1.0. INTRODUCTION

Research on urban planning and urban growth has been an area of emphasis of the urban geographers, planners, and policy makers in the recent years. The main aim of urban planning and management is the development of urban space and its environment. Land use planning is an important base for urban planning. The development of Indian Cities is largely controlled by land use. Therefore land use has become a central component in urban planning, for managing the available natural resources and the changes in the environment. Land Use may be defined as the use of land by humans, usually with emphasis on the functional role of land in economic activities (Campbell, 1987). Rubenstein and Bacon (1990) defined land use as the type of activity on a piece of land, such as residential, commercial or industrial. In other words land use simply means the use to which the land is being put or the utilization of land devoted to human activities. Urban Land Use refers to the utilization of urban land for various human activities. According to Blumenfield (1972), urban land use, at its broadest, can be seen as the adaptation and utilization of space to accommodate different human activities, all of which stem from the concentration of large numbers of people in urban areas, and all of which require, if not create, specific land uses. The layout or arrangement of the uses of the land in a specific urban area is known as Urban Land Use Pattern. In other words, while examining the internal structure of city and cities, a number of distinctive land uses are seen, like residential, commercial, industrial, etc. The nature, distribution and extent of these land use define the urban land use pattern. The land use pattern of a region is a product of interaction between physical conditions and their utilisation by man under various socio-economic conditions, in time and space. The intention of
studying land use of an urban area is to find out if the land is used optimally and to inspect the extent to which current land uses are hindering the progress of an area. Land use analysis helps in determining a suitable pattern for the present and the future needs of a city. The values and attributes of the people have changed over time, which has a direct impact on the land use. Land is becoming a scarce resource due to rapidly increasing population and its characteristics. Therefore, knowledge on land use and the potentiality and possibilities for the optimal use of the available land is essential for planning strategies for land use to meet the increasing demands of human and their welfare.

Land use change indeed has been governed by the physical conditions, but it also to a large extent is determined by social, economical, political conditions as well, in time and space. Other conditions like market forces, land management technologies, infrastructure and land use policies also have significant role in taking the decision to alter land use. The changes in the economic policies, with replacement of direct government controls on the economic activities by a regulatory system has altered the entire social and economic landscape, which in turn has brought a significant change in the urban land use.

Moreover, the 74th Constitutional Amendment Act (Nagar Palika Act, 1992) has entrusted the urban local bodies with an added responsibility to look into the civic needs of the urban dwellers and the infrastructural development. This has resulted in a remarkable alteration in the land use pattern in Indian cities.

The effect of policy implementation was widespread and small developing towns like Ranchi have also experienced transformation in the existing conditions, which brought a remarkable change in its land use. The City of Ranchi has been
administratively significant ever since the British period, but its importance increased after getting the status of the capital of Jharkhand, in November 2000. The new secretariat, high-court, headquarters and other administrative buildings, came into existence with the formation of the new state. Moreover in order to cater to the needs of the city, the basic amenities and infrastructure has been strengthened. There has been a mass migration of people from rural areas to cities. The major cause is the search for better employment opportunities in these urban centers. As urban population increases, the demand of land for various urban activities also increases. A remarkable increase in education has also resulted in a huge influx of migrants; with consequent increase in the urban and demographic pressure on land. All these have significantly altered the land use and the resultant landscape of the city. Such conditions are dynamic in nature and are expected to bring about changes in the existing conditions of land use in future, the consequences of which is unpredictable.

Therefore, it is of paramount importance to understand the spatio-temporal patterns and driving forces of the urban land use change, which may play an important role in developing rational economic, social and environmental policies in an area. Therefore in this research an attempt has been made to monitor the land use changes and the underlying causes in Ranchi city, in the period before the state formation and after the inception, keeping in view the changes in the economic policies and the 74th Constitutional Amendment Act (Nagar Palika Act, 1992)

1.1. STATEMENT OF PROBLEM

The process of urban growth has often been criticized for inefficient use of land and large-scale encroachment on environmentally sensitive area, which is a threat to sustainable development. However, sustainable urban growth, management and
development planning need to take account of the dynamic process of temporal urban change. The measurement of urban form can provide a more systematic analysis of the relationships between urban form and process (Yeh and Li, 2001). Therefore, one of the pre-requisite for understanding urban growth is to look into the land use change.

