Booming Real Estate Markets, Changing Urban Design and Endangered Heritage Status: A Case Study of Mysore Urban Area

Jayamani, M. and Dr. Asima Nusrath

Abstract
This present paper attempts to explain the impact of changing real estate market on urban design. Speculation in land market is rising tremendously due to the liberal economic policies adopted by Government of Karnataka which is keen to promote itself as the destination for domestic and foreign investment to catalyze industrial growth. Therefore several incentives and infrastructure development programs are underway and more is expected in the near future to make this area a model region. Several gigantic development schemes have triggered leading to the intensification in land market situation. However, the land market situation especially in high-income residential areas are undergoing transition in architectural design and the present study tries to examine changing land values and their impact on urban design and vulnerability to the heritage character of Mysore and legalities of town planning.

1. INTRODUCTION
Mysore, the city of palaces, is witnessing tremendous growth from the past few years. On the Bangalore-Mysore corridor, software giant Infosys has already come up with its training center, while Wipro has finalized the site for its development facility. Mphasis, the first American corporation, Accenture, IBM, Cognizant Technologies and Honeywell are some of the others, who are following these Indian companies. It is not just the IT companies, but other prestigious companies like S Kumars, Kirloskars Gensets, VenlonPolysters, Reid and Taylor, Lassen and Tourbo and Bharath Earth Movers have also a firm foothold in the city from the past many years.

Mysore is one of the most preferred residential locations in Karnataka. Interestingly, even the residents of Bangalore are finding it comfortable to work in Bangalore yet stay in Mysore. Even, it is reasoned that a distance of 140 kilometers between Bangalore and Mysore takes lesser time to cover than hourslong grueling in the Bangalore traffic.

Since the time of the construction of Outer Ring Road (ORR), Mysore urban area has gained land value not only in the central areas but all around the city. Currently, however the real estate market has been hit badly due to the global recession with many cities such as Bangalore, Mysore, Mangalore and Hubli-Dharwad having very scarce property buyers. Real estate business has had a bad

Jayamani. M, Research Scholar, Department of Studies in Geography, Manasagangothri, University of Mysore, Karnataka. E-mail: jayageomgm@gmail.com
Dr. Asima Nusrath, Associate Professor, Department of Studies in Geography, Manasagangothri, University of Mysore, Karnataka. E-mail: n_asima@yahoo.com
impact, especially on Mysore followed by Bangalore, because this happens to be one of the major hubs of urban India. Kumar Gera, chairman of the Confederation of Real Estate Developers Association of India (CREDAI) said, “We are feeling the ripples of global slowdown. There is a 30 percent drop in new projects this year compared to last year. It will stabilize only if the market returns to its sound health. Otherwise, the entire market will be affected badly.”

City of Mysore has spread over a radius of 20 km. Heritage of the city brings about a natural linkage to architectural flavor. While the current trend of housing system is heading for the apartments, it appears that it will have damning effect on the heritage of the city.

Mysore city was considered as the most important cultural capital of Karnataka state which is one of the fastest growing cities next only to Bangalore. It is known as the cultural hub of the state. It lies in a saucer shaped basin flanked by Chamundi hills on the southwest and raised platform near Hinkal village on the west at an elevation of 769.05 meters above sea level at 120 18’ North latitude and 760 42’ East longitudes and located at a distance of 139 kilometers from country’s software hub Bangalore. The city is spread over an area of 128.42 sq km with a total population of 787,179 persons according to 2001 Census. The city is well known for its places and culture. Mysore is an educational, commercial and administrative center and also an important tourist and heritage center.

This paper aims to analyze the profitability in the construction of apartment buildings against single dwelling. It also attempts to examine the building byelaws in Mysore Urban Area especially for apartment buildings and regulations for construction in the vicinity of heritage areas and to assess the vulnerability of heritage areas by the changing architectural design.

