



## The Sprawling City of Mysore and its Planning Regions — a case study of urban expansion

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### Abstract

*The inner city dominates popular imagination of haphazard urban growth as these areas are generative of urban problems in various shades of grey. But the peripheries face somewhat a unique dilemma that revolves around the dual question of uncertainties. The first is of isolation by cost if not by time and distance, from the city centre and all the facilities and services which it does still provide. The second is the issue related to the impact of city extension upon the open countryside. The second one poses perhaps the biggest challenge as far as the planning for the city is concerned. The city of Mysore has a rich cultural heritage and now happens to be a fast growing city of Karnataka, after Bengaluru. It typically had grown outward while accommodating its growing population and this has led to the changing land uses of it and its surrounding rural fringes which have slowly been included in the urban area of Mysore City Conurbation. The city of Mysore and its fringes have been divided into certain Planning Units or Regions for the ease of putting equal attentions to the area of study. Objective of this paper is to highlight the planning approaches that may be adopted in the city of Mysore and its fringes for balanced urbanisation.*

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### Introduction

The inner city dominates popular imagination of haphazard urban growth as these areas are generative of urban problems in various shades of grey. But the peripheries face somewhat a unique dilemma that revolves around the dual question of uncertainties. The first is of isolation by cost if not by time and distance, from the city centre and all the facilities and services which it does still provide. The second is the issue related to the impact of city extension upon its countryside; it is perhaps the biggest challenge as far as the city planning is concerned. The city planners today no longer view planning for the city and that of its suburbs separately as they together make an 'urban area' liveable. The approach of the planners and architects to the urban fringe problems differ from those of social scientists, in so far as they focus on urban land policy, plan outlays and relevant acts. During the industrial growths however cities expanded into their rural

hinterlands and such walls of distinctions were abolished physically and conceptually. Suburbanisation, or the emergence of suburbs has a long tradition that began in Europe in the 17th-18th Century in England and later went into the North American countries and Asia. The loss of former typical CBD functions of the core city and the growing importance of the former suburban areas can be observed everywhere with its clearest expression in the so called Edge Cities (Garreau, 1991). The city of Mysore has a rich cultural heritage and now happens to be a fast growing city of Karnataka, after Bengaluru. It typically had grown outward while accommodating its growing population and this has led to the changes in its land use pattern as well as its fringe areas which have slowly been included in the urban area of Mysore City Conurbation.

The growing autonomy of suburbia, the weakening linkage between the city and its suburban

hinterland and as a result, the replacement of the traditional radial transportation pattern of the early suburbanisation by a non-directional more tangential and even a random or chaotic one with its highest density within and between the former suburban areas, and the side by side existence of rural areas with agricultural land use, highly concentrated notions like 'cityland' (Holzner, 1996), 'between-city' (Sieverts, 1997) or simply 'Metropolitan Areas' may be applied to any and every city of the developing Nation and its suburbs. Hence, 'city as a specific unit beyond the randomness of administrative territorial organisation' does not exist anymore (Haussermann and Siebel, 1987).

These metropolitan areas are neither urban or rural and 'unlike all cities of the past, this new ones has no defined centre or periphery, no core, no manufacturing or growth corridors in low density settlements that combine urban, suburban and rural elements in a seemingly random and endless collage' (Fishman, 1994). One can observe a spatial form of societal order whose characteristic feature is the rapid weakening of the spatial centre-periphery gradient plus the disappearance of a territorial border. Today the city is everywhere and nowhere. The city is observed as a spatial form, if at all only in the case of small and medium sized towns (Gerhard, 1971). The expansion of the city by way of what is termed by McKay the 'Metropolitan Invasion' has proceeded unimpeded with the increasing tempo and has engulfed the land in the suburbs transforming the face of the country (shaw and McKay, 1942). The metropolitan invasion would take its start from the central community and move towards more urbanization.