Population of the Ranchi city has been increasing very rapidly due to its position as administrative nucleus, available resources, education and job opportunities, which has caused a remarkable change in the land use. This process has been more rampant after it received the status of a state capital. There has been substantial decrease in agricultural land, water bodies and increase in settlements and road network. Areas are being converted for urban use without any systematic development plan and without a corresponding investment in infrastructure. Poor land management has resulted in urban areas with inadequate services and infrastructure and a corresponding lack of accessibility, that may prove very costly to resolve in future. Moreover the conversion of rural land into urban has resulted in conflicts between the government and the locals. The city on the other hand is an unplanned city and the extension of the urban area has also been haphazard. With the changes in the economic policies and resultant increase in the efficiency and effectiveness in the economy to a large extent has caused a change in the demographic, social, infrastructural and other realms of the city, which determine the land use of an area. Moreover with an increase in the responsibilities of the Urban Local Bodies, after the Nagar Palika Act, with respect to infrastructural development and civic amenities, the landscape of the city has been significantly altered.
There has been an increase in the area of under residences, commercial and public facilities, education and research facilities in order to cater to the needs of growing urban population, with the increase in the administrative importance of the city, which has also resulted in the emergence of new administrative buildings. With the separation of the administrative cadre, there has been administrative migration from Patna, thereby increasing the population and the facilities required for the increase, which would have not been possible if Ranchi would not have become the capital city. The relaxation of new economic policies and the Nagar Palika Act, has yielded overall economic growth, resulting in an increase in industrial activities and infrastructure development, primarily transport and other civic amenities. On the other hand, the water bodies and open spaces have shrunk in order to accommodate the above facilities.

Therefore, the present research work highlights the causes and effects of land use change, before and after the formation of the Jharkhand State, keeping in view the remarkable changes that have taken place in the history of urbanization of the city, especially after the inception of the new state and the changes in the economic policies, keeping in view the Nagar Palika Act, so that the planning and developmental actions can be taken up accordingly.

1.2. OBJECTIVES

The main objectives of the study are as follows:

   i) To study the change in the land use pattern in Ranchi city, after it attained its separate statehood (2000) and Ranchi became the Capital City;
ii) To determine the causes of land use change in the city;

iii) To identify the rate and direction of land use change in the City.

1.3. RESEARCH QUESTIONS

Within the framework of the broad objectives, the following research questions have been addressed during the course of investigation:

i) What are the emerging patterns of land use change in Ranchi city, after the formation of Jharkhand state?

**Justification:** The land use of Ranchi City has been altered to a large extent. There are certain areas which are not suitable for a particular use but being used.

ii) To identify the main drivers of land use changes in the city and the direction of such changes?

**Justification:** There has been a significant increase in the rate of change, in the city after the formation of the state. The factors triggering such change need to be identified and analyzed for a better management of the city’s future growth and development.

1.4. JUSTIFICATION OF THE STUDY AREA

Jharkhand is a mineral rich state that has resulted in rapid industrialization and urbanization. And Ranchi has been the capital of this mineral rich state. It has had administrative importance ever since the British period and also it has been an important centre for education with the finest schools and colleges, including engineering and medical colleges, of eastern India. These have been an attraction for
the migrants, since long. The city experienced a remarkable urban growth after 1958 with the establishment of Heavy Engineering Corporation and its associated township. The H.E.C. Township was set up with consequent development of infrastructure including roads, markets and other basic amenities. This gave rise to other allied industrial areas along with their respective townships viz. Kokar, Tupudana and Tatisilwai. With this the infrastructure was strengthened further.

Another breakthrough was the year 2000, when it received the status of state capital. Thereafter in order to cater to the needs of the city basic amenities and infrastructure have been strengthened. There has been a remarkable increase in educational facilities and employment opportunities. This resulted in the influx of people from other parts of erstwhile Bihar, Uttar Pradesh, West Bengal and Maharashtra and particularly from the neighboring rural areas. With the increase in its administrative importance it became the hub of headquarters and organizations. There has been incredible increase in residential complexes absorbing the rapidly increasing population in the city. Over the years with the increasing demand of the city, shopping complexes, market areas and recreational areas have come up.

Moreover, the city having hosted the National Games in the year 2011, the land use of the city experienced remarkable change. The infrastructure was strengthened especially in terms of 4 lane roads and the sport complexes and residences at Khelgaon.