The present study is based on primary and secondary data. The primary data pertains to the location of apartments, verifying the application of building byelaws, occupants of the apartment and flats, pertaining to the kind of occupancy, cost and year of construction, availability of basic services and information of the owners and tenants in the apartments. Secondary data was collected from the real estate agencies and the sub-registers office was useful to obtain data on land transactions from 2000 to 2010. Profitability in the construction between single houses and flats were assessed taking into consideration as follows:

- Cost of a single house = Cost of land + cost of construction
- (Average cost of construction varies between deluxe and luxury houses)
- Cost of a single flat = Cost of land/ Number of stories + cost of construction

(The number of stories in each apartment is normally four in Mysore)
Apartment building is a multifamily residential housing where multiple separate housing units for residential i.e. non-commercial inhabitants live. In some countries the word unit is a more general term referring to both apartments and rental business suites. The term flat is commonly, but not exclusively, used in the United Kingdom, Hong Kong and most Commonwealth countries. In Malaysian English, flat often denotes a housing block of lesser quality meant for lower income groups, while apartment is more generic and may also include luxury condominiums. In India apartments refer to the building which houses several flats. Each flat is a single residential unit either owned or rented.

Previous studies have shown that in an urban area land values are determined by their relative location to distance from the central areas, industrial proximity, and accessibility to service areas, etc. (Marshall, 1890; Hurd, 1911 and Haig, 1926). There is another view of land evaluation which is based on the thought that utilization of land is ultimately determined by the relative efficiencies of various uses in various locations (Radcliff, 1949; Berry and Garrison, 1958; Beckman, 1959; Alonso, 1960; Knos, 1962; Yeats and Garner, 1971; Khan, 1976; McDonald, 1979; McMillen, 1996; Han and Basuki, 2001). The city center is still the area where highest land value is existing. However with the development of sub centers, land values increase, wherever nodal functions exist. The other perspective to this theme is the demand for land and rent ratio, and the taxation having their influence on the land rent (Rose, 1992; Stassmann and Blunt, 1994).

With the prevailing high land values there are various ways in which the city planners and realtors are finding alternative schemes to keep the real estate market active in apartments for mass low cost housing. For example, Hufbauer and Steven (1974) analyzed the economic grounds for demolition of old buildings...
and replacing them with structures more suited to present height and density conditions. Whenever these situations emerge in historical towns and cities, the most important effects are on the city landscape with contradicting urban architecture and design. Such situations have also happened due to urban renewal programs in the case of old and New Delhi. There is another view of inner-city apartments as competition for inner city land rather than the preference of buyers. The innercity apartments are in fact a natural extension of an existing demand for residence close to the city (Morrison, 1999; Geltner, and Miller, 2001).

2. IMPACT OF GLOBAL RECESSION ON LAND VALUE AND RENT

Global economic recession has made a serious impact on land values in general and the construction industry in particular especially since 2006 onwards. The rate of construction of houses has generally decreased on one hand and on the other hand, there is an increase in demand for houses over and above the average requirement because of increasing growth of employment in IT sector. There is a need to strike a balance to make good supply of houses at a reduced cost of construction. Builders are pursuing alternative schemes in sideling the recessional effects chiefly by going in for low cost housing schemes. Increasing land values and escalating costs of construction are leading to shortage of housing stock. Land values have dropped since the recession, but the supply of land has been almost suspended. Financial facilities for the construction are not very encouraging. Costs of construction materials too have made a distinctive mark of peak prices making the total cost of construction very high. These factors have made construction temporarily difficult. Apartment system is able to cater to more dwellings at a reasonably low cost. Apartments in Mysore are generally constructed up to a maximum of four stories.

The highest value was observed in 2008-2009 in Kuvempunagar and Jayalakshmirpuram areas. Land value has increased not only within the city but also in the fringe areas as far as 20-30 km of Mysore. This has instigated land investors to purchase land because of greater profits in real estate business, causing increase in land prices all across the micro markets. Apart from this, the Bangalore Mysore Infrastructure Corridor (BMIC) has also added a hike to land values in the city as this infrastructure corridor will reduce the travel time between Bangalore and Mysore to a greater extent and people will prefer to stay back in Mysore and work in Bangalore because of the peaceful environment in the city.

