Chapter 1: Introduction

1. Preamble

Housing affordability is a significant determinant in a household's choice of a house for habitation, either for owning or for renting. Since every house is unique in its spatial setting, there are numerous factors affecting the housing choice of a household besides housing affordability, which is dependent on house price. Generally, housing affordability is studied from an economic purview which is purely based on the relationship of buyer's income and house price. The study of this relationship can be significantly enriched when the study of housing affordability becomes inclusive of the impacts of infrastructure development. In this respect, studies on housing affordability embrace a large pool of causal factors besides household income and house price. At the same time, there is a need to streamline the inclusive evaluation of housing affordability using a simplified approach based on key parameters representing both infrastructure driven housing affordability and consequent residential location choice. The present work is an attempt based on such an approach.

In the context of developing countries, researches on housing affordability is significantly interrelated with outcomes of overall population growth, the consequent pace of urbanization and their impact on infrastructure development in urban areas. Global urban population has already crossed the threshold of 50% and is expected to reach a 60% mark by 2030 (UNFPA, 2007; Tibaijuka, 2010; UN, 2010; WHO, 2013). However, majority of the urban population growth is now contributed by developing countries (Satterthwaite, 2008) as the rate of urbanization has stabilised in the developed countries (UNHABITAT, 2002b; UN-HABITAT, 2006; United Nations Population Division, 2008) where the level of infrastructure development has reached an acceptable standard. Consequently, it is imperative for the developing countries to upgrade the existing level

of infrastructure development including provision of affordable housing, to support the rapid pace of urbanisation.

In developing countries, urbanisation is an added concern for any housing policy consideration due to its impact on economy, environment and infrastructure development. Urbanization triggers off a need for rapid infrastructure development affecting urban environment, which in turn leads to agglomeration economies, stimulating economic growth and employment generation in urban centres. This is the reason why urban centres are often hailed as 'engines of economic growth' (Esfahani & Ramírez, 2003; RBI, 2010; Tibaijuka, 2010).

However, in developing countries, there exist three different kinds of variations in terms of level of infrastructure development and provision of affordable housing. Firstly, there are variations observed in terms of provision of affordable housing and allied infrastructure services within a large urban region or a metropolis. These variations in provision of affordable housing and availability of standard level of allied infrastructure services, observed between urban centres, attract migrants towards the better equipped urban centres resulting in uneven distribution of basic services across the metropolis (Iimi, 2005).

Secondly, there also exists, another kind of variations in housing and allied infrastructure services in a metropolis. A metropolitan area constitutes its own spatial network of smaller and larger urban centres and often the level and distribution of infrastructure development facilitating interconnections between places of employment generation and housing is far below an accepted standard. These variations within a metropolitan network have a profound impact on housing affordability. As a result, huge variations in availability of affordable housing and allied infrastructure services become evident in developing countries. For instance, within India's urban agglomerations or metropolises, existing variations in terms of shortage of affordable housing and inadequate levels of infrastructure development, is further aggravated by massive urban population growth (Pitale, 2011).

Thirdly, in Indian metropolises, variations are also evident in terms of shortcomings in provision of basic standards of living (MGI, 2010). Standard of living depends on the level of availability of accepted level of infrastructure development within urban centres. It is observed by researchers that investment and subsequent development of infrastructure have a considerable impact in achieving inclusive urban development, and these have led to an inequitable access to affordable housing (Kundu, 2006; Hingorani & Tiwari, 2012). Therefore, provision of affordable housing and allied infrastructure development foreruns the order of importance in policy measures to deal with outcomes of rapid urbanisation in large urban agglomerations (Masterbuilder, 2013). In accordance with these observations, a recent report by the United Nations Human Settlements Programme (UN-HABITAT, 2002a) have identified two aspects of economic development as two forerunning concerns, and they also represent two integral components of housing rights:

- Affordability of housing
- Availability of infrastructure and allied services

The recent economic downturn has raised several questions for policy makers regarding economic impact of housing market, and specifically the economic feasibility of housing targeting different income groups (Tsai & Peng, 2011; Van der Heijden *et al.*, 2011). Several research works on the economic crisis and its subsequent impact on overall urban economic development have emphasized a re-orientation in directives for policy measures on the two aforesaid components (Chandrasekar & Sanghvi, 2008; Warnock & Warnock, 2008; Adams & Füss, 2010; Agnello & Schuknecht, 2011). Two significant observations may be sited to best explain the two components:

• Firstly, the component of affordability of housing has gained relevance in a developing nation context, like India, where a huge demand for affordable housing exist (Pittini, 2012). In India, The Ministry of Urban Employment and Poverty Alleviation (MHUPA), has focused on 'affordable housing for all' program since 2007. The revised consensus of MHUPA now is to drive a shift in investment from

high-end premium housing to promotion of affordable housing for low-to-middle income earning population.

Secondly, at the global level, major world economic institutions and policy experts
have agreed to revise policies on basic infrastructure investments associated with
housing sector. The revision is seen as a counter remedy to recover from economic
recession. Investment in basic infrastructure development can be followed to
rejuvenate the pace of socio-economic growth and boost overall market dynamism
(UN-HABITAT, 2009; ADB, 2010).

Therefore, the significance of research on housing affordability inclusive of an assessment of impacts of level of infrastructure development is considerable in a developing country like India. Till date, there have been few researches on housing affordability particularly addressing the need of low-to-middle income groups, on one hand, and emphasizing an evaluation of the impact of infrastructure development on housing affordability measures, on the other hand (Sengupta, 2006b; Chatterjee *et al.*, 2009; Todi, 2009; Kundu, 2013). In this light, an assessment of variation in infrastructure development and its consequent impact on housing affordability, in a developing nation like India and that too within the context of a metropolis, is both a significant and an unaddressed issue. Therefore, there is a need to develop and streamline an approach of assessing housing affordability, inclusive of the variation in infrastructure development, within the context of metropolitan development in India. Hence, the present research.

1.1 Formulation of Research Objectives

In the present research, a detailed assessment of housing affordability has been attempted based on levels of infrastructure development. Consequently, a better understanding of current residential location choice and future preference patterns has been attempted. Accordingly, the objectives are:

- To assess housing affordability, as revealed by spatial variations in level of infrastructure development, based on current housing location choice
- To determine future housing location as preferred by households, based on expected level of infrastructure development
- To evaluate future trends in housing affordability, based on housing affordability as revealed by current housing location and preferred choices of future housing location

In the present research, the case study of Kolkata urban agglomeration (KUA) has been utilized to best forward the approach. At the generic level, the directives and recommendations as proposed by the research may be applicable to similar case studies with appropriate moderation.

1.2 Utility of Study

The current research attempts to substantiate a research hypothesis favouring an assessment of housing affordability inclusive of the impacts of level of infrastructure development within a metropolis. The present research forwards an argument, in favour of a hypothesis that an inclusion of the impact of infrastructure development on housing affordability will lead to a significant rationalization of an assessment of housing affordability within the spatial context of a metropolis. The study expects that the inclusive approach to assessment of housing affordability will provide a greater insight compared to the conventional assessment conducted purely from an economic domain.

1.3 Structure of Thesis

Chapter one presents the study backdrop leading to research concerns and a subsequent formulation of objectives and the utility of the research.

Chapter two forwards a required set and sequence of literature review that augments the basic research concerns and subsequent formulation of study objectives based on inclusive viewpoint of housing affordability as against the conventional and exclusive viewpoint.

Chapter three provides the methodology, case study and the pool of relevant data and tools and techniques utilized in the research.

Chapter four presents the results and interpretation of the assessment of housing affordability, as revealed by spatial variations in level of infrastructure development, based on current housing location choice within KUA.

Chapter five constitutes of the results and interpretations of the assessment of future housing location as preferred by households, based on expected level of infrastructure development, within KUA.

Chapter six summarises the evaluation of the nature and extent of consistency between patterns of housing affordability as revealed by the current housing location and as evident from the preferred choice of future housing location.

Chapter seven highlights priority strategies and long term recommendations based on evaluation of the observed patterns of housing affordability and infrastructure development driven residential location choice. Finally the chapter concludes with the utility of the present research both with its limitations and the scope of future research.