All these have brought a significant change in the land use and resultant landscape of the city. A large area of agricultural, forest and barren land have been brought under non-agricultural use, leading to the expansion of the urban area. This expansion has gone beyond the planned limit. From the environmental point of view the city has
been adversely affected, with the encroachment of river catchment area, deforestation, congestion etc. Keeping in view the potential of the city in terms of existing resources and the growth centres and sectors of development, the city is bound to experience continuous urban growth in the coming years, which shall bring change in the land use pattern, adversely affecting the ecology of the region. Therefore, the study area has an immense potential for the change detection study to be carried out. Moreover, efforts should be drawn to delineate the sprawl boundary of the city, keeping in mind the carrying capacity of the city, and the planning and developmental actions should be taken up accordingly.

1.5. DATABASE AND METHODOLOGY

The research is based on data collected from both primary and secondary data. Three points of time has been taken into consideration viz. the census years, 1991, 2001 and 2011, that is the period before the state formation and after. These years have been taken because the state was formed in the year 2000, so these would give a picture of the conditions prior to the formation and after that. Also because the effect of the economic policy changes was not very significant in the initial phase of its implementation in 1991 but more remarkable in the later phase, therefore the period 1991-2001 would represent the former and 2001-2011 the latter. Moreover the Nagar Palika Act came into being in the year 1992 but became influential only in the later phase coinciding with the formation of the state.

At the onset with the aid of secondary data like government documents, non-government documents, books, articles, newspaper magazines, private records and internet sources a theoretical framework for the research has been prepared. After
critically reviewing the literature the problem of the research and the research questions have been framed. The records, books and articles, gave an idea of the prevalent conditions. Secondary information regarding the demographic, socio-economic and infrastructure has been taken from Census reports, Jharkhand Development Reports, Reports from Ranchi Municipal Corporation, District Transport Office, RIADA and other government and non-government report, to look into the causative factors for land use change. After having a theoretical framework of the study, primary data comprising of satellite the following has been taken aid of:

<table>
<thead>
<tr>
<th>DATA SOURCE</th>
<th>PATH-ROW/MAP NO</th>
<th>YEAR OF PUBLICATION/ACQUISITION</th>
<th>SPATIAL RESOLUTION (m)/SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOI TOPOGRAPHICAL SHEETS</td>
<td>73E/7 NE,NW,SE,SW</td>
<td>1989</td>
<td>1:50,000</td>
</tr>
<tr>
<td>IRS IC LISSIII</td>
<td>1782 and 6906-61</td>
<td>1990</td>
<td>2.3</td>
</tr>
<tr>
<td>LANDSAT TM</td>
<td>140-44</td>
<td>2005</td>
<td>30</td>
</tr>
<tr>
<td>LANDSAT TM</td>
<td>140-44</td>
<td>2015</td>
<td>30</td>
</tr>
</tbody>
</table>
The database and methodology for the different objectives are as follows:

1.5.1. Database and Methodology for Objective 1:

Database

Primary

a) Satellite Images and Toposheets –Land Use Land Cover Classification maps have been prepared and information about Land Use Land Cover Classes has been extracted.

b) Field Survey- Socio-economic and household characteristics, General Land use characteristics and change in urban units have been found out from the sample survey

Secondary Data

Census reports, Jharkhand Development Reports, Reports from Ranchi Municipal Corporation, and other government and non-government report to have an idea of the study area.

Methodology

Sample Selection

A Stratified Random Sampling Method has been adopted for the selection of sample. A Sample Size of 350 households has been taken. Firstly the Study area has been divided into Urban Units, depending upon the dominant land use activities and the socio-economic characteristic in each ward. A Total of 70 localities covering each of
these units have been selected having varied characteristics, covering 35 wards. In this way 5 households have been selected from each locality.

**Change Detection**

In order to study the change in the land use pattern in the city before and after the state formation, satellite data has been used, which has been further authenticated by ground truthing. Satellite data of different dates (1990, 2005, and 2015) has been collected, to identify the actual changes and determine accuracy. The land use change detection technique has been employed to classify the images during interpretation. With the help of visual interpretation, each image set has been broadly classified into different categories viz.

a) Built-Up Area

b) Agricultural Land

c) Open Spaces

d) Water-Bodies

e) Vegetation

The above categories of land use are prone to changes due to urban growth and with the formation of capital city. Land use Land Cover maps of three points of time under consideration has been prepared using Arc GIS 10. Using visual interpretation each image set has been compared to observe the changes in each land use category in the different time periods. The results have been validated by ground truthing. The maps
prepared from satellite data has been reinforced with the primary data collected from the field and secondary sources. A land use matrix has been prepared based on change detection for 1990 to 2005 and 2005 to 2015.