### Area of Study

The Mysore City is located at 76°12'E longitude and 12°18' N latitudes. It is the second single largest city in the state of Karnataka. It was initially the capital of the former princely state of Mysore and is now a divisional headquarters having a population of nearly 10 lakhs, as per the Census records, 2011. The State Government, under the provision of the Karnataka Town and Country Planning Act, 1961, which provides for regulation of planned growth of land-use and development for urban areas, constituted a City Planning Authority for Mysore for preparation of development plans for the Mysore city and its surroundings. Realising the urgency of planning for sheltering the growing urban population in Mysore, the city planners constituted a greater Mysore Urban area including Mysore city itself, Nanjangud Town Municipal Council area, 84 villages within Mysore taluka, 19 villages within Nanjangud taluka and 14 villages within Srirangapatna taluka. The entire planning region covers an area of 509.03 square kilometres.

### Historical Background

The princely state of Mysore (1399 - 1947) was a

kingdom of southern India, traditionally believed to have been found in 1399 near the modern city of Mysore. The Wodeyar family ruled the kingdom which initially served as a vassal state of the Vijayanagara Empire. With the decline of the Vijayanagara empire by 1565, the kingdom became independent and with the passage of time it witnessed annexation of neighbouring territories in the southern parts of Karnataka and Tamilnadu. However with the growth of British rule in the country the Mysore kingdom shrunk quite a great deal. The history of Mysore goes back to the ancient time of Gods, Goddesses and demons.

The name Mysore is derived from the demon Mahishasura. He was killed by Chamundeshwari, also known as Mahishasura Mardhini. Nanjangud is a town in Mysore district in the Indian state of Karnataka. It is a temple town and is on the banks of the river Kapila (a.k.a Kabini). It is at a distance of 23 km from the city of Mysore. Nanjangud is also called as "Dakshina Kashi" (southern Kashi). The main temple at Nanjangud is dedicated to the Hindu god Shiva, whose another name is Nanjundeshwara. Nanjundeshwara means the God who drank poison. Hindu mythology quotes an interesting legend in which the Gods and demons churned the ocean in search of the nectar of immortality. During this churning, there were lots of artefacts that emanated out of the ocean, including poison. To prevent the poison from spreading across the universe and destroying it, Shiva came to the rescue and drank the poison. His wife Parvati then held his throat tightly to prevent the poison from spreading to the rest of his body. Nanjanagud literally means the place where Nanjundeshwara resides.

### Physical Background

The area of study lies in the southern Maidan or plateau region in the southernmost part of Karnataka State. Physiographically the region is located in the southern part of Deccan peninsula with Tamilnadu to its southeast, the Kodagu district to its west, district of Mandya in the north, Hassan district to its northwest and Bengaluru to its northeast. The region enjoys cool and equable temperature and is situated on mostly lateritic soil sometimes covered by red loam, sandy loam, red clay and black cotton soil. Mysore region encompasses two types of vegetation types including moist deciduous type where the rainfall is 900-1100 mm and dry deciduous type where the rainfall is 700 - 900 mm. The region is well covered by teak, rosewood, eucalyptus and sandalwood.

### Observations and findings

Urbanisation comes as a direct outcome of industrial development and the former is the obvious trend evidenced in the developing nations like India, where every city is well expanding geographically. A sprawling city grows out beyond the existing limit, engulfs the rural fringes surrounding it, steadily transforming them into

continuous built up areas with distinct urban entities. Bengaluru city shares maximum urban population in Karnataka, with over 8 million population, followed by Mysore with nearly 10 lakh population, then Hubli-Dharwar, Mangalore city etc. But interestingly, as far as the ideal distribution of population is concerned (by Zipf's method), the shares of urban population of every cities up till 10th rank in Karnataka are low in comparison to what these should be, revealing the basic trend of the people of Karnataka moving towards the Primate City that is Bengaluru, owing to more employment and educational opportunities. Mysore and other remaining cities of Karnataka are lagging behind as far as the proportionate distribution of urban population is concerned; indeed these towns and cities had so far not been the obvious choices of migrant population (as destination-city). Mysore city should house at least half the number of population belonging to Bengaluru city, as the analysis reveals (fig.1). But may be the city should provide more of other basic opportunities in order to cater to the needs of growing migrant population.

