CHAPTER : I

INTRODUCTION

KEYWORDS:
Population Geography; South Ganga Plain in Bihar; Historical Perspectives; Kaimur Hills in Kaimur (New) District; Magadh Region; Anga Pradesh glorified tenets of Philosophy, Religion; Administrative break-up; Significance of the Study; Purpose of the study; Methodology and Structural framework.
demography, population geography is basically quantitative, it is largely dependent upon Statistical data. The quantity and quality of geographic analysis of population has improved on a scientific basis since 1953 when Glenn T. Trewartha undisputedly gained the most important place for having initiated the development of this systematic branch of geography. He has lucidly stated that number, densities and qualities of the population are the point of reference from which all other elements are observed and from which they all singly or collectively derive significance and meaning. While defining, population Geography, Trewartha stressed that "its essence lay in the understanding of regional differences in the earth's covering of people." Demko remarked, "despite statements pleading the need for a study of dynamics, the dynamics are stressed with the goal of understanding area differences." The human population is the most vigorous in its impact on the formation of geographic personality of a region through its growth, behaviour and its activities of economic production.

Regarding the contents of population Geography, G.T. Trewartha was of the view that it was confined to (a) geography of population in the past, (b) population numbers which includes distribution, density, migration, growth etc. and (c) qualities of population and their regional pattern of distribution, including physical as well as socio-economic qualities.

"Population geography lays emphasis on "spatial" dimension
in the distribution, density, structure and composition, mobility and migration, dynamics and growth, demographic processes and other demographic facts. Population geography is the study of spatial variations in human population. Population geography deals with the demographic facts in their present environmental context as well as the causes, their origin and characteristics and possible consequences. Population geography studies man in all his aspects as an area characterising and area differentiating elements. Population geography examines the influence of the geographical environment (both physical and cultural environment). Physical environment includes location, configuration, terrain control, climate, drainage, flora and fauna, soils, natural resources etc. Cultural environment includes economy, education, political and social factors, technological development, communication and transport, urbanization, settlement etc. These influences are studied or the spatial distribution of demographic phenomena and demographic processes.  

Zelinsky, in his book, "A Prologue to Population Geography", classified the phenomena to be covered by a population geography into three categories, (i) essentially biological, which includes birth, heredity, or physical behaviour of individuals including sex, age and race, (ii) Economic, social and culture in causation, which include residence, occupation, marital status, caste, income, language, literacy, religion etc. (iii) those that constitute the element of dynamics.
This elements of population includes vital rates - birth and death rates, migration pattern etc.\textsuperscript{8}

The significance of population geography as a branch of geography has grown constantly with an increasing awareness of the dynamism of population.\textsuperscript{9} The importance of the study of population geography is of growing significance. Among developing countries the rate of progress toward economic modernization is indicated by the percentage of people employed in industry versus those in agriculture.\textsuperscript{10}

SOUTH GANGA PLAIN IN BIHAR:

Structurally the region of South Ganga Plain in Bihar is a segment of the great Indo - Ganga trough.\textsuperscript{14} The South Ganga Plain popularly known as South Bihar Plain or Central Bihar spans over greater parts of Patna, Magadh, Munger and Bhagalpur Divisions between the Ganga and 100 - metre contour line.\textsuperscript{11} The area of this plain is 33,670 square kilometres with an unequal width from east to west. It gradually tapers from a wide base in the west of a narrow tongue on the north of the Raj Mahal Hills. The surface rises more rapidly away from the Ganga in this plain than on the north of the river.\textsuperscript{12} This plain is composed with a thick deposits of alluvium brought by the streams debouching from the Southern hills. The entire area may roughly be divided into two parts extending from east to west - one is a narrow belt of highland along the Ganga and the other is the rest of the plain. In this second part behind the Ganga levee is a tree like low-lying country known as 'TAL' lying in Patna.
district. The plain is drained by several rivers, main being the river Ganga. The fertile alluvial and thickly populated plain contain most of the trees and plants useful to man that are suited to the soil and climate.