**Database and Methodology for Objective II**

To determine the changes for Land Use, causative factors has been categorised as:

a) Formation of the Jharkhand State and Ranchi as the Capital city of the State

b) Changes in Economic Policy (Economic Deregulations) from both the Central and State Governments

c) Impact of 74th Constitutional Amendment Act (Nagar Palika Act, 1992) on the urban governance of Ranchi.

In the light of above the parameters changes have determined on:

i) Demography- Population Growth

ii) Social- Education, Health, New Housing Colonies ;

iii) Economic- Income, Commercial, Land Price; And

iv) Infrastructure and Public Facilities and Industrial Development

Relationship between these parameters and the land use categories has been established. The results have been substantiated with field investigation
Database and Methodology for Objective III:

Database

Primary

Field Survey: Spatial changes in land use classes
Satellite Images: Land Use Classification

Secondary Data

Census of India-Household Density
District Transport Office-Vehicular Growth
Ranchi Municipal Corporation- Road Lengths
Ranchi Industrial Area Development Authority- Industrial Growth, Employment, Land Acquisition
Ranchi Utility Information System- Ward-wise distribution of major activities.

Methodology

In order to get a precise picture of the rate and direction of change in land use, percentage change in each land use has been calculated, with the help of the following equation:

\[
\text{Percentage Change in Area} = \frac{A_0 - A_1 \times 100}{A_0}
\]

Two time periods has been considered viz. 1990-2005 and 2005-2015. Therefore for the first period \(A_0\) is the area in 1990 and \(A_1\) is the area for 2005 and for the second \(A_0\) is the area for 2001 and \(A_1\) is the area for 2015. The area under each land use category has been calculated from each image set prepared. Similarly the rate of change has been calculated:

\[
\text{Rate of Change in Area} = \frac{A_0 - A_1 \times 100/t}{A_0}
\]
In order to have a clear picture of the direction of land use change, as to which land use classes have been undergone changes, a next level land use classification has been done. Thereafter, spatial changes in each land use class have been identified.

At the end, from the facts and analysis an overall picture of the land use change of Ranchi city has been prepared.

**CHAPTER SCHEME**

The study has been divided into the following chapters:

**Chapter I: Introduction**: The first chapter gives a broad idea of the design of the research including, introduction, review of literature, statement of the problem, objectives, research questions, an account of the data used and a methodological framework of steps in which the research is carried out, along with the chapter scheme of the study.

**Chapter II: The Study Area**: This chapter gives a detailed geographical account of the study area, Ranchi City, emphasizing the physical and the socio-cultural setting.

**Chapter III: Present Scenario of the City**: This chapter focuses on the existing scenario in the city, including the existing urban infrastructure and the spatial characteristics of the existing Land Use categories.

**Chapter IV: Causes of Land Use Changes in Ranchi City**: This chapter looks into the factors triggering the Land Use Change after formation of the State Capital and the consequences thereafter.
**Chapter V: Spatial Analysis of Land Use in Ranchi City:** This chapter deals with the identification of the spatial change in each Land Use category and the direction of change which is taking place.

**Chapter VI: Conclusion:** The chapter summarizes the main findings of the study and generalizes the findings in understanding the causes, processes and consequences of such land use changes on the city population.

**SUMMARY AND CONCLUSION**

- Land use has become the main component in urban planning, for managing natural resources and environmental changes, with the increasing rate of urban growth.
- The measurement of urban form can provide a more systematic analysis of the relationships between urban form and process (Yeh and Li, 2001). Therefore, one of the pre-requisite for understanding urban growth is to look into the land use change.
- Remote sensing and Geographic Information Science technologies have proved beneficial to detect and quantify the spatio-temporal changes in the landscape and the consequent impact on the environment.
- The physical and the socio-economic conditions of Ranchi City have been conducive enough for human settlement and urban growth, which has resulted in the spatial growth of the City, ever since the Bihar regime.
- There have been changes in the physical and the socio-economic conditions which have brought changes in the overall land use and land cover of the City. The changes in such conditions have been rapid and the land use has changed accordingly.
The Ranchi City is dominated by mixed structures of urban and rural nature, with an absence of hierarchical form of urban development mainly because of its evolution from a tribal village to an administrative town and thereafter from an industrial town to the State Capital.