### Population Profile

The planning area for Mysore-Nanjangud includes the following areas where population growth has been projected for the decades 2021 and 2031. They are tabulated below. Interestingly, the region under discussion has been a mixed bag of experiences as far as the population growth is concerned. A rising population in Mysore city from 1961 onwards has recorded an increasing trend till today, though in a diminishing growth rate. In fact the region of Nanjangud recorded huge growth of population in the decade 1981 owing mostly due to the in-migration of the people from the neighbouring rural fringes in search of jobs in this temple based settlement point. Nevertheless a positive growth of the town is always recorded here. Krishna Raja Nagara area and the other remaining rural fringe areas included in the planning area somewhat record positive growth rate of population (though sometimes low as compared to the previous decade). The following diagrams show the growth of population in Mysore City, Nanjangud, Krishnaraja Nagara Area and other rural fringes over the decades 1961 up till 2001 with corresponding growth rates (fig.2).

The leftward side of the Y-axes of the graphs show the growing population of the study area. Mysore, Nanjangud and other rural areas show a steady increase but Krishnaraja Nagara area shows a rise from 1961 till 1981 and falls again in growth of population in 1991 and rises again in 2001. The rightward side of the Y-axes demarcates the growth rates, depicted by curve lines; which is on sharp decline in Mysore City and Nanjangud Town. In fact, the growth rates have fallen for the decade 1991 onwards in Mysore City and Nanjangud Town owing to the reason these regions were already carrying more than they could, population

and immigration had steadily declined.

But the regions like Krishnaraja Nagara and other rural fringes included in the planning region have recorded a rise in growth rate owing to the probable reason that the population of the remote fringe areas of Karnataka in search of employment and 'good' qualities of city living. It is interesting to note that, the entire area under study shows an inherent trend of population growth, a typical feature of probably any and every developing nation. The Mysore urban area includes the maximal share of population increase from 1961 up till 2001, as the Census records reveal. The next in order, is the rural fringe area (other than the Krishnaraja Nagara area and Nanjangud urban area) which stands in the second rank, as far as the percentage share of population is concerned in the area of study. The fringe area however covers a considerable share of population and in an decreasing rate though, demanding a special mention as far as planning at regional level is concerned. The remaining areas of Nanjangud Urban area and Krishnaraja Nagara area more or less cover the same share of population strength in the study area over the decades. The analysis shows that the population profile of the Planning Area deserves social and of course economic provisions aiming at better living especially in these areas of greater population percentages. The Mysore Urban Area deserves managing its growing population with the existing pattern of city living and rural fringes demand better living and infrastructures which would be mostly 'new' to them (fig.2).

### Planning Strategies for the Mysore Planning Regions

As mentioned earlier, in order to check the haphazard growth of population the city of Mysore and its peripheries along with the Temple town of Nanjangud and some rural outgrowths have been categorised into a number of Planning Regions. In fact, in the proposal there are two major Urban Areas identified as Mysore City Corporation Area and the Nanjangud Town Municipal Area. Besides outgrowths near Mysore City at its west, that means the region in and around Krishna Raja Nagara Area and few industrial pockets around Thandavapura, a village in the mid way between Mysore and Nanjangud has been included for area planning purpose. The Planning Regions are forty five in number, of which regions numbered 1 - 7 includes mostly the central part of Mysore City. But the Planning Regions numbered 8 to 30 are categorised as 'Eco-Planning District' which mostly accommodate the outer built up areas of Mysore City, including the areas like Chamundi Hill areas and its neighbourhood. The remaining areas like those coming under the Planning Regions numbered 31 - 45, are typically the rural fringes of Mysore City. Later, the delineation of Planning Regions in Mysore Urban Areas were reorganised like existing developed area around Mysore City comes under the Planning Regions numbered 1 - 31.

However, Nanjangud Town area is covered under the Planning District 42. The Planning regions remaining, namely 32 - 41, 43, 44 and 45 typically encompass the rural fringes around Mysore city with larger sizes of land, discrete built up areas etc. As stated earlier the regions for planning purposes may be delineated as only Mysore city with its city corporation limits. However the Planning district 31 encompasses the northern fringes of Mysore with close nearness to the Bengaluru-Mysore railway tract. The Planning Regions numbered 32 and 33 are located in the eastern fringes of Mysore City near Bannur; 34 and 35 include the south eastern peripheries of Mysore including Chamundi Hills lined with forest lands.