Residential land values from 2000-2010 shows drastic change chiefly owing to economic development and population growth. In Gokulum, Jayalakshmi Puram, Ventikopal, Saraswathi Puram, Kuvempu Nagar, Vijaya Nagar, and Siddharthanagar areas where land value and land rent is highest in the city,
demand for houses is also very high. High rents particularly in these areas are due to the occupancy of high income residents mostly NRIs, big business houses, industrialists, professionals and people of high social class.

Contrary to the escalating land prices and increasing cost of construction of single houses, apartments are much cheaper than costs incurred for constructing single houses. As a result of common utilities and sharing costs of land, and construction by all the owners of apartments, total costs are minimized. In some areas where land is cheaper, cost of land almost diminishes invalidating the existence of the cost of land. Prices at which the flats are sold are cheaper than single houses, but the realtors also make a very high rate of profits in flats. This is the reason why growth of apartments is rampantly increasing. In the present days when there is greater risk and insecurity, apartments are becoming enclosures of good security and in most cases prevent home invasions and theft. Apartments are also more convenient than owning a house as the general maintenance and landscaping is taken care of by owners’ association and it accommodates all the basic necessities and luxuries of a modern house at reasonable cost. In view of all

Fig. 2 The Change in Land Value in Mysore Urban Area from 2000-2010.

![Graph showing the change in land value in Mysore urban area from 2000-2010.]
these benefits, apartments are mostly preferred over a single independent house. However, growth of single houses has grown steadily until 2001, but later there is a decline of 21.43 percent in the rate of growth of houses from 2006 onwards in Mysore city.

Mysore has mostly single dwelling houses, but from the past decade the real estate market boomed and the rents increased disproportionately high. This was a turning point in the construction industry and real estate business. Areas having high rent began to be developed with distinguished and improved state of the art architecture for high rise apartment. In some areas such as Jayalakshmi Puram, Saraswathi Puram, Gokulum, etc., since the rents are very high, any new construction is eventually becoming either high rise buildings or multistoried commercial building for offices and malls. Thereby leading to a high concentration of high rise buildings.

3. CONSTRUCTION OF APARTMENT BUILDINGS AGAINST SINGLE HOUSE DWELLINGS

3.1 Profitability in Apartments

Cost of construction is estimated for both apartments and flats and single houses in different localities in Mysore. Average market value is compared to the cost of construction and profits are analyzed. These profits in the construction of apartments vary between different areas depending upon land values, nature of neighborhoods, distance to the city center, infrastructure and attractions in the neighborhoods, etc.

3.2 Areas of High Profitability

Yadavagiri, Saraswathi Puram, Jayalakshmi Puram, Vontikoppal, Siddharthanagar, Ittegegudu (Lalitha Mahal road), and Gokulum are high profit areas. These areas include posh localities with high income residents, where mostly rich and influential live. Neighborhoods consist of elegant malls,
good roads and boulevards, with fashionable commercial areas and restaurants. The social fabric is intensely sophisticated with a cosmopolitan culture. Hence, profits in apartment construction are fully guaranteed. Consequently, there is a high concentration of apartments. Siddharthanagar, Ittegugudu (Lalitha Mahal road), consists of the foothills of Chamundi Hills, adjacent to Lalitha Mahal Palace, Beautiful Karanji Lake, and Race Course. Saraswathi Puram is located just 2 km away from the city center and it is adjacent to Kukkarahalli Lake, and Mysore University Campus.

3.3 Areas of Medium Profitability
Hebbal Industrial Area, Metagalli, Vijayanagar I, J.P.Nagara, Vijayanagar II, Vijayanagar III, Rajendranagar, Gayathripuram, Bannimantap Extension, Brindavan Extension, Kuvempunagar and Lakshmi Puram have medium profits in apartment houses.