The plain comprises the micro-geographical regions of Bhojpur Plain (Ganga - Son Divide) and Magadh - Anga Plain.

The study area is comprised of four administrative divisions viz. Patna, Magadh, Munger and Bhagalpur, which incorporates 16 districts and 90 Police Stations. The plain contain a total population of 3,11,37,560 (2001)\(^{13}\) persons or 37.57% of the total population of the State. The total urban population of the area under study is 51,52,287 (2001) persons or 16.55% of the total population of the South Ganga Plain while the percentage of the state is 10.47. It has an average density of population of 925 persons / km\(^2\) (2001). There are 7 cities (Class I) in the study area. Total number of towns are 69 including outgrowth (OG) and Census Towns (CT).

A retrospective glance into the illustrious history of Bihar shows that it has been the precursor of many movements. Of late Bihar alongwith Bengal also was the birth place of the Naxalite movement. The social dynamics of caste - ridden Central Bihar has become an important area of this activity.

HISTORICAL PERSPECTIVES:

The area of the South Ganga Plain in Bihar appears to have been occupied by human settlement deep down during the pre-historic
times. Civilization based on rudimentary agriculture and crude metal working dates back to about 10,000 years. Even as late as "3500 - 2500 B.C., man eked out a precarious existence .... and there was hardly any trade in essential commodities. Indeed there was no surplus; man lived on the edge of the needs. Magadh was at that time "an impure non - Aryan region" and so was also its eastern neighbour, the Anga. Resourceful Magadh which was not fully aryanised even upto Buddha and which became "one of the earliest homes of Buddhism and remained a centre of that faith until the Muslim conquest.

"In the wake of Aryan colonization and cultural assimilation, the region seems to have developed a more advanced agricultural society, based mostly on the indigenous labour and technique and the superimposed political and social leadership. Though social stratification and hierarchy had already began in the growing society, it had not hardened till then, towns and villages emerged." Magadh with some alternating vicissitudes rose several times as the greatest regional and national power by annexing the neighbouring territories in the north, east and west and superimposing on others, as in the reigns of Bimbisar, Ajatsatru, Mahopadmananda, the Mauryas and the Guptas etc. Cities had become centres of commerce, industry, politics and culture. Large cities like Pataliputra, Rajgir were walled and gated, and had even watch towers.

"The territory included within the district of Monghyr (old) formed
part of the MADHYA - DESA or "Midland" of the first Aryan settlers. It has been identified with Modagiri, a place mentioned in the Mahabharata which was the capital of a kingdom in Eastern India near Vanga and Tamralipta."²¹

Central Bihar is the region of Bhojpur, Magadh and Anga Plain. "The Bhojpur plain is coterminus with the Shahabad (old district as well) Plain, and is a prosperous rice dominated agricultural area. The Magadh - Anga Plain is historically an important region lying east of the Son. Each was anciently a separate kingdom but they also merged at times, and although there has been a good deal of cultural exchange between the two, sufficient dichotomy exists to divide the region into Magadh Plain and Anga Plain. Magadh Plain is the cultural area of Magadhi Dialect. The Anga Plain is a small region and is agriculturally distinct from other sub-regions of the Middle Ganga Plain, South having the highest dependency on indigenous system of irrigation."²²

KAIMUR HILLS IN KAIMUR (NEW) DISTRICT :

Kaimur hills were home to early man²³: Prehistoric man had his origin in the Kaimur hills. This startling revelation was made by noted archaeologist, Dr. Prakash Chandra Prasad, accompanying a trekking team of the 23rd Infantry Division led by the Colonel Umesh Prasad.

This information was unearthed with the find of Palaeolithic tools for the first time by any historian.
The earlier belief of first settlement in the Middle Stone Age (in the presence of Mesolithic tools) has been shattered with this new find by Dr. Prasad. The tools were found in the vicinity of Kaimur hill range. Some Neolithic tools were also found.

He holds the view that the existence of this settlement threw light on the cultural sequence of early man, both in technology as in tool making and a colourful cultural heritage as represented by rock shelter and rock paintings in the table land of the Hills. This also emphasised prehistoric ways of a harmonious living. It gave proof of domestication of animals like cow, bull, elephant and familiarity with rhinoceros, beers, deers, bishon and serpent.