Also, the regions lying to the southern part of Mysore City comes under the category of Planning regions 36 and 37, at the vicinity of Mysore-Chamarajanagara railway line. The Planning Region numbered 38 lies to the south west corner of the city; but the regions 39 and 40 are located near the westerly fringes of the city which are dry lands of waste, and so is the Planning Region numbered 41 in the north-western part. In fact the Planning Regions numbered 43, 44 and 45 are located in the peripheries of Nanjangud Town coming under the direct influence of the Temple Town. The Planning Regions so far designated may be well suited to the future oriented prospects as far as urban growth is concerned.

In fact the Planning Regions cover the Mysore City itself and the peripheries which show mostly residential land uses, followed by land under transport sectors. Astonishingly areas near the Mysore palace have been under land use of agricultural may be termed as land kept as cultivable fallow or small scale horticultural activities are practiced here. The southern periphery of the city however shows a major part of its area under agricultural uses too (fig.3).

### Dilemmas of Urbanisation in the Study Area

Sustainable Development in the City of Mysore begins with a respect and understanding of the Natural Systems that provide us with the resources necessary to function and grow, and that support the overall understanding of the preservation of natural Resources. Mysore City recognises its environment and natural landscape as part of an Urban Ecosystem. This ecosystem includes not only natural resources, habitats, but also human adaptations and enhancements such as street trees, culverts, and storm water runoff. Mysore City itself maintains a good cover and has eight lakes that add to the land use features of it. These are the sources of Open Areas within the rapid Urbanising Cities. Of these eight lakes, the most frequented are Kukkarahalli and Karanji. These water bodies act as sources of recreation to the city dwellers (Table - 2a). Kukkarahalli lake is located near the University of Mysore. It used to be a source of potable water supply to the city of Mysore, but with the passage of time these fresh water lakes which were fed by

rainwater and urban runoff have become dumping ground for release of sewage, garbage and silt inflows. They are also subjected to land encroachment or diversion of natural runoff from the lakes, illegal construction, cutting of foreshore trees leading to soil erosion, discharges of sewage etc. Karanji lake is one of the favourite halts of migratory birds like Herons and Egrets. The lake has started getting polluted when sewage from the nearby residential areas were let into the lake. This pollution led to the destruction of aquatic life in the lake with the food sources getting depleted, the migratory birds started to avoid this place.

Mysore and its surroundings are rich in flora and fauna. It has somehow managed to save large tracts of land as reserved forests and open areas. Within Mysore they are preserved as reserved forests and open areas and also sometimes they are termed as green areas. The largest green tract is the Chamundi Betta forest, followed by the forests at Yelwala, Bommanahalli and Bastipur. The total area under forest cover is 950 hectares; but increase in population and unbridled urbanisation of Mysore city has eaten away open spaces and agricultural land around the Mysore City as the city continues to grow horizontally and of course radially. The Mysore Urban Development Authority has proposed new residential layouts on the peripheries which is a clear indication of vanishing off even more stretches of agricultural fields and lands under natural vegetation. The Table(2b) gives an idea regarding the stretches of natural vegetation in and around Mysore Urban Agglomeration.

### Recommendations for Delineating the Planning Regions

Thus developmentalism is a battleground where contention rages among bureaucratic economists, Marxist revolutionists, environmental activists, feminist critics, postmodern skeptics, and radical democrats. Theories of development reach deeply into culture for explanatory and persuasive power, while the end products of such deep thinking, together with the dedicated practices of millions of well meaning people are appropriate for the mass people:

- 1) The region under consideration should designate transportation corridors using hub and spoke method which may allow minimal loss of land under forest covers.
- 2) Setting regional level policies and zoning which encourages a mix of housing activities and open space maintenance.
- 3) Considering strict alternatives for treating waste water disposal and proper maintenance of wetlands.
- 4) Designating Green Belt or similar tracts of vegetation between each units of land use in the study area in order to resist settlement amalgamation and reduce the overlaps.
- 5) One key purpose of the Small Area Master Planning Process is to discover and express the community's desires for the shape of future land development in the



Planning Area. Through the development review process, diverse parties advocate for their personal interests as each individual project is discussed and either approved or denied. The Small Area Master Plan is useful in this context as the repository of the "community interest" in the area.