3.4 Areas of Low Profitability
Vijayanagara IV, Sharadadevi Nagara, Ramakrishna Nagara, Vivekananda Nagara have low profits primarily due to long distance from the city.

3.5 Profitability In Housing
High profits in the construction of houses are observed in Hebbal Industrial Area, Saraswathi Puram and Yadavagiri. Medium profits are gained in the areas of Vijayanagar I, II and III stage, Siddhartha Nagar, Ittegugudu, Ramakrishnanagar, J.P. Nagara, Rajeev Nagara, Bogadi road and Chamundi Puram. Low profits in Lakshmiapuram, Brindavan Extension, Sharadadevinagar, and so on. As compared to profits of apartment buildings...
and housing, apartment buildings have high profits than single housing.

Land values are an important aspect in the total cost of construction. Land value generally varies from 3 to 4 times higher than a cost of construction of a house. This is a great hindrance in construction of houses in urban areas. But in apartment construction, land value is shared by flats owners, and the total cost of construction considerably declines. Areas having low and medium land values such as Vijayanagar IV, Sharadadevinagar, Ramakrishnanagara, and Vivekanandanagara are gaining less profitability because of long distance from the city center and unattractive neighborhoods. However the profitability in Vijayanagar II, Bannimantap Extension, Lakshmipuram, Hebbal Industrial Area, Gokulum, Jayalakshmipuram, Vontikopal, Siddhartha Nagar, Ittegegudu (Lalitha Mahal road) Yadavagiri, and SaraswathiPuram is high, because it is closer to the industrial workplace, where Infosys, Wipro and other IT companies are concentrated.

4. HERITAGE AREAS AND BUILDING BYE LAWS
There is a growing fear among common residents whether newly constructed high rise apartments, which are mushrooming in the city, would eventually affect the heritage status of the city. Owing to the low cost of apartment construction, there is a possibility that the inner city areas, mostly residential in nature with
Fig. 8 Construction Cost and Profitability in Apartment Housing System.

Fig. 9 Profitability in the Construction of Flats in Mysore City

single houses, could be converted into apartment buildings. These areas happen to be in the central areas, and closer to areas which are declared as heritage hot spots. It may ultimately affect the heritage landscape. In view of this, the Mysore Town Planning Act has emphasized the following regulations for the protection of heritage status.

The Areas of Special Control (Heritage Regulations) The Archeological Monuments Act 1961: In the local planning area
construction should not affect the aesthetic environs. In order to preserve aesthetic environs around heritage areas the following special regulations are adopted.

- Buildings upto and inclusive of the first floor or up to a height of 7 m from ground level, whichever is less, are only permissible within a distance of 100 m from the premises of these monuments.
- Building upto and inclusive of the second floor or up to a height of 10.5 m from ground level, whichever is less, only are permissible in the area beyond 100 m and within 200 m distance from the premises of the monuments.
- Building upto and inclusive of third floor or up to a height of 14 m from ground level, whichever is less, only are permissible between 200 m and 400 m distance from the premises of the monument.

In most of the cases, it is observed that the byelaws are manipulated by the building design. Apartment buildings mostly have a height ranging between 27
to 35 meters and the setbacks in these cases happen to be 11 meters on all sides. Owing to the fact that the cost of land is very high, it becomes very costly to leave the prime land empty. Building design commonly adopted so that the basement is normally used as parking, which violates the byelaws. But the pillars and foundation starts with the extent of the site itself. The next floor is the ground floor where the construction is extended forward so that the plinth area is covered until the total extent of the site. The height of the building also has to comply with the width of the roads, but in more that 80 percent of the cases it was found that the rule is violated.

Mysore city can be divided into three zones, the intensive, intermediate and outer zone.

Intensive zone: This Zone covers the central part of Mysore city. Such as Devarajurs road, Sayyaji Rao road, Ashoka road, Dhanvanthri road, which are the commercial nerves of Mysore city. The important monuments of this Zone are
Main Palace, Jagan Mohan Palace, Lalitha Mahal Palace, St.Phelomena’s Church, Town hall, Government House, Orient library, Krishnarajendra hospital, Deputy Commissioner’s office, and Maharaja College. Hence, there is a little scope for apartment buildings.

