# E-Content for Project work on Patna For M,A IV th Semester Students (2020)

# SUCCESSIVE GROWTH OF PATNA AND VISION FOR FUTURE DEVELOPMENT

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**Introduction**

Patna, the great imperial city is the largest riverine city in the world. It is the capital of Bihar and an important commercial, administrative, educational and medical centre. The history of this city is magnificent and the city has been known by various names as Pataligram, Patliputra, Kusumpur, Pushpapur, Azimabad and in the present day as Patna. It is the second largest in Eastern zone after Kolkata and 14th million plus city in India.

Patna has been the seat of administration, judiciary and legislature and its importance in modern period increased with the declaration of its status as capital of Bihar and Orissa in 1911. After separation from Orissa, it remained the capital of Bihar. In other division into Bihar and Jharkhand in 2000, Patna remained the capital of truncated Bihar. The only primate city of Bihar, Patna agglomeration, comprises Patna Regional Development Authority (PRDA), within

this area is the Patna Urban Area (PUA) and the major component consists of Patna Municipal Corporation (PMC) and its outgrowth.

**Objectives**

The objectives are as follows:-

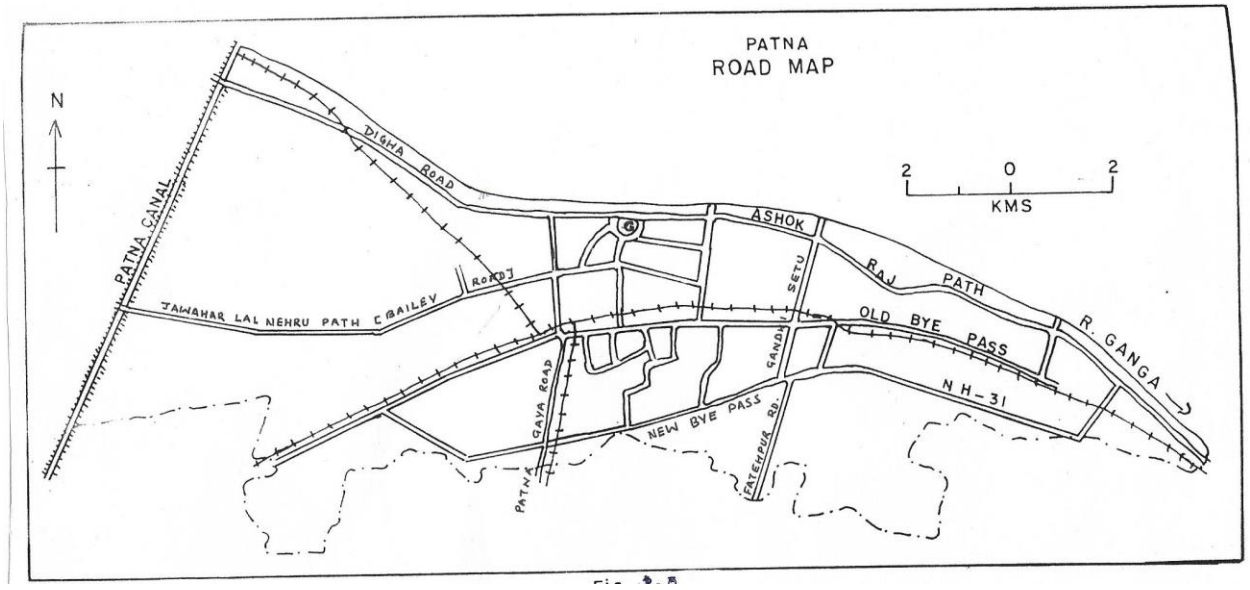
1. To study the physiography of the past scenario of Patna
2. To outline the growth of Patna in Phases
3. To study the Recent changes in form and Landuse changes
4. To visualize the future Development of Patna