6) It is important to look at the area as a whole, takes all views in the community into account, and is able to inform the development or conservation of individual parcels with a holistic, large scale, long-term understanding of the community's interest in the area. In this way, this Plan is intended to influence development, nudging it toward greater alignment with the collective will of the residents in the area.

7) Recognising and logically infilling the existing urbanisation pattern in the identified developing and approved urban area of Mysore. Recognising and accommodating the development of a potential new urban community centres including urban portions of the approved Planning Areas along with logical identified areas to the north and the southern portions of the city.

8) Recognising and accommodating continued rural residential development in the identified southern portion of the planning area, with the encouragement to connect to central water systems, and with more emphasis on cluster development approaches.

8) Restricting any urban development in the eastern part of the planning area and discourage any further rezoning here because there is every chance of overlapping with Bengaluru urban expanse.

### Conclusion

The region under consideration has been delineated for planning purposes into several units with the sole aim to restrict loss of mixed patterns of land uses. The urbanisation comes with built up areas and steady loss of vegetated cover and cultivable fields. But efforts should be given to acquire a balance when such things happen. Urban dynamics is the study of land transformations occurring in any urban areas through

time. Urban areas in the developing countries face the growing problems of haphazard growth, loss of vegetation, with decline in arable lands and also decline in wildlife habitat. Most of the problems are attributed to the growing population pressure. Infact the impact of metro-polisation, on urbanised villages has thrown challenging questions about land uses and its dynamics, besides water facilities and sanitation. Urban expansion mostly engulfs its surroundings and acts as the facilitator of drastic changes in land use of its vicinity. Planning Region of Mysore is indeed an theoretical effort that seeks practical applications in Mysore City and its fringe areas for balanced urbanisation.

### References

1. Carter H (1991): The Study of Urban Geography, Routledge Publishers Ltd.
2. Das A. K. (1992): Urban Planning in India, Rawat Publications, Jaipur pp.122-128
3. Dikshit J. K. (Ed. 2011): The Urban Fringe of Indian Cities, Rawat Publications, Jaipur, India
4. Jha. M. (Ed. 2008): Landuse : Reflection on Spatial Informatics Agriculture and Development, Concept Pub. Co., ND
5. Pandey V (2014): Rethinking Urban Development: Exploring Cosmopolitanism and Regionalism in Post-Industrial Cities, Rawat Publications, Jaipur. pp 34-35
6. Provisional Population Totals Paper 1 & 2 of 2011, Census of India, 2011, New Delhi
7. Report on Demography of Mysore City Council & Corporation, MUDA (Mysore Urban Development Authority, 2009
8. Revised Master Plan-2031 for Mysore-Nanjangud Planning Area, Mysore Urban Development Authority, 2011, Mysore
9. Shaw, C.R. and McKay, H.D. (1942) Juvenile Delinquency and Urban Areas University of Chicago Press, Chicago,

Table – 1: Delineation of Mysore Urban Area into Planning Regions

Types	Planning Regions
Mysore City	1 - 30
Northern Peripheries	31
Eastern Peripheries	32 - 33
South-eastern Peripheries	34 - 35
Southern Peripheries	36 - 37
South-western Peripheries	38
Western Peripheries	39 - 40
North-western Peripheries	41
Nanjangud Town	42
Nanjangud Town-fringes	43 - 45

Source: Compiled by Author

Table - 2a: Distribution of Waterbodies in the Study Area  
(based on Usages and Catchment Area)