Intermediate zone: In intermediate areas due to congestion there are restricting regulations against high rise buildings in Jayalakshimipuram, especially Kalidasa road, Temple road, Gokulum, Vontikopal, Saraswathi Puram, Kuvempunagar, Vijayanagar I and II stage, and Siddhartha Nagar, Udayagiri, Kalyani Nagar, Shanti Nagar, and Rajiv Nagar and so on. In this Zone concentration of apartment buildings are more compared to other two zones. Due to availability of large land area, good road networks, and essential services compared to other non-apartment areas. These areas are also situated away from slums, and crowded localities. The multinational companies are interested in this Zone, which is causing serious hindrance for the future land market.

Outer zone: Outer Zone covers the peripheral areas of Mysore such as north western parts of the city with Hebbal Industrial Area and towards the southern
part of the city i.e. Nanjangud Area. Many developers are coming up with commercial office space and realizing the potential for future growth in IT and ITES sectors.

Some of the areas like Lakshmipuram, Siddhartha Nagara, Lalitha Mahal road have largest concentrations of apartment buildings. These apartments are closer to heritage areas. Hence this will affect the heritage perception of the city.

As regulated by the MUDA the Archeological Monuments Act, 1961, the intensive zone occupies excessive concentration of heritage hot spots. Out of the total 17 heritage hot spots, fifteen are located within the intensive zone. One heritage hot spot each is located in the intermediate and outer zone respectively. However the central and intensive zone being the most congested area with all the cultural display of present and erstwhile glory is causing immense mixture and confused landscape. In addition the high rise apartments are causing visual diminution to the heritage buildings. Therefore it is appropriately suggested in the heritage regulations that no building should be permitted higher than 14 m between 200-400 m from the heritage hot spots. Nevertheless Fig.14 shows that there is an enormous crowding of apartment buildings within the intensive zone and within the prescribed prohibited distance, especially closer to Chamarajendra
Fig. 14 Vulnerability of Heritage Areas to Apartment Buildings.

palace, Karanji Lake, and the Zoological gardens located on the eastern edges of the intensive zone, where great concentration of high rise apartments ranging between 20 to 24 m are in violation of the regulation.

5. CONCLUSIONS

Trend of high rise apartments has set in and it will continue to grow larger and larger, thereby not only sustaining good supply of dwelling units but will also increase the vulnerability to the heritage of the city in a long period. In the present situation, apartment system is appropriate in terms of accommodating more houses and people within reasonable costs. Land market situation, especially in the high income residential areas are already undergoing transition in architectural design. It is most likely that this change in the construction design may pass into the moderate income areas in the second stage and lastly, it may appear even in the low income residential areas. Traditional single housing system will eventually become costlier for construction and maintenance for a single owner.
Future areas for greater concentration of high rise apartments is most likely Vijayanagar 4th stage, Bogadi road, Mahadevapura road, T.N. Pura road, etc. because these areas are closer to the ring road and also located at the vicinity of the upcoming residential areas. Heritage conservation needs a well-protected full proof machinery to take care of heritage.

REFERENCES
Corporation of the City of Mysore (2010) Housing, Mysore City Corporation, Corporation of the City of Mysore, Mysore.
Website: http://www.jnnurm.mysorecity.gov.in.
Website: http://www.mysoreclick.in.

Call for Papers and News Items

The Editor requests members to send articles for inclusion in the Journal and Newsletter. Chairpersons and Secretaries of the various Regional Chapters and Committees of the Institute are particularly requested to send highlights of their activities for the Newsletter and articles for the Journal on a regular basis. Articles for the Journal may be sent as a soft copy (MS Word) as well as hard copy. Items for the Newsletter can also be e-mailed to: itpidel@nda.vsnl.net.in Diagrams and sketches should be neatly drawn, labeled and sent as soft as well as hard copy.

Editor