Patna is situated between latitude $25^0 35'$ N to $25^0 38'$ N and $85^0 05'$ E to $85^0 15'$ E longitudes and has a mean elevation of 57 meter above sea-level. Located on the southern bank of the River Ganga, the area of Patna is a monotonous flat plain with a thick alluvial cover. The city represents an excellent example of linear pattern of city in India due to its situation on the extensively broad levee of Ganga. Patna is sandwiched between the high Himalayan ranges in the far north and the hilly tracts of Chhotanagpur Plateau in the south. The outstanding feature in the site of Patna are the natural dominance of River Ganga in the north and the abandoned courses of the river Sone which has gradually migrated towards the west and about 35 kms away (near Bhawania Tola) it meets River Ganga.

In the south River Punpun mostly flows in a north east direction almost parallel to the River Ganga and finally joins at Fatwa about 25 kms downstream of the city. As a result, the form of the city resembles a sword with a handle in the west and the point towards the east which is assuming a rectangular shape since 1980 due to technological and cultural progress of the city.

The function of the city's circulation system is to provide for the movement of people and goods. Patna being an important trade centre where commuters whether casual or regular have been visiting the city has developed much owing to its well-developed road system. The existing road system of Patna is typical of a linear city. (Fig.1) Ashok Raj Path is an important road which runs through the natural levee of the Ganga from east to west and has to a large extent influenced the linear growth of the city. Patna Bye pass forms part of NH-30 and is next to Ashok Raj Path in Importance. The New Bye Pass beginning from Anisabad to Mahatma Gandhi Gandhi Setu is yet important road from east to west and is the southernmost road of Patna. An achievement of Patna's development process is the construction of Mahatma Gandhi Setu which connects Patna with cities of North Bihar. Other feeder roads run from north to south. Eastern Railway connects Patna to Delhi and Kolkata runs in the centre of the city.

