TRENDS OF URBANISATION IN HADOTI PLATEAU OF RAJASTHAN

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ABSTRACT

The paper focuses on *recent trends in urbanization reflect economic and political changes, some long-rooted, some of more recent horizontal world levels. For instance, the study of urbanization at worldwide can be considered, since 1950 for the purpose that reflects that the economy has grown many times. Since then, one has also change one dominate by relatively close national economies or trading blocks to one where production and the services, it needs are increasingly integrated internationally.*

INTRODUCTION

Perhaps urban growth influences the settlement system located in surrounding areas of urban region in terms of network and linkages. In recent decades unprecedented changes occurred particularly in metro cities and urban centers in general economic and political conditions. So far case of Hadoti plateau is concerned where the settlement pattern have changed much less then the degree of economic, social and demographic change might imply. In case of Kota city and other urban centers, they have attracted more people not only from the surrounding but also from the Uttar Pradesh, Madhya Pradesh, Rajasthan states. Basically, the urban centers represent considerable concentration of human and physical capital and it is difficult for new towns or cities to arise that can compete with the old one. Because, cities have changed their economic scenario due to the development of transportation, communication and other infrastructural development towards industrial growth.

OBJECTIVES

Following objectives have been taken into account of this paper:

1. To analyse the geographical factors which influence the urban growth of the study area.
2. To examine the relationship among the variables of urbanizations
3. To understand the overall trend of urbanization in concerned area.

STUDY AREA:

The present paper deals the trends of urbanization consists four districts of Eastern Rajasthan namely Baran, Bundi, Jhalawar and Kota. Geographically the study region extended in between $23^o51'$ N to $25^o27'$ N latitudes and $75^o15'$ E to $76^o25'$ E longitudes. It is bounded by Bhilwara and Tonk district in west and north-west, by Madhya Pradesh in the north eastern side. The region is bounded by Chittorgarh (Rawat Bhatta) district in the south-western direction. The Chambal river flows from south west to north west where multipurpose project of Chambal developed by government of India ,that has become a key factor behind the industrialization as well as urbanization for this region.

The major urban centres are known as Kota, Bundi, Jhalawar and Baran. There are 25 urban centres identified by Census of India. Out of them 8 towns in Baran district, 5 towns in Bundi district, 7 towns in Jhalawar district and 5 towns are located in Kota district.

DATA BASE

Various sources of data have been used for collection of primary information as well as secondary data.

METHODOLOGY:

The following methodology is used to identify the levels of urbanization:

1. Techniques like correlation and regression analysis applied to find out the relationship between explained variable i.e. level of urbanization and other explanatory variables.
2. The following statistical techniques have been used

(a)   *Degree of urbanization*

The formula for computing it is:

$$\alpha = \frac{U}{T} \times 100$$

Where, α = Degree of urbanization

U = Urban population

T = Total population

(b)   *Rate and speed of urbanization*

It is calculated in the following way:

$$\text{Rate of Urbanisation} = \frac{\alpha_2 - \alpha_1}{\alpha_1} \times 100$$

Where α_2 and α_1 are the degree of urbanization at two points of time.

(c)   *Laws of Retail Gravitation*

$$\text{Distance between A \& B} = \iota + \frac{\sqrt{\{\text{Size of A}\}}}{\sqrt{\{\text{Size of B}\}}}$$

Levels of urbanization in the Hadoti region specially in Kota, Baran, Bundi, Jhalawar have been studied on the basis of proportion of urban population to the total population at Tehsil level. In South Eastern Rajasthan, there are 6 tehsils, which do not have any urban centre. Two tehsils are lying in Baran district namely Sahabad, Kishanganj. On the other hand, two tehsils have been identified without urban centre namely Itawa and Digod in Kota district. In Bundi district and Jhalawar district both have one tehsils without urban centre namely Hindoli in Bundi and Khanpur in Jhalawar.

Table 1
Levels of Urbanisation 2011

S.No.	Tehsils of Hadoti Region	Total Population 2001	Total Population 2011	Urban Population 2001	Urban Population 2011	Percentage Increase in 2011
1	Ladpura	868213	1143792	723522	1025954	89.7
2	Ramganj Mandi	228479	272448	96406	128804	47.3
3	Sangod	165600	186240	18649	21846	11.7
4	Mangrol	93550	106963	21842	25073	23.4
5	Antah	103835	120038	26784	323377	27
6	Baran	181807	213555	78665	117992	55.3
7	Atru	132944	149959	5901	27650	18.4
8	Chhabra	122288	152429	22796	32285	21.2
9	Chippabarod	143885	170886	16027	18837	11.0
10	Nainwa	171401	196070	15174	19485	9.9
11	Indragarh	111747	127715	32183	40649	31.8
12	Keshoraipatan	138008	153987	38947	45375	29.5
13	Bundi	352174	411533	93258	115559	28.1
14	Jhalrapatan	291137	356707	86095	114237	32
15	Aklera	141992	178571	18172	26240	14.7
16	Manohar Thana	116076	143075	9228	11292	07.9
17	Pachpahar	152385	179418	35695	42283	23.6
18	Pirawa	183082	212679	11185	12807	06.00
19	Gangdhar	142281	167486	7867	8584	05.1

Source: Census of India, 2001 and 2011, www.censusindia.com

Following methods have been used for the determination of trends of urbanisation.