Water body	Catchment Area (ha)	Usage
Kukkarahalli	160.70	Recreation
Lingambudi Tank	4377.45	Irrigation
Karanji Tank	852.71	Recreation
Hinkal Tank	315.60	Irrigation
Hebbal Tank	514.00	Irrigation
Dalvoy Tank	3600.00	Irrigation
Bogadi Tank	1096.50	Irrigation
Shetty Kere	1652.70	Irrigation
Devanur Tank	345.10	Irrigation
Kyathamahanahalli Tank	110	Irrigation
Rayana Kere	1652.70	Irrigation

Table - 2b: Distribution of Forested Areas in Mysore and its surroundings

Notified Forests	Villages Covered	Range	Extent (ha)
Yelwala	Yelwala	Mysore	214.48
Bastipura	Bastipura	Mysore	74.05
Bommanahalli	Manikyapura	Mysore	4.85
Bommanahalli	Manikyapura	Mysore	4.45
Bommanahalli	Bommanahalli	Mysore	39.26
			337.09
Chamundi	Chamundi Betta	Green Urban Area	101.91
Chamundi	Chamundi Betta	Green Urban Area	85.53
Chamundi	Chamundi Betta	Green Urban Area	87.52
Chamundi	Chamundi Betta	Green Urban Area	130.77
Chamundi	Hosahundi	Green Urban Area	29.94
Chamundi	Uttanhhalli	Green Urban Area	44.55
Chamundi	Sakkahalli	Green Urban Area	132.88
Chamundi	Sakkahalli	Green Urban Area	0.41
			613.51

Source: Compiled by Author

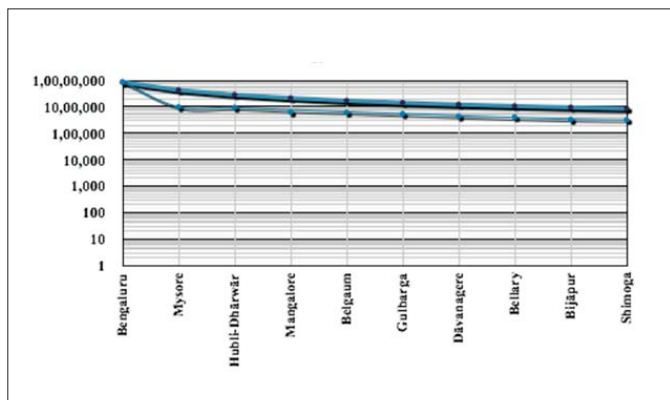
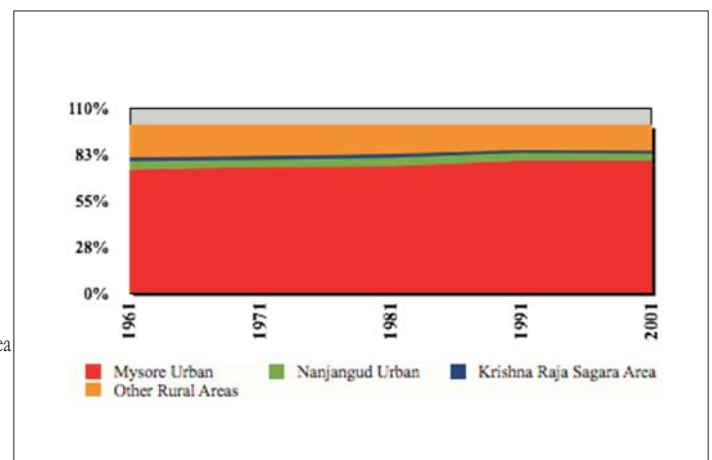


Fig. 2: Distribution of Population in the 4 Broad Planning Units of the Study Area