Fig.1

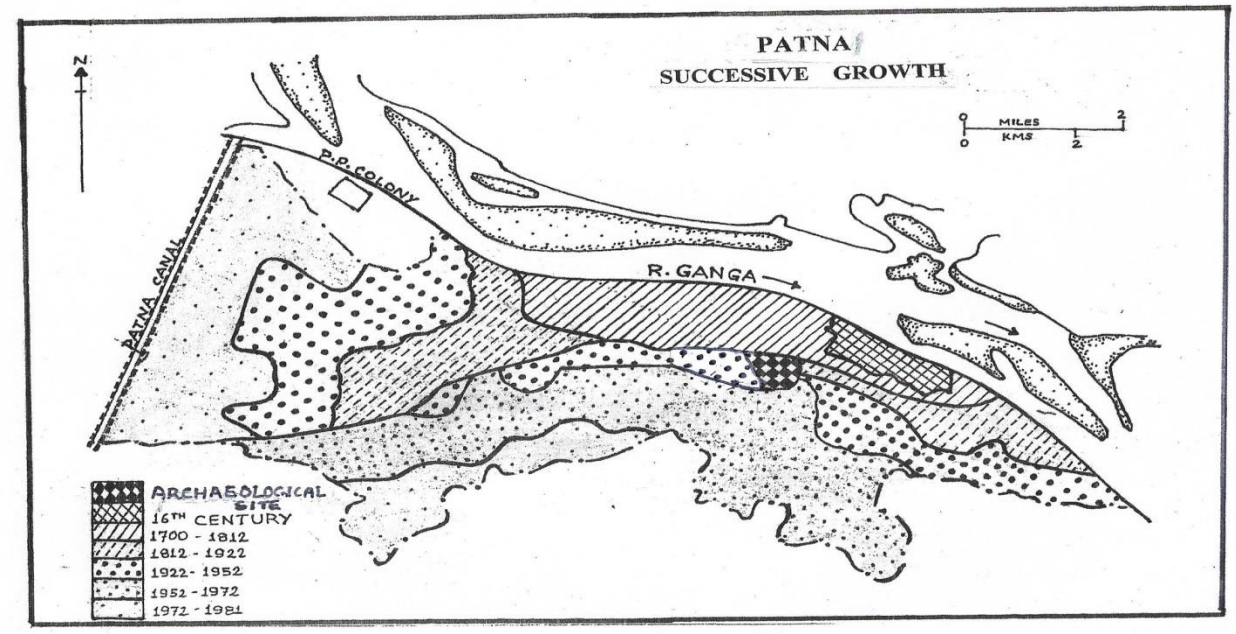



Patna has grown in size and importance over the years. The city has grown in phases. Fig. 2 gives an idea of the successive growth of Patna. The first

settlement began in 1641 along the banks of River Ganga in the Eastern part. The first nucleus was therefore formed between Paschim Darwaza and Purab Darwaza. This was an old built up zone where an arc was formed by the curved shape of the Ganga. The crescent shape of the bank disturbed the growth of the settlement. The urban complexes multiplied throughout the whole of 18th, 19th and early 20th century. The growth pattern has been in sectors along Ashok Raj Path. The expansion of the city towards the north was restricted by the Ganga and towards the south by the havoc of floods created by the Punpun. The sectoral growth consisted of the commercial sector in the middle and the residential sectors grew towards the north and south.

The Eastern sector is characterized by commercial landuse in the centre, residential in the south and institutional in the north. Maroofgunj and Mansoorgunj have highest concentration of wholesale, trade in grains, spices and kirana materials. This meets the centre which has expanded from the east. North of Ashok Raj Path is an area of compact administrative - cum institutional zone.

Fig.2



Till 1810 migration was set in leading to the development of another nucleus in Muradpur area from where expansion took place towards east, south – west and west. River Ganga prevented the growth in the north. The sectors expanding from the eastern and central nuclei meet each other without leaving any open space between the two. These were highly developed sectors and are very distinct in function. The area has specialized retailing business. The sectors in the southern and western zones are primarily residential in character. Bakergunj, Daryapur, Machuatoli, Kadamkuan , Chiraiyatanr, Rajendra Nagar and Kankerbagh form the southern sector. Towards west the sectors that have developed are Dujra, Mandiri, Boring Road, Rajbansinagar, Krishnapuri and Sri Krishnanagar etc.

The south-western sector has characteristic feature of commercial landuse and it goes to New Market through exhibition Road, Dak bungalow road and Fraser road.

Development process continued and another sector having an administrative use developed from Budh Marg to Raj Bhawan. This continues further west along Bailey Road where the main landuse is residential as Patelnagar, Shastrinagar, etc. After 1990, this area is developing fast. The whole area has newly developed colonies. The space after Golf club has been filled up by residential use up till Patna Canal which is the western most municipal limit of Patna. More growth of educational institutions and residential colonies has developed up to Danapur as a result of urban sprawl. Southern Patna has also developed fast as residential colonies have sprung up after 1980 and more recently between Old Bye Pass and New Bye Pass. The area around Phuwarisharif and Kankerbagh is fully developed.

**Recent Changes in Patna**

Administrative and political development often acts as a stimulus for the growth of the city which is further advanced by the growth of commercial and industrial activities. Patna has witnessed rapid growth of population as a result of natural growth and migration as well as functions of the city has undergone perceptible changes. The numbers of wards have swelled as well as area and populations too have witnessed changes within Patna municipal area and urban agglomeration. Patna Municipal Corporation Area (PMCA) till 1991 was divided into 37 wards. In 2001, it was further divided into 42 wards and then again into 57 wards. In 2007, Patna has further has been divided into 72 administrative wards. Outgrowths are Pataliputra Housing Colony, Digha-Mainpura, Sabazpura, Khalilpura, and Badalpura. These outgrowths are not in Patna Municipal ward limits but for all practical purposes these are parts of the Corporation. Table 1 gives an idea of the changes in area and population of Patna municipal wards.