(i)   Trends of urbanisation was measured through arithmetic mean of the variables and levels have been computed on the basis of standard deviation (σ). Using these statistical techniques, urban population have been taken into consideration to find out the trends of urbanisation.

(ii)   Trends of urbanisation have been measured on the basis of proportion of urban population in a particular study unit at tehsil level.

Very High Level of Urbanisation:

Very high level of urbanisation have been observed only in one tehsil of the region, which have very high proportion of urban population, particularly in Ladpura tehsil. It has been observed that Kota city is located in Ladpura tehsil which have high proportion of urban population i.e. 89.7 percent, where the total population of this particular unit is 8, 68,512 persons in 2001 and 1143792 in 2011, out of which urban population is 1025954 persons, due to growth of Kota city in plain areas of Chambal River and its tributaries, where the Industrial complexes are taking place along with the state Highways and Railway lines. Besides this the Kota city is also famous for coaching institutes in the country for giving coaching to medical, engineering students. Kota is also leading industrial city in Rajasthan. It has developed industrial agglomeration in eastern Rajasthan.

High Level of Urbanisation

The high level of urbanisation has been recorded only in Ramganj Mandi and Baran Tehsil. The high level of urbanisation in Baran are due to growth of town as a nodal point of the transportation routes. Infact, Baran situated on Kota – Bina, Broad Gauge Railway line and also on the junction of state highway No. 17 and No. 19. Baran town has a prime importance as a major urban centre due to its geographical location. River Banganga flowing to the north of the town, joins the River Parwan, a tributary of the River Chambal, also support to the urban growth.

The geographical location of Baran within rich hinterland receive support from the surrounding region due to agricultural and forest products. The advent of Chambal river boosted its economy, because by providing irrigation facility to the whole area. Due to increased agricultural production availability of power and marketing surplus, the economic activities were further enhanced and a grain mandi of "A" type was also established here.

While Ramganj Mandi is famous for stone, which are extensively quarried as slabs for flooring and are also well-known as Kota stone. The Kota stone business provides job opportunities to the population of Hadoti region and influences the economy of the whole region. Ramganj Mandi is the main region, where stone mining are happening. Ramganj Mandi is also famous as Stone Mandi and it gives employment to large proportion of population.

Medium Level of Urbanisation

Medium level of urbanisation has been identified in seven tehsils of region namely Mangrol, Antah, Indragarh, Keshoraipatan, Bundi and Jhalrapatan, Pachpahar. These above all tehsils found in the Baran, Bundi and Jhalawar districts. Out of the all tehsils two tehsils have been recognized as the district headquarters particularly in Bundi and Jhalawar. The remaining tehsils have towns as administrative centres at tehsil level. In this particular level, the Indragarh and Jhalrapatan tehsils have proportion of urban population more than 32 percent followed by Antah tehsil (27%), Mangrol (23.4%), Pachpahar (23.6%), Bundi (28.1%), Keshoraipatan (29.5%) and the lowest level of urbanisation have recorded in Mangrol tehsil (23.4%) in this category.

Low Level of Urbanisation

Urbanisation is continuous process, which comprises several dimensions in different ways. In case of hadoti, the low-level proportion of urban population exists in periphery of the region.

The following factors are responsible for creation of low level of urbanization:

(i)   *Inaccessibility:* Inaccessibility consider as main factor in creation of low growth of urban centres. In case of hadoti region the tehsils like. Gangdhar, Manohar Thana of Jhalawar district, tehsils like Chippabarod, Chhabra of Baran district and Nainwa tehsil of Bundi district are located very far from district headquarter and these tehsils do not have sufficient road network, consequently these areas could not develop as urban centres.

(ii)   *Socio-culture set up*: Infact social structure plays vital role to develop the town and cities. In case of Jhalawar district the most of the areas do not have sufficient social amenities which create social backwardness, that is why the social structure reflects the overall development of the area concerned.

(iii)   *Industrial development* – The low-level urbanized areas do not have much industrial units, that keeps the low proportion of urban population because people do not want to move from rural areas to urban areas. Because job opportunities are very less in these towns.

(iv)   *Other factors* :

  (a)   Low proportion of workers engaged in tertiary and