Painting depicting trees, AKHET (shooting), dancing groups have been found in abundance. These rock shelters, with or without painting, are mostly found in the Rohtas district at places like Chanairu mand, Mithai mand, Majurwa mand, Inerbigahia mand and Chamain mand (near Pandu).

Though there is still a need of extensive exploration the special feature which attracts attention is the superimposition of paintings. Archaeologically, it gives an idea of re-using the style over the old paintings in continuity. It means the colourful paintings took a long period of history which may cover a period from Mesolithic to Charcolithic.

Sadly, the area inspite of its historical importance, remains neglected. The Kaimur hills range need to be declared protected as
it was the home of the early man. The rock paintings must be chemically preserved along with proper security arrangements. Mining near the shelters should not be allowed.

In order to attract tourists, these shelters should be linked by motorable roads and adequate lodging facilities should also be provided. Pre-historic parks need to be developed on top of the Hills, depicting the then life-style to boost further research and study to this field. A pre-historic research centre is also needed to boost further research and study in this field.

**MAGADH REGION:**

Magadh was occupied in pre-historic times by aboriginal races, whose power is still attested by the remains attributed to them, the traditions of their rules and the names they gave to places while their descendants are still found in considerable numbers in the hilly tracts to the South of the Magadh Division. Down to the time of Manu, Magadh has not been included in the list of the Brahmanistic land. Gaya was a part of Magadha. Magadha remained, it is interesting to note, outside the pale of "Aryadom for a long time. Rig Veda does not mention the word "Magadha". Instead the word "Kikata" has occurred once, which has been in the later works used as a Synonym of Magadha.24

Magadha was the centre of activities of the two great religions of Buddhism and Jainaism. It was the scene of the life-work of their founders Gautam Buddha (623-543 B.C.) and his elder contemporary
Vardhamana Mahavira. They gave to the world the apostle of "Ahimsa" and universal love.

**ANGA PRADESH GLORIFIED TENETS OF PHILOSOPHY, RELIGION**

Details of Anga Pradesh may be acquainted with through our ancient literature. The great Indologist, Mr. F.E. Pargiter, has also mentioned in his book "Ancient Countries in Eastern India" that the kingdom of Anga comprised of the modern districts of Bhagalpur and Monghyr (Munger) and also extended northwards up to the river Kausiki (modern Kosi) and included the western portion of the district of Purnea as its eastern fringe. Its western boundary, along Magadha, was always the river Kiul. It is in the VALMIKI RAMAYANA that Anga attains limelight. Raja Dasaratha was advised by Rishi Vasistha to perform PUTRESTHI YAJNA with the help of Rishi Sringa who was living in Anga capital with Raja Romapada. The Rishi had married Romapada's daughter Shanta, and had settled here. Raja Dasaratha and Romapada were friends (Valmiki Ca to XI : 3). King Dasaratha came to Anga along with his consorts, ministers and attendants and stayed here for seven to eight days. Finally, he succeeded in securing the favours of Rishi Sringa and took him to Ayodhya for the YAJANA. Later developments are well-known. Lord Vishnu descended on the earth as Rama, the eldest son of Dasaratha and there lies the pride of Bhagalpur in heralding the advent of the greatest among personal gods of the Hindus. Lord Rama became the greatest liberator of sages and saints, from an antithetical culture, that of the RAKSHAS.
The kingdom of Anga receives sustained references even in the MAHABHARATA. In the ADIPARVA, we find Arjuna emerging as the invincible hero during archery competition between the Kauravas and the Pandavas. Duryodhana would not take the decision lightly. He put up Karna to fight, but the latter had no legal authority. Duryodhana, therefore, conferred the principality of Anga on him, and then the contest became difficult.

The same chief of Anga, Mahavira Karna, created a legend of heroism and chivalry on the battlefield of Kurushetra. So, this is another contribution of Bhagalpur in the sphere of heroism, self-sacrifice and sincerity to a benefactor which is indeed the highest form of moral life.