Table 1

Changes in Area and Population in Patna – (PMC)

| Year | Area in Hectares | Population in Lakhs |
|---|---|---|
| 1981 | 9718.25 | 776371 |
| 1991 | 9945.00 | 971243 |
| 2001 | - | 1432209 |
| 2011 | 10900.00 | 1684222 |

Today, Patna has emerged as an important metropolitan center performing all functions as residential, commercial, educational, medical, institutional, transport and recreational centre. Apart from the constituent colleges, it is a seat of learning of many technical studies. Important educational centers today are :

The National Institute of Technology (NIT), National Institute of Fashion Designing (NIFT), MESRA COLLEGE of Engineering Patna Branch, Chanakya Law University (CNLU) and hordes of coaching institutes. Important hospitals are PMCH, NMCH, Indira Gandhi Institute of Medical Sciences, Jeevak Heart Hospital, Paras Hospital, Magadh Hospital and innumerable Nursing homes.

As far as recreational facilities are concerned, Patna has large parks as Gandhi Maidan, Sanjay Gandhi Botanical Garden, Ecological Park, Kumhrar Park, Buddha Smriti Park, Golf Club, Bankipore Club and Patna Club, as well as Science and Technology Park. Neighbourhood parks as Sri Krishna Nagar Park, Buddha Colony Park, Rajendra Nagar Park have been renovated. Rajendra Nagar Sports Stadium, Kalidas Rangalaya, Bihar Museum, Planetarium are also noteworthy.

Under City Development plan many roads and flyovers have been built for the ease of traffic movement. River front Development is also been initiated where roads along river similar to Marine Drive of Mumbai are being constructed. This road will run from Digha to Patna City. Another rail- road bridge named JP Setu over Ganga has been built connecting Digha to Sonepur.

## Vision of Future Development of Patna as a Smart City

Patna has been chosen under Smart city Development Plan. In 2015, 100 Smart cities have been selected from old and new towns having potentialities of future growth. Smart city programme will look after the development of affordable homes, drinking water facilities, sewerage and storm drainage and renewal and rehabilitation of slums. It envisages having a digital planning for the city as smart living, smart mobility, smart environment, smart economy and smart people. The old city of concrete and glass has to be replaced by a world of

computer generated solution. The Urban Development Departments (UDD) has initiated the process for constitution of Special Purpose Vehicles (SPV) to roll out infrastructure upgrade schemes under the Smart City Mission.

Under the Smart City Mission, area based development, pan city development as well as plan city smart solutions have been envisaged for both Patna and Muzaffarpur. Area needed for pan city development is 3000 acres. It will have IT driven technology to regulate traffic, smart water supply, storm water management and solid waste management. Retrofitting seeks to develop roads with footpaths, parking facilities, potable water and uninterrupted power supply without disturbing existing structures.

The barren land on the banks of River Ganga and uninhibited land off Patna –Bakhtiarpur Byepass and south of Kankarbagh are to be developed as Green Field. Redevelopment of Pataliputra Industrial area and Gardanibagh area has to be taken up. Under Retrofitting plans are Patna Junction to Gandhi Maidan and Kangan Ghat to Patna Sahib Junction which are in dire need of renovation and redevelopment. Retrofitting of Kankarbagh colony, Boring Road area and Mainpura have been proposed. Besides this the vision is to develop parks, public buildings, government and private offices and commercial zone. Similarly, health care facility, building large residential areas of mixed income group, a sporting complex at Pataliputra and construction of interstate bus Terminus, besides NH-30 city Bye Pass are planned to be developed.

Information technology based intelligent water supply management, storm water management, transport and traffic management, smart municipal government, solid waste and power outage management have been proposed

under the pan city solution of Patna. (Report of Subhash Pathak, Hindustan Times, Patna, Thursday, September 21, 2017.)

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