MULITPLE NUCLEI THEORY AN APLLICATION VIEW WITH RESPECT TO HYDERABAD

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Abstract: *Geographic land use models explain the land use pattern in an urban region. They also explain about future growth of city, goes for a model describes about city sustainability etc. Multiple nuclei model is one of the urban growth models in urban region development. In this paper I am presenting about the application view of multiple nuclei model with respect to Hyderabad city, identifying nuclei in city, their importance, their growing model, their growth potential in future. It also includes about problems facing, their impact on urban sustainability, discussion about the solutions to be fallowed and there On.*

Key Words: Growth models, multiple nuclei model, urban sustainability, urban development.

1. INTRODUCTION:

Model is an idealized structured representation of existing thing. City models are about presenting the city structure and their growth progress, direction in a simplified manner. Geographical models are very important for visualising the growth of an urban area, future prospects and manner in accordance with its growing. By applying growth model to an urban area we can find about the where growth is concentrating, where the growth is stagnated, actions to be taken are also be can analysed.

Multiple nuclei model was proposed by C.D, HARRISS and E.L. ULMAN to analyse the more rigid and complex urban land use patterns. This theory suggests about the development of a city takes place around the multiple nuclei rather than around the single centre. The clustering of land use pattern around nuclei creates the cell structure. The cell pattern shape and size depends on many factors such as geographical factors such as land availability, political factors, and historical factors such as inertia and socio economic conditions prevailing in the city. The nuclei may be attracts various patterns of growth and multiple nuclei get developed within the urban cellular structure around the main nuclei.

Hyderabad is capital of telangana with the area of 650 sq. kms, with population of 68 lac. (20011 census), but actual figure may be more than that. Hyderabad has historical importance and has potential to growth in future as endowed with natural resources and man power. When analysing the various urban land use model with respect to Hyderabad, it very prominently get analysed with multiple nuclei as development of Hyderabad done at various multiple nuclei, rather than concentrating and spreading from one nucleus. Those nuclei are spreading in all directions and each nucleus has its own way of spreading. Each nucleus got spread into and developed into cell structure. But each has its own demerits along with merits and have own limitations, threat to their own sustainability, these can be analysed with respect to future forecasting with spatial technologies and general surveys, etc.

There are several nuclei around which development spread in Hyderabad .The following explains about the nuclei characteristics, prevalence, limitations etc.

Ramachandrapuram – BHELL

Developed in western part of city acting as major industrial belt of city and educational lab as several industries such as pharma heavy industries and Hyderabad central University (H.C.U) several other technological institutions setup. There developed several independent nuclei such as Patancheru, Kukatpally and Miapur etc. The limitations of this nucleus are heavy pollution land encroachment into surrounding rural areas. These to be controlled and proper planning should be taken care other its sustainability may lose.

Banjara hills- Jubleihills:

Entertainment, software based developing nuclei. Major entertainment facilities are developing here, software hub also developing around this nuclei. Major software industries, educational hubs such as IITs, Hi-tech city, Manikonda are developed into mini nuclei. The major issues are vastly increasing pollution levels, land availability, some areas of nuclei reaches its potential, so care must be taken and otherwise its sustainability lost may be threat.

Secunderabad:

Defence, transport based nucleus. Central defence institutions and academies are located here. Spreaded into surrounding districts. The educational institutions set up around the several multiple nuclei which developed around

the main nuclei. The issues are land availability, pollution, lack of coming new industries; infrastructure trend continues several places around the nuclei may get abandoned.

Koti:

One of the main nuclei around which development Spreaded in past. Educational institutions, transportation, market facilities are concentrated at present around this nuclei. The land availability, pollution levels are main threats. No space for new industries for being setup. Once a major development nuclei in city getting into mere market, transportation centre, this due to losing sustainability. This must be not continued.

Uppal-Ghatkesar:

One of the newly developing nuclei, educational institutions, industries is beginning setup; good transportation facilities are also boosting the growth. The main advantages for this nucleus are land availability, comparatively less pollution environment and virgin natural resources etc. sustainability of this area to be sustained for future development.

Besides these several other nuclei are also developing around the city. Such as Adibhatla IT hub and other entertainment centres are being developed. Hyderabad as endowed with several natural resources able to develop many other nuclei

2. CONCLUSION:

Hyderabad is one of the vastly developing cities in India. Having vast natural resources in surrounding areas can able to develop in a dynamic manner within sustainability. The resources should be planned in a sustainable manner otherwise they may get depleted and may cause ecological imbalances in city. Development plan should be dispersed around the city with equality, otherwise once developed area may lose its resources and sustainability and may get abandoned. This must be avoided. So proper plan according to available resources with modern technologies be encouraged.

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