an enabling environment to attract private sector participation and foreign direct investment but at the same time lacking of community participation had remained major roadblock. Since infrastructure projects require a large financial outlay having long gestation and long payback period, the Government should put in place a strong regulatory structure and play the role of facilitator, enabler, and catalyst. The government has to set an ambitious vision for the economic and social development and play a critical role in creating an enabling environment. It is now realized that the Government has to increasingly adopt the role of a regulator and act as bridge within the community for the provision of infrastructure services as a service provider. Service providing mechanism reinforced by the commitment and trust is the key factor to achieve success in above aspects. One of the core principles of good governance is to facilitate public participation/consultation in the decision-making process. Public participation increases the likelihood that actions taken or services provided by public agencies more adequately reflect the needs of people and that the benefits of development are more equitably shared. Equitable sharing
of informative resources and benefits is also an issue of sustainable development. As such, public participation has been recognized as one of the core principles of sustainable development. Here, participation means contributing to development, benefiting from development and taking part in decision-making about development, which could be realized through activities facilitated by authorities as well as activities initiated or generated by the people themselves by underlining trust, flow of transparent information equilibrium, competencies of service provider/facilitator, opportunism, political situation, knowledge & experience of service provider & commitment to community from service provider and from commitment from community to service provider.

Majority business, community, and infrastructure service providers/facilitators are often reluctant to depend on each other without a mutual commitment to establish an effective relationship. The concept of commitment has received great attention in management, marketing, and service industries literature. The community increased commitment requires both perceptual and behavioral attention to tightening the relationship for long-term business advantage. The theories of Internationalization process and transaction cost economics have been credited with the factors which lead to higher commitment. These issues are addressed in this thesis research. This introductory chapter of the thesis discusses the background of this research project including research questions, Objective, scope, basic framework, brief methodology and the contributors of the study. It also provides a brief outline of the thesis.

The goals of this chapter are to:

- Review of concept of commitment from different perspective on a specific infrastructure service provider context (Section 1.1)
- Discuss the research issue along with the background of the research and summary of the problem of research (Section 1.2)
- Specify the research questions and objectives of the study (Section 1.3)
- Propose an a priori conceptual framework based on preliminary review (Section 1.4)
- Focus on the distinct area covered and justifications of the study which are specified as scope and significance (Section 1.5 and Section 1.6)
- Provide in brief the research design and analysis (Section 1.7)
- Specify the present research setting as a wide spread infrastructure service context (Section 1.8)
- Focus on some area of contributions to the body of knowledge and practice (Section 1.9)
- Briefly discuss the limitations of the study (Section 1.10)
- Provide an outline of this report (Section 1.11)

1.1 Concept of Commitment

The term ‘commitment’ has received great attention in management (e.g., Elizur and Koslowsky, 2001; Yousef, 2000), marketing (Kim and Oh, 2002), and service
provision literature (Richey and Myers, 2001). This section explores the concept of commitment in the community-service provider relationship context. The concept of commitment is somewhat different in marketing and service provider-community literature from that in the organizational and management literature, because the nature of involvement of the parties is different.

In the service provider literature, the term 'commitment' has been used to indicate a desire for a long-term presence in the servicing market or to continue the relationship with the global grids (Richey and Myers, 2001). It is also implied that service provider commitment involves the service provider management's willingness to devote adequate tangible and intangible resources to service provider related activities (Katsikeas et al., 1996). More specifically, Beamish et al. (1993) perceived commitment to community from service provider as "the amount of the firm's personnel and top management resources devoted to service providing activities" (p. 128).

The present study attempts to explore a uni-dimensional perspective of Infrastructure provision through commitment by winning trust of community with their participation.

Factors such as opportunism, communication, trust, investment, and political volatility seem quite meaningful in explaining the service provider's commitment; these do not necessarily form an exhaustive list of possible backgrounds. A number of other backgrounds of commitment can be inferred from theories relevant in this area of research, Informative equilibrium, knowledge, and experience, and service provider's competencies may also be relevant as potential experiences of service provider commitment (a detailed review of the theoretical underpinnings is set out in Chapter 2).