The City initially had community based settlements. As the City developed and people from the neighbouring areas migrated to the City mixed community settlements gradually emerged.

The present land use is mainly dominated by new residential developments that have taken place with the increase in the population of the City. These developments have mainly taken place on the agricultural land and open spaces.

Though there has been an increase in the urban facilities, but an irregularity has been observed in their distribution. These are concentrated in few relatively developed pockets. Similarly infrastructure development has also been confined to few areas. In this way the available facilities and the infrastructure is not sufficient in relation to the demand of the City.

There has been remarkable alteration in the land use of Ranchi City, especially after the separation of Jharkhand State and it getting the status of Capital, with consequent changes in the administrative, socio-economic and political characteristics in the City.

Most of the Expansion has mainly been in terms of built up area, in the form of Residential, Commercial, Administrative, Industrial and Social and Physical Infrastructure. Agricultural Land, Water bodies and Vegetation have undergone shrinkage.
• The percentage of use of land has increased on one hand, resulting in the expansion of the city and on the other hand the nature of land use has been transformed into other alternative uses, dependent upon the need of the developing Capital City.

• The change in the land use is more prominent along the major road corridors of the city. The urban area has spread radially in all directions. However, Defence areas and the un-reclaimable wastelands have restricted the expansion of land use.

• The major factors for the change in the land use have mainly been the formation of the Capital. There has been a change in the socio-economic characteristics of the City after the formation of capital. Private participation has led to the rapid development of the physical infrastructure. The Nagar Palika Act to an extent has resulted in the increase in public facilities but it still needs to be implemented properly.

• Towards the beginning of the phase of formation of Capital, the government was mainly engaged in developing the physical infrastructure of the city later the social infrastructure was strengthened.

• The City being evolved from a tribal village was initially settled in scattered pockets, which expanded further. The transport network developed and the settlements developed along these transport routes. The transport network that developed also was an unplanned one, giving rise to an unplanned urban area. Whatever development that took place gradually were quite haphazard without any systematic plan. The new developments that have taken place are seen superimposed on the older ones.
• The core of the City has become over-congested. This congestion has left the city with less scope for further development. Further alteration of the land use is difficult. Moreover with the sub-urbanisation of activities, more emphasis has been given on the development of the periphery and the core is being neglected.

• Though there has been development of infrastructure, it has not kept in pace with the growing needs of the city. Compared to the other newly formed Capitals like Raipur and Dehradun of the newly formed states of Chattisgarh and Uttrakhand respectively, the infrastructure development has been lower. Dehradun however is different from Ranchi in terms of physical as well as social conditions. But Raipur is quite similar to Ranchi in terms of physical and socio-economical conditions. Having similar conditions the level of development in terms of infrastructure, Raipur is leading ahead of Ranchi. However in terms of increase in the urban area, Ranchi is expanding at a much faster rate.

• Most of the land has been not been fully utilized. The land left under-utilised cannot be utilized to the fullest mainly because of the following constraints:
  
  o The status of the land as a Tribal Land
    
      ▪ Most of the land left unutilized is mainly tribal land, that is governed by the Chotanagpur Tenancy Act, that restricts the transfer of land to a non-tribal. This has hindered the access of planning activities to such land.
  
  o Inadequate Infrastructure
    
      ▪ The unplanned city often poses a hindrance to the development of the infrastructure of the city. The City requires
infrastructural development but it already is so congested that it cannot accommodate any further development of such type.

- Defence Land
  - The defence land prevents alteration of its land to any other use. The City has been prevented from growing into these areas.

- Religious Areas
  - With the increase in the migrant population in the City, it is characterized by a multi-community population. Catering to their needs several religious set-ups have emerged throughout the City. Most of these have been unplanned and a misfit land use. However it is not possible to remove such establishments keeping in view the religious sentiments of the community.

