Development Of Nodal Centre As Strategy For Balanced Regional Development

Bhavik Panchal, Sejal Bhagat

Abstract— India is home to the world's largest share of the rural population, 68.84 percent according to India's 2011 census and 31.16 percent of the urban population. By 2031, the urban population will increase to 600 million by an increase of 200 million over 20 years. Sustainable management of this growth through the provision of physical and social infrastructure is one of the government's major challenges. To manage this growth in sustainable way identification of rural growth centre or growth node is needed which can accommodate future population. Nodal centre in region is strategy of micro level planning which provides services to its own people as well as rural hinterland. Nodal centre in the region will act as counter magnet of urbanization and centre for future economic growth.

Keywords — Growth centre, Growth pole, Nodal centre, regional planning, urbanization

1 INTRODUCTION

Urbanization is define as the physical growth of the town or area due to industrialization, migration and increase in the population and in the developing country like India where urbanization creates huge impact on the economy also. India is home to world largest share of rural population with 68.84% as per census 2011 of India and with 31.16% of urban population though the pace of urbanization is slow as compare to other developing country like China. It took India almost 40 years to raise the urban population by 250 million (1971 to 2008) and it will take just half of that to add another 250 million.[1] MGI projection shows that urban population will increase from 340 million in 2008 to 590 million in 2030[1] and according to the UN World Population Report in 2007, approximately 40.76 per cent of the country’s population is expected to reside in urban areas by 2030.[2] Urbanization have both positive and negative impact in developing country like India. Urban sprawl is one those negative impact of urbanization as result of urbanization urban sprawl is approaching rural hinterland.[3] This urban sprawl changes the agriculture land into built up land and also create the stress on existing infrastructure. Managing this growth in sustainable way where cities area continuously increasing and approaching rural hinterland is remain serious challenge for the government. Though the urban sprawl is approaching rural hinterland paradoxically these villages have been most neglected as far as facilities for life is concerned and rural area devoid of opportunity and facing of lack of infrastructure. There is need to manage the strain that will develop as cities expand and maximize economic opportunity that well urban cities offer.[1] India urgently need proactive approach to addressing the challenges of urbanization. Development of rural growth centre or nodal centre in region which can accommodate future population and provide employment to its own population as well as to its surrounding hinterland will acts as counter magnet strategy for urbanization.

2 LITERATURE REVIEW

2.1 Concept of central place

Service center / central place are settlements which have some distinctive public utility services which differ from other neighboring settlements. In other words, any settlement of a focal nature in terms of the various socio-economic activities that serve the surrounding area, together with its own settlement, is referred to as a service center / nodal centre. Service center / central place is therefore a place where the central function is concerned. Retail business, medical services, administrative services, repair work, schools, colleges and industrial activities are identified in which workers are employed largely from the surrounding area of influence of the town.[4] The central place is a town providing services to the community of its hinterland, supplying it with essential goods and services such as financial, banking and professional services, educational, recreational and cultural amenities, as well as retail services provided by them and the people supported, which may be categorized as high-level centers or low-level shopping centers[5] The Nodal centre varies in importance, depending on the central function. Service centers / Nodal Centres and their spatial organization play the most important role in the regional development of the region. Nodal centre is a focal point of contact and serves as a development hub for the city, offering a number of services, including schooling, safety, communication and veterinary care, etc., to the people of the surrounding communities [5].

In addition to its own population, the service center / Nodal centre performs functions / services for its complementary region. Functions are performed only by a few places, but are used by a number of other settlements around them. Functions are special and are defined in hierarchical orders, where low order functions are the central place of small order and high order functions are central places of high order. It is true that center roles and facilities rely on the needs of the inhabitants and their size and need, i.e. the value of a center depends on people's economic, social and cultural condition.[5]

2.2 Concept of growth pole model

The 'growth point’ paradigm is the core theoretical basis of the growth center definition. The model originates from François Perroux’s work, which began by believing that economic growth is not all at once occurring but begins at certain specific growth poles and spreads across various channels with varying intensities and effects. The original design of Perroux
had little to do with space. During the 1960s concrete approaches were intensively studied and applied in developed and developing countries, centered upon the principles of the growth pole. By the end of the 1970s, in at least 28 industrialized and emerging countries, growth pole approaches were "implemented, provided for or debated seriously." These comprised Argentina, Brazil, Macedonia, Colombia, France, Cuba, Greece, Germany, Ghana, India, Pakistan, England, Italy, Kenya, Luxembourg, Libya, Malaysia, Nigeria, Peru, Poland, Russia, Portugal, Sweden, Tanzania, Venezuela, Yugoslavia and the United States[6]

2.3 Nodal centre as strategy for counter magnet of urbanization and balanced regional development
Nodal centre or rural growth centre is one of those strategy for micro level planning in the development of the region. Nodal centre can be define as centre with mixed use community where people can work play and live. It is centre which provides services to its own people as well as to its surrounding population. The Nodal centre planning is based on theory of Perroux, Von thunen theory of concentric ring model and Christaller’s central place theory. Nodal centre in region acts as stimuli for the balanced growth of the region. This centre are the growth node or rural settlement in the region with relatively high intensity of functionality with urban area. As per urban and regional development plan formulation and implementation guideline, India 2014"The growth nodes around which the flows are active and intense shall be the Nodal centre” The concept of Nodal centre is to integrate rural development and identify the existing potential linkages around major transportation corridors and locate those area where investment can be done. The development of nodal centre will acts as nuclei of future economic growth and centre of specialized services in the region. In Mumbai Nodal development is mostly around the Transportation hub accessed by various modes of transportation and interlink through the transportation corridor with other nodes and city area.[7]

3 Case study: Nodal development of Navi Mumbai
Mumbai is economic capital of India.it is the second most populated city in the world. Navi Mumbai is the satellite town of Mumbai. Navi Mumbai is one the largest planned city in the India. Navi Mumbai project began in 1971.Polycentric model of urban development was adopted for the development of the project area into 14 nodes.[8] Navi Mumbai consist of 14 nodes and each node is planned to accommodate population about 1 lakh to 2 lakh. Each node is divided into neighborhoods. These nodes contains residential, commercial, industrial and recreational use. Some of nodes have special features. E.g. vashi is the centre of Navi Mumbai’s wholesale market. Airoli and koper-khairane have industrial estate. Navi Mumbai’s success stems from its planned approach. Given the massive scale of Navi Mumbai, planners followed a polycentric nodal method of development in order to avoid a situation like Mumbai of operation concentration, created by a monocentric development model. The multicenter method is focused on the decentralization theory. Decentralization and align development in the residential areas, job centers, industrial and non-polluting manufacturing and population density are the primary areas of focus. The emphasis of this project is on the population distribution and events in various cities.[9]
can be the way of achieving balanced regional development.

REFERENCES