1.2 Research Challenges

With nearly 300 million urban residents, India's cities contribute over 60% of GDP and account for more than 90% of Government revenues (Planning Commission Report-2008). Their efficiency has a significant and direct bearing on the country's overall economy. The urban contribution to growth and poverty alleviation is not being realized since most cities suffer from severe infrastructure bottlenecks, service deficiencies, weak finances, poor local governance, and distortions in land and factor markets. Thus for India, accommodating the needs of its growing urban populations is and will continue to be a strategic policy issue for many years to come.

According to Planning Commission estimates, Infrastructure investment requirements until 2011-2012, which includes investments in the transport, telecommunications, energy, and urban sectors, will be $425 billion. Of this total, there was a $123 billion anticipated financing gap which could be addressed by the private sector by increasing the current private sector investments from 1% to 3% of India’s GDP. The demand for infrastructure services has increased rapidly after industrial liberalization of the Indian economy. Unfortunately, infrastructure bottlenecks remain the biggest stumbling block of industrial progress in the country. By their very nature, infrastructure projects involve huge initial investments, long gestation periods, and high risk. There is a considerable gap between the present levels and quality of investment on the one hand and their optimal levels for the
economy on the other. Large-scale fresh investments are, therefore, required to boost up robust growth in the country. A large international consortium of knowledge institutions, market players and governmental bodies, joining forces to solve the huge problems in today's infrastructure sectors with a foresight of financial markets, the nature of risk, valuation of investments and sources of financing. Scarcity of developed urban land, accumulated backlog of housing, large deficits in urban infrastructure and services, degradation of the physical urban environment and alarming increase in the number of urban poor are some of the problems faced by cities in India. Persistence of urban problems reflects badly, not only on the effectiveness of planning processes, but also on management structures through which problems are sought to be improved. This is in spite of the fact that over the years a fairly elaborate multi-level institutional framework has been developed for urban planning and development. The prevalent practice is that central government lays down policies and priorities, and oversees the flow of central funds to states. State governments' directorates of town planning prepare development plans. Development authorities, a host of special purpose agencies and line departments are involved in implementing the plans and carrying out associated development works. Municipalities ultimately take over developed areas to look after day-to-day attention and deal with various management issues. But there are gaps in municipal administration, which reduce its efficiency. Gaps exist in relation to various aspects of urban planning, development, and management with public participation.

1.2.1. Lack of Spatial Planning Framework

Urban planning framework suffers from split emphasis on sector-wise economic planning at the national level and physical planning at the urban settlement level. National economic planning lacks spatial dimensions and settlement level planning is pursued in a piecemeal manner without any spatial and economic policy support at regional levels that is district and state levels. This has also led to urban and rural settlements not only being planned in the absence of a policy framework but also in isolation from each other.

There is no single authority to look into the totality of services and functions of a community. Agencies whose functional responsibilities overlap begin to work at cross purposes with each other. Lack of coordination amongst agencies results in considerable wastage of resources and delay in execution of projects.

1.2.2. Neglect of Local Government Institutions

Under the Constitution of India, local government is a state subject. State governments have exclusive powers to create municipalities, alter their jurisdictions, merge one with another, or abolish them. But, municipalities which constitute the most nodal local government institutions in urban areas in the post-independence India have received little attention from state governments. Most municipalities remained financially insolvent. This was so because local government institutions in India are outside the statutory transfer of funds and are wholly dependent on the state government's assistance for supporting their activities. Amount of funds which transfers to them in the process is nowhere near their requirements, often not even enough to pay salaries of their employees. Municipalities have very little scope for augmenting resources through their own initiative. On the contrary their income opportunities are either stagnant or
decreasing. Many of the revenue making functions of local bodies are often arbitrarily seized by State Governments. Local governments are not only loaded with the weakest revenue instruments but also are burdened with a management expertise that is inadequate even for routine maintenance works.