Fig. 1: Actual and Estimated Population of 10 Cities / Towns of Karnataka, 2011



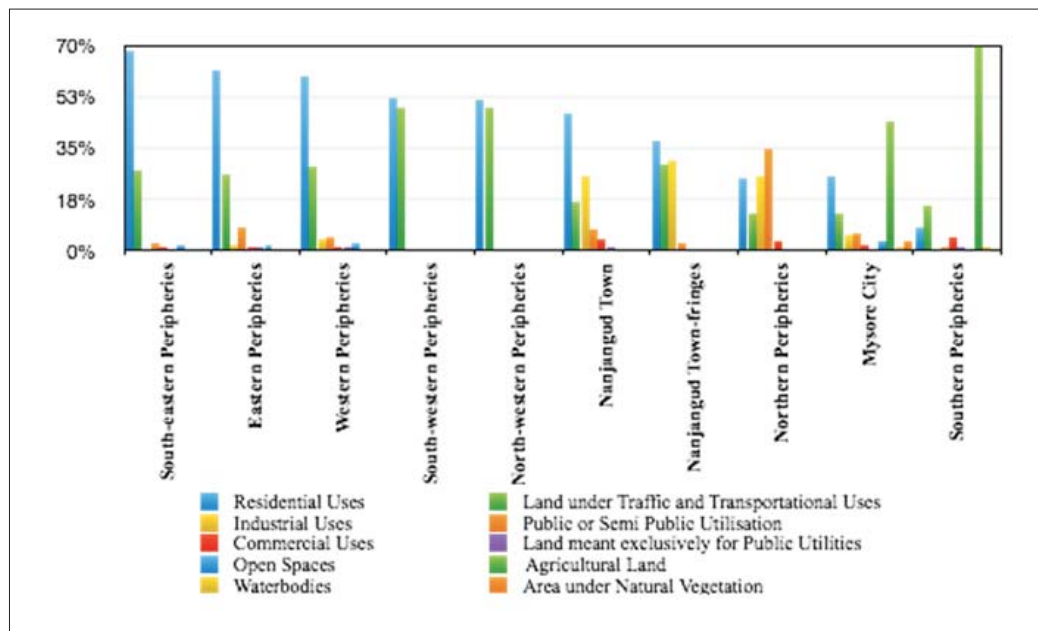


Fig. 3: Distribution of Landuse in the Periphery of Mysore City, 2011

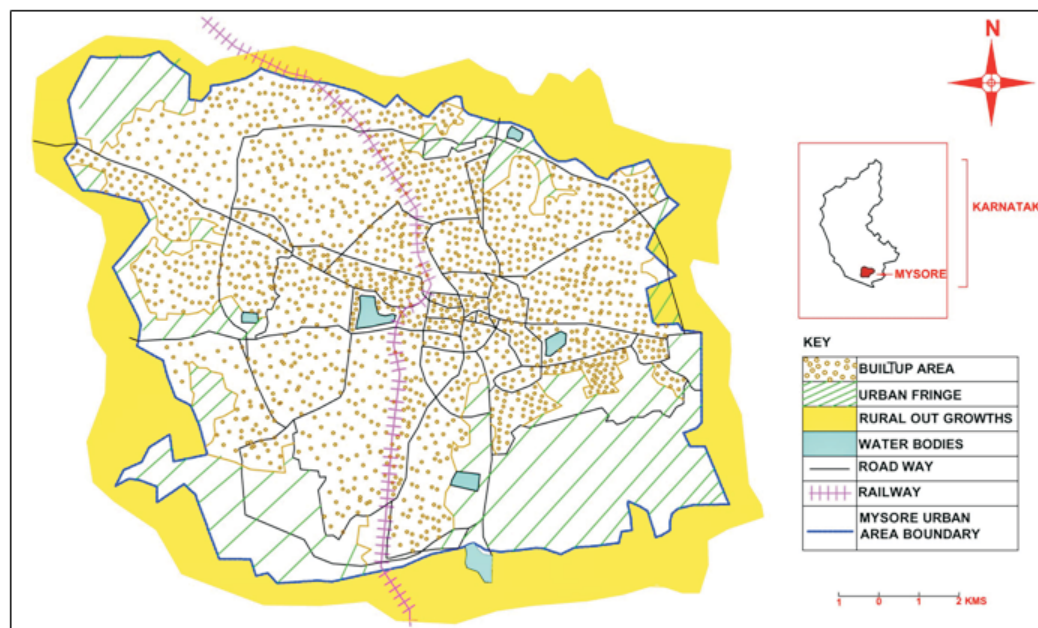


Fig. 4: Existing Landuse of Mysore - Nanjangud Planning Region



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