Bhagalpur's contribution to socio-religious thinking of Hinduism does not end here. Alike the Hindus, the Buddhists and the Jains venerate Bhagalpur for one reason or the other. Bhagwan Vasopujya, the 12th TIRTHANKAR, was born in Bhagalpur, Champanagar. He attained KAIVALYA here, and finally, laid down his body to eternal rest at Champanagar.

Along with Champapuri, Sultanganj has its own religious importance. Rishi Zahnu's Asham is located on the banks of the Ganges and the story of Ganga's terrible descent, then a restraint imposed on her by the RISHI, and her final release at Sultanganj with the efforts of Bhagiratha are all nicely narrated in
GANGAVATARNAM. The episode make the place so holy.

Kahalgaon too has its philosophical, historical and religious glory. On the bank of the river Ganges there is an old temple of Lord Shiva called Baba Bateshwarnath. On the eastern side lies the ancient university of Vikramasila established by the Pala king Dharampala in about 9th Century A.D. It served as a causeway between India, Nepal, Tibet and China. The greatest contribution of this university is the opening of a two-way intellectual and philosophical traffic between India and Trans-Himalayan Countries. Gyanari Atisa achieved religious and philosophical unity between countries by his indefatigable labour and energy.

The next important place that comes to our view is Mandar Hill.

Bhogalpur has been affected by all the religious and reformist movements of modern times. Consequently, we see Hindu temples, Mosques, Churches, Gurudwaras, Swetambar and Digambar Jain Temples. Arya Samaj Mandir and even the Theosophical societies and homes, along with Brahma Samaj meeting places. The presence of Ramkrishna Mission, in addition to these, reflects the cosmopolitan character of Bhagalpur.
ADMINISTRATIVE BREAK-UP

Following table no. 1 shows the administrative break-up of the area under study:

TABLE NO. 1

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Division</th>
<th>District</th>
<th>Total Population</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Patna (Patna)</td>
<td>Patna (Patna)</td>
<td>47,09,851</td>
<td>27,40,927</td>
<td>19,68,924</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nalanda (Biharharif)</td>
<td>23,68,327</td>
<td>20,14,884</td>
<td>3,53,443</td>
</tr>
<tr>
<td>1.</td>
<td>Rihirpur (Ara)</td>
<td>22,33,415</td>
<td>19,21,121</td>
<td>3,12,234</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Rohtas (Sasaram)</td>
<td>24,40,762</td>
<td>21,22,175</td>
<td>3,26,597</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Buxar (Buxar)</td>
<td>14,03,462</td>
<td>12,74,591</td>
<td>1,28,771</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Kaimur (Bhabua)</td>
<td>12,64,575</td>
<td>12,43,086</td>
<td>41,507</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Magadh (Gaya)</td>
<td>Gaya (Gaya)</td>
<td>34,64,983</td>
<td>29,89,942</td>
<td>4,75,041</td>
</tr>
<tr>
<td>8.</td>
<td>Jehanabad (Jbad)</td>
<td>15,11,406</td>
<td>13,99,513</td>
<td>1,11,693</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Nawada (Nawada)</td>
<td>18,09,425</td>
<td>16,70,759</td>
<td>1,38,666</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Aurangabad (Aurangabad)</td>
<td>20,04,960</td>
<td>18,36,127</td>
<td>1,68,033</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Munger (Munger)</td>
<td>11,35,499</td>
<td>8,18,913</td>
<td>3,16,586</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Lakhisarai (Lakhisarai)</td>
<td>8,01,173</td>
<td>6,83,588</td>
<td>1,17,585</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Sheikpura (Sheikpura)</td>
<td>5,25,137</td>
<td>4,43,837</td>
<td>81,300</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Jamui (Jamui)</td>
<td>13,97,474</td>
<td>12,94,296</td>
<td>1,03,176</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Bhagalpur (Bhagalpur)</td>
<td>24,30,331</td>
<td>19,78,412</td>
<td>4,51,919</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Rhaqnlpur (Bhagalpur)</td>
<td>16,08,778</td>
<td>15,52,432</td>
<td>56,346</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Banka</td>
<td>16,08,778</td>
<td>15,52,432</td>
<td>56,346</td>
<td></td>
</tr>
</tbody>
</table>

Total : South Ganga Plain in Bihar 3,11,37,560 2,59,85,273 51,52,287

Sources: Census of India, 2001, Series - 11, Bihar, Provisional Population Tables, Paper 2 of 2001, pp. 70 - 77

Note: In brackets are Divisional and District headquarters.

In fine, present study is the analysis of the region having a total population of about 3.11 crores of persons. Patna district has the largest number of people, followed by Gaya district and lowest in the newly created district of Sheikhpura (5,25,137 persons).
SIGNIFICANCE OF THE STUDY

The study region is very fertile which support dense population concentration, both rural and urban. High agglomeration and dynamics of population pose a number of population hazards.

Again, the significance of the study of population in geography of any place is of growing importance. The significance of population geography as a branch of geography has grown constantly with an increasing awareness of the dynamism of population.25

PURPOSE OF THE STUDY:

The most conspicuous feature of to-day's accelerated world population growth is its even greater rapidity of urbanization. In many periods in history, population and cities have grown, but the tempo and dimensions of recent years have never been equalled. The many ramifications of this growth have special significance in relation to economic and social change.26

The growth of population has many problems. "Population problem has many ramifications. It belongs to that borderland of enquiry which opens on to that bonderland of enquiry which opens on Anthropology, Geography, Sociology and Economics. Thus, population problem is not a single problem but has, essentially, many dimensions and facts."27

Thus, the purpose of the present research work is to assess the present status of the growing rural and urban population and to suggest ways and means to ameliorate the related problems.
METHODOLOGY:

Methodology includes the methods of statistical, cartographic, and analytical. The map of Bihar, with divisions and districts have formed the basis of the work. Literary work has been done at various libraries like Varanasi, BodhGaya etc. On the basis of procured and processed data and information, a number of maps and diagrams have been prepared. A few photographs have also been taken as photo illustrations.

STRUCTURAL FRAMEWORK:

The work has been studied by dividing it into ten chapters.

CHAPTER I is the introduction one which describes the study and importance of population geography, the tract of South Ganga Plain in Bihar - its brief features; historical perspectives; Kaimur Hills; Magadh Region; Anga Pradesh; administrative break - up; significance of the study; purpose of the study; methodology and structural framework.

CHAPTER II delineates geographical perspective which includes the description of physical aspects - relief; climatic conditions; rivers and streams, waterfalls, ponds, waterbodies; soils and cultural aspects - settlement and communication and transport.

CHAPTER III discusses distribution and density of population which comprises determinants; spatial distribution; types of density and density distribution.

CHAPTER IV lays emphasis on the description of composition
CHAPTER V delineates growth of population which discusses pattern of growth of population; the period of rapid growth (1931 - 2001) and districtwise growth of population.

CHAPTER VI lays emphasis on the description of fertility and mortality, which includes indices of fertility; factors determining the fertility of population; Mortality, indices of mortality and Natural Increase.

CHAPTER VII focuses on the description of Migration which incorporates the details of Immigration, Emigration, general trends in Immigration and Emigration; differential mobility; Rural - Urban Migration - pull and push factors; Measurement of Migration; Factors stimulating out - migration; Types of Migration and Consequences of Migration.

CHAPTER VIII discusses Urbanization which describes urbanization; Measurement of Urbanization; Growth of Urban Population; Causes of growth and future growth of population.

CHAPTER IX details population and Environment which comprises the delineation of population growth and degradation of environment and Hazards and Policies of Population dynamics.

CHAPTER X Summarises the whole work and conclusion is drawn.
REFERENCES


5. Ibid


9. Clarke, J.A. (1971), Population Geography and Developing Countries, P.1


17. Ibid., p. 185


20. Ibid., P. 188


23. An extract, The Times of India, a daily newspaper, 17. Feb, 1997, p.4