1.2.3. Highly Centralized Administrative Setup
A highly centralized administrative setup adopted by Government of India after independence also affected against the interests of urban local bodies. Since existing planning and development systems in India emphasized top down model of decision making without any inbuilt feedback mechanisms, local bodies find themselves at the receiving end of the directives originating from the higher levels of governments. At the same time, in the absence of citizens’ participation in planning and development process, local government agencies merely depended upon plans and programs chalked out by officials of central and state governments.

1.2.4. Non-Involvement of People in Planning and Development Processes
Lacking of people's involvement, urban development agencies often pursue objectives that are at variance with peoples’ aspirations. Community participation should be understood as a process in which all concerned parties including the affected people are involved in decision-making about development works and delivery of public goods and services. Community’s involvement could be realized in many ways and by different methods. However, they are to be designed and made compatible with the characteristics of the task to be accomplished, and of the culture being practiced and to be cultivated. The next section addresses the research questions and fundamental objectives of this research.

1.3 Research Questions & Objective
Given the background of the study and overview of the research problem, there seems to be an imminent need and opportunity to understand the government/facilitator/service provider's commitment relationship with the community and its driving forces to continue the relationship towards gaining relative improvement. Hence, the central research question to be addressed in this proposed study is:

1.3.1 Research Questions
What are the backgrounds of a community's commitment to service provider and how do they influence the community commitment?

Therefore, the essential research questions to be addresses in this proposed study is:

Q1: What are the service level issues that the Government faces? Q2: What are the methods to manage service level issues and ease a gap between demand & supply? Q3: what are the available resources in given situation for the creation of time bound Infrastructure? Q4: What are the methods/tools available to offer sustainable infrastructure services aligned with the need of the society? Q5: What actions are advocated to encourage financing in infrastructure and full participation by all?

From the above research questions, an objective is conceptualized into testable hypotheses in the chapter: 3 of this study supported by a case study in chapter: 8.
However, the proposed framework is presented in the following scenario to provide a summarized view of research.

1.3.2 Research Objective

The specific objective of the study is to develop and test a comprehensive conceptual research framework that assesses land based fiscal tools and Town Planning scheme practices for generating financial resources to deliver quality infrastructure services in timely manner with full participation by all and to assesses the community commitment to service provider, based on relevant theories and the literature. Inter-relationship among trust, public consultation, informative equilibrium, service provider’s competencies, investment, opportunism, political volatility, knowledge & experience and Commitment.

1.4 Proposed Conceptual Framework

From the discussions presented earlier, the emerged backgrounds of community commitment in provision of infrastructure are clearly incidental. However, there are some variables that not only have direct influence on the commitment to service provider, but also play an intervening role. Accordingly, the proposed framework (discussed in chapter: 3) in Figure 1.1 (c) below depicts a composite relationship headed by participative planning process. Figure 1.1 (a) & (b)

**Figure 1.1 (a) Level of participation**

<table>
<thead>
<tr>
<th>Supporting initiatives of beneficiaries/citizens</th>
</tr>
</thead>
<tbody>
<tr>
<td>All actors acting together</td>
</tr>
<tr>
<td>All actors deciding together</td>
</tr>
<tr>
<td>Consultation with other actors</td>
</tr>
<tr>
<td>Providing information to all actors</td>
</tr>
</tbody>
</table>

Source: [http://www.local.odpm.gov.uk/research/part.htm](http://www.local.odpm.gov.uk/research/part.htm), (23, December 2010, 9.30 pm)
Figure 1.1 (b): Overall Planning and Policy development Process

1. Initial/existing knowledge about issues and problems
2. Designing a participation process
3. Communication with stakeholders
4. Stakeholders participation
5. Compilation and coding of stakeholders' statements
6. Analysis of stakeholders' views and opinions
7. Identification of major issues and problems
8. Verification of links
9. Objectives tree
10. Verification with existing plans/programmes and additional information
11. Consultation with stakeholders
12. Alternative choice analysis
13. Draft action plans
14. Plenary meeting of stakeholders
15. Finalization of plans
16. Implementation

(Generated by Researcher)
The extensive review of the relevant conceptual and theoretical literature (discussed in Chapter 2) suggested the need to develop a competing model as well as a conceptual qualitative model to practically verify the reconcile effect of trust in the commitment building process i.e. success in the infrastructure provision through a land as a resource by using comprehensive public participation and partnering process. Thus, the above proposed fundamental framework helps to develop two additional models which are proposed in Chapter 3. The next section explores the scope of the study.