**Future Implications:** On the basis of the above changes in the land use the following future implications may be drawn:

- The Population of Ranchi is bound to increase with the development of the City, with the increase in development activities in the City and the increasing employment opportunities. This would result in further expansion in the urban area with consequent increase in the built up area, mainly in the form of residential, commercial and infrastructural land use. This would lead to further congestion in the City, posing hindrance for further development. Moreover with the dearth of land and increasing population the option of decongestion is also less feasible.
The City is likely to face further increase in the housing density and increase in high rise structures, with increasing residential needs. That is the intensity of land use is likely to increase in future at a much faster rate. All these would lead to a further rise in land prices.

With the increase in residential and commercial areas, less amount of land would be left for infrastructural development. It would be difficult to develop infrastructure to meet the needs of the growing population. With less scope of broadening of roads, traffic congestions are likely to happen.

Ranchi has a land that slopes in all directions resulting in the higher rate of run-off, resulting in lower groundwater recharge. Moreover the increase in the built up area, which is bound to happen in future, would result in further decline in the recharge areas, which would result in the problem of water scarcity. The low-lying areas of recent alluvium are considered to be excellent recharge zones, but these areas have been transformed into built-up.

A planned Sub-City is likely to emerge in the near future with separate zones for different land use activities, keeping in view the requirements of the expanding urban area.

**Policy Measures:** Keeping in view the changes in the land use and the future implications the following policy measures may be taken:

As the City is expanding with increasing population an infrastructural development, the City has become exhausted and with the underlying old set up of an unplanned City, future developments are not feasible. Therefore attempts are to be made to shift the activities like
administrative activities, big commercial activities, new housing colonies and public facilities outside the city.

- At present most of the Colleges are running in buildings on lease. Even most of the sections of the Ranchi University are running on leased out buildings. Such activities are scattered without any proper plan. Therefore an attempt may be made to shift these educational activities outside the City in one place. The pattern of Delhi University may be adopted, where the colleges and university departments are concentrated in one particular area.

- Similarly the administrative activities which at present lie scattered need to be brought together in one space. This would bring added efficiency in the administration, with all the administrative activities in one place. On the other hand the public dealing departments may be left within the City, so that the people may have easy access to such facilities.

- Construction of flyovers and subways may be opted for to avoid traffic congestion. However these are cost-intensive and are beneficial only to those who commute through vehicles. For pedestrians and people moving in cycles and cycle rickshaws, which are quite large in number, the problem remains the same. Parking areas that have been largely ignored needs to be looked into. With limited spaces, multi-storied parking areas may be proposed. In the bus routes the Bus Rapid Transit system adopted in Ahmedabad may be adopted, with separate lanes for buses. The existing bus stand in Khadgada needs to be shifted away from the City congestion to avoid traffic congestion. An
Inter-State Bus Terminus is essential for the increasing thoroughfare in the City.

- With the dearth of land, misfit land use need to be identified and effort should be made to make optimum use of land. The wastelands may be identified so that these may be reclaimed for some kind of use. Similarly the dead assets like buildings or areas which have been abandoned need to be reclaimed for more productive uses. At present the old Jail of the City has been converted to a park and the Jaipal Singh Stadium, which has been in a dying condition, is being used for fairs and functions and it has been proposed to convert it to a vending zone.

- Most of the developments that are taking place in the City have often ignored the environment ethics. The water bodies have experienced remarkable shrinkage. The vegetation has been cleared for development activities, without any afforestation activities. Such issues need to be addressed. Such environmental sensitive areas need to be avoided for development activities. Similarly as the City is facing problem of water scarcity, the sites with good recharge potential need to be identified and should be strictly avoided for any kind of built-up. Water harvesting structures should be made compulsory and need to be followed strictly. The building laws should incorporate environment ethics and a continuous monitoring should be done, so that the environmental sensitive areas are not encroached upon. There are several streams and water bodies in the City and areas around then
have been left mostly neglected. Such areas need to be cleaned and
used as recreational spaces.

- The urban growth and land use change in the City practically cannot be
  checked. But it is to be made sure that the land use change that is
  happening is not a misfit one and that an optimum utilisation of land is
  taking place, keeping in view the environment ethics and a sustainable
  form of development. Moreover attempts should be made for the areas
  having a faulty land use, to transform them to an ideal land use as
  much as possible. However at the stage of development the City is at
  present, it may be a difficult task.