1.5 Scope of the Study

The proposed study combines two basic hypothetical considerations (discussed in Chapter 2) providing better conceptualization of commitment for provision of infrastructure services. Such an approach is proposed to cover:

- The concept of commitment for the provision of Infrastructure i.e. community context.
- Internationalization process theory and transaction cost theory as a base in regard to a different perspective such as community commitment.
- The conclusions from the above theories and literature have indicated that factors such as informative equilibrium, knowledge and experience, service provider's competencies, trust, communication, political volatility, opportunism, and investment are potential creators of community commitment for policy planning & implementing reforms.
- While the term infrastructure provision through commitment building process has received great attention not only in society but also in other fields of research. This study has reviewed studies on community-service provider relationships for developing the proposed framework.
• The study additionally ties, co-relates, and focuses on the relevant proven model (Infrastructure Provision through Town Planning Scheme Mechanism) from the commitment, trust, & public Participation perspectives. This has rendered supplementary support in conceptualizing the new context.

• Cross-sectional data have been collected from a various towns (i.e. Dholera, Bharuch-Dahej, Gandhinagar, all towns in Gujarat state) toward generalization of the findings.

• The proposed conceptual model and a competing model have been tested to verify the mediating effect of some of the predictor variables in the model and their relative explanatory power. Further, the study incorporates a framework for conceptual insight based on qualitative information. (Chapter : 5)

Conclusion of study is based upon information drawn from research of the relevant segment, discussions with the respective stakeholders and researcher’s very own subject knowledge

1.6. Significance of the Study

It is a great challenge to the Governments (central and states) and a huge opportunity for the private sector, especially entrepreneurs, builders and NGOs (Non-Governmental Organizations) to jointly execute infrastructure development projects on a war-footing through Public Private Participation /Partnerships (PPPs).

Research study analyses recent growth, progress, research in the field of urban Infrastructure management. It discusses the key issues, needs for the resources, challenges, problems and prospects, questions and methodologies adopted and in practice to date. The overall intent is to highlight the opportunities for further work by overcoming risk, exploring potential methodologies and further directions for sustainable infrastructure development by winning community confidence & trust by overcoming challenges.

This Research examines & understands different aspects of infrastructure planning, implementation & financing by exercising instrument of a land as resource (different sector, various concepts/schemes, and business models) and recommends suitable road map for time bound creation of next generation infrastructure while relating it with community commitment.

Identification of key research issues in a new field of inquiry is a task to be approached with some care, when economics, business, and political conditions are subject to rapid changes, the importance of research agendas for funding and resources can shift quickly. Therefore, it is with some caution that a list of significant issues in urban Infrastructure development and its strategic implementation is presented and addressed in research proposal derived from apparent trends in the literature as wells help from Research Guide, dialogue with practitioners, experts, professionals, consultants, bureaucrats. Each issue has been phrased as a question under various themes in proposal. A behavioral aspect, service provider’s commitment to their community appears to be instrumental to continuing the relationship. Consequently, understanding the commitment relationship between service provider and community based on service provider perception is important from both academic and practical perspectives (Skarmeas et al., 2002).
Research attempts to address the development and implementation of infrastructure by using a case study of Town Planning Scheme mechanism by means of land as a resources/tool for generation of additional financial resources through comprehensive public participation and testing consultative process themselves.

The study is significant in a number of ways. This section discusses the significance of the study from the theoretical and practical perspectives.

First, merging the streams of research with theoretical developments in regional occupation, the theories of internationalization (Johanson and Vahlne, 1977; 1990; Johanson and Wiedersheim-Paul, 1975) have been explored on the deliver side. On the other hand, over the last three decades transaction cost theory (Williamson, 1985) has become mainstream theory in the field of organizational science. The theory has been used to examine community—service provider relationships (Heide and John, 1992; Noordewier et al., 1990). However, to explore further on the above theories to examine the community commitment in specific service provider context, most of the factors considered in the relevant literature which explain the service provider commitment seem quite meaningful; such literature appears to have fewer explored potential variables that can be derived from the above theoretical basis. Similarly, potential variables can also be derived from the conceptual and empirical literature (service provider’s competencies) which deserves investigation in a community- service provider relationship context. This study has attempted to identify the potential variables.

Second, the review uncovered that the term ‘commitment’ has been examined in service delivery literature (Cox and Walker, 1997), but a similar extension could be enhanced on the service provider side to examine the community-service provider relationship. The importance of regional servicing has increased exponentially. In the regional community-service provider relationship, commitment plays a strong tie-up role. Therefore, commitment is essential for the development and maintenance of successful long-term community- service provider relationships and researchers have identified its stable and enduring impact on community- service provider relationships (Wilson, 1995).

Third, the review also shows that the term commitment and its determinants have been examined in the community- service provider relationships in different business bases, mostly in the developed country/regional context. This limits generalizability of the findings because the macro-economic environment of a developing country/region may have a moderating effect on service provider continuing commitment to service provider.

1.7. Research Methods and Analyses

The methodology included field visits, focused group discussions, quick assessment, rapid appraisal, responses of the officials to structured queries, published and secondary materials. In addition two workshops were also organized one at Dholera & second at Bharuch. The workshop was somewhat constrained by lack of an organization data base particularly in respect of the changes that have taken place in land reforms and the underlying issues in the last few decades. The workshop has attempted to capture some of these developments.

In order to successfully conduct the proposed research analysis and test the research framework, both quantitative and qualitative approaches have been used.
as discussed in Chapter 4 and in Chapter 7. In brief, for quantitative testing of the model, primary data were extracted from a cross-section of (from the stakeholders like Government/Administrators, private players, investors, to mention a few amongst others and few selected communities (i.e. private/public}) 262 service provider and land owner/ community (response rate 43.67%) in a developing regional(Dholera, Bharuch, Gandhinagar- Gujarat). After elimination of cases with missing data and outlier cases, 232 cases have been used in the final analysis. Initially, measurement models in CFA are tested (Schumacker and Lomax, 1996) using AMOS 5 software with the help of experts. In the model refinement process, 12 measurement items out of 51 are excluded. The remaining 39 items with nine construct measures have been used to test the proposed models. The proposed model is found to have an improved fit than the competing model, and the results of a modified proposed model are discussed in Chapter 6.

Furthermore, for qualitative testing of the proposed conceptual framework, twelve in-depth interviews were conducted. The cases have been categorized according to their properties with respect to different hypotheses being grouped together, enabling comparison, discussion, and interpretation of the occurrences. Five types of respondents, based on the service provider characteristics of facilitator firms, have been used in the description and interpretation of the qualitative data in Chapter 7. The qualitative findings provide some new directions in community-service provider relationship in the development of infrastructure. However, it is clear that the qualitative model is partially reinforced and complemented with the result of modified competing model (not discussed in this thesis) where theoretical arguments in terms of enhancing knowledge and experience and the mediating role of trust are partially supported.

1.8. The Study in Context

A review of the academic literature revealed that so far, exceptional attempt has been made to explore service provider-community perspective for infrastructure planning & implementation perspective in a regional context. Similarly, studies on infrastructure investment need, service levels, demand, & supply, road blocks, various planning & implementation models with the help of public participation for creating values in relationship building for the development have also largely overlooked the area as a potential research setting. Therefore, community’s commitment to service provider in such a context is important for a clear understanding by investor and policy makers. While Next Generation Infrastructure Management through commitment is a wide area of research interest, this study looks at provisions of resources for infrastructure management through commitment and its dynamics from a developing region context.

From the detailed review of the relevant literature, theoretical development on internationalization of organizations (Johanson and Vahline, 1977; Johanson and Wiedersheim-Paul, 1975) and transaction cost economics (Williamson, 1985; 1975) largely ignored the community perspective (Liang and Parkhe, 1997). In consequence, this study made a rational choice to incorporate the theoretical grounding for the variables of interest into all applied theories.
1.9. Major Area of Contributions

The study expects to contribute in a number of ways to the body of knowledge of the field. The major areas of contribution are:

- From the theoretical perspective, the study examines two basic economic theories to gain a better understanding of community's commitment to service provider. Explicitly, applicability of the theories and implications for the community commitment factors related to transaction cost economics (Williamson, 1985) and internationalization process (Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975) are demonstrated.

- The conceptual scheme proposed in the theoretical model is validated with high explanatory power and achieved respectable fit to the data. Therefore, the study contributes to the literature by validating most of the explanatory variables in the comprehensive model. Simultaneously, qualitative information provides support to the trust and commitment building process with some new insights.

- The study contributes to the literature by incorporating developing region data into experimental simplifications of the findings where managerial implications are also significant contributions in such a context.

- Finally, while this study has adapted some of the hypothesis measures as well as developed some extended measures, an appropriate methodological process has been followed to test their reliability and validity thus, contributing to a quantitative methodological approach to global infrastructure research.

Further details of these contributions are discussed in Chapter 8 (section 8.3).

1.10. Limitations of the Study

To keep the study within manageable proportions for rigorous analysis and maintain carefulness, the scope of the research is limited to the study of urban infrastructure provision by using land as resources & commitment to community by service provider and vice versa. The scope of this proposal is to present the outcome of groundwork analysis and understanding of the thesis background. As this research is confined to the analyses and investigation of background of community commitment, the review of the literature suggests that there is a wide range of issues that might have some influence on community commitment on infrastructure provisions by using land as a resource.

During the research exertion, while conducting primary survey it is apparent that even after interacting with stakeholders and paying several visits, the availability of individuals remained difficult; which is a common concern. In such cases, best uses of available means are taken for consideration. After carrying out the detail appraisal of all the related phase of research, necessary modifications are evolved in subsequent stages during the course of the preparation of the thesis proposal by taking due care that ultimate goal of the research work remain justifiable.

Conclusion of study is based upon information drawn from research of the relevant segment, discussions with the respective stakeholders and researcher's very own subject knowledge.
To keep the study within manageable proportions for rigorous investigation and maintain cost-cutting, only eight theoretically driven rational issues have been included in this study as predictors of service provider commitment. The study explores only community's perceptions on the relationship with service provider rather than considering all perspectives.

As discussed in section -1 of this chapter, one of the three constituent parts of Next Generation Infrastructure Management is environment. Socio-economic sustainability is depended on environmental sustainability. So forth, urban infrastructure is linked to the environment through pollution management and public health issues. In developing countries, rapid urbanization is a major challenge that may have significant health related environmental impacts affecting all class of society. It is important to focus on the health-environment dimension of urban infrastructure planning. It also helps to bring in the planning process the voice and needs of those most affected by the environmental degradation originated in accelerated urbanization. The challenge of rapid urbanization is to sustain economic growth while at the same time avoiding or minimizing environmental problems that can arise from growth. In confronting these problems, however, there are no stock solutions. Each city should formulate its own environmental strategy depending on the nature and severity of its problems, which in turn depend on: (a) the density and patterns of development, particularly existing infrastructure; (b) the population size and rate of growth; (c) the level of income and economic development; (d) the type of climate and regional ecosystem; and (e) the roles and interactions of numerous public and private actors. The existence of an overarching planning framework for urban investments, which takes environmental and social constraints into consideration, can significantly reduce the occurrence of environmental and social impacts as cities develop. To confine the scope of the study, analyses and investigation environmental aspects is not addressed in detail.

Since, the literatures referred herein for the research work with respect to commitment studies are almost decade dated. The reason being; rare significant study/research/work on related aspects has been carried out by researchers/professionals/experts and as a result updated literature is not presented. The limited study literature is available that examines background of community commitment to service provider. The limitations of the study are also discussed in detail in Chapter 8.

1.11. Thesis Outline

Fundamentally, the presentation of this thesis follows the structure of the doctoral thesis suggested by Perry (1998). The study proceeds by outlining the broad view of necessitate infrastructure provision through public participation that leads to the focus of the research issue. This problem identification follows a conceptual framework having support from the theory and literature to test empirically and conceptual validation. The overall outline as well as structural pattern of this thesis is discussed in this section. The thesis comprises eight chapters and each of the chapters is introduced as follows.

Chapter 1: Introduction explores the concept of commitment for provision of infrastructure, research background and problem, research question, objective of the research, a framework based on background literature, scope and significance,
brief methodology of the study, research context, expected contributions and limitations of the study.

Chapter 2: Literature review focuses on four major dimensions which consolidate the review of the theories, general focus on commitment in different types of studies, mainstream studies of community-service provider commitment, and review of the identified backgrounds.

Chapter 3: Conceptual framework develops a conceptual model with hypothesized correlations and a framework for conceptual insight to explore the progressing trust and its development process based on qualitative data. This chapter further proposes a competing model to verify the reconciling power of trust/reliance along with some other interrelationships.

Chapter 4: Methodology of the study covers all the relevant issues of the quantitative and qualitative research approaches to be followed in this study. This chapter includes the rationale for the qualitative and quantitative approaches for this study, sample survey, selection of key informants, investment need, service level, response rate, element of study, measurement of hypotheses, research mechanism, survey data, analytical tools of quantitative data, qualitative data collection, protocol and analytical approach of qualitative data.

Chapter 5 comprises three major sections which are sample profile, measurement model development, and testing the proposed structural models. The sample profile details the sample demographics, responses, data cleaning and descriptive statistics. Secondly, in the process of measurement validation, all construct measures have been assessed individually in Confirmatory Factor Analysis (CFA models) and successively in an overall measurement model to verify the unidimensionality of the measures. Finally, proposed and competing models have been tested in Structural Equation Modeling (SEM) and compared with the overall measurement model to verify the overall fit to the data and the theory. Hypothesis validity and reliability have also been reported in this chapter of the study.

Chapter 6 discusses the findings of hypotheses testing. Since the modified proposed model is found to have relatively high explanatory power and an enhanced model fit than the competing model, findings of this model have been discussed for hypotheses testing in this chapter.

Chapter 7 deals with the qualitative findings of this study. The sample profile of the in-depth group discussion, individual case profile, and results of the cross-case analyses are discussed in this chapter.

Chapter 8 provides the summary and implications of the study. To consolidate the answer of the research question and objective, this chapter synthesizes the overall findings, which follows the research implications for researchers and practitioners. Detailed contributions to the theory and the body of knowledge are also discussed. As directed by the present research findings and background, several future research directions are suggested. Finally, the limitations of this research are addressed. This chapter briefly deliberates the proven model that supports the provision of infrastructure with the help of legal tool of Town Planning Scheme mechanism as a case study from the context of community-service provider relationship. This is a classic example of community participation & public private
participation (PPP) for the provision of infrastructure by encouraging win-win situation.

In sum, this chapter of the study has provided the background and overview of this thesis. The background information explicitly specifies the research gap in the literature. The research problem, research question and objective, and justification of the study clearly signify the importance of this research. This chapter also provides an outline of the investigation including the research framework, methodological approach, and areas of contributions. Given the framework of this thesis, the following chapter contains a comprehensive discussion of the relevant theories which emerged from an exhaustive review of the literatures focusing on specific community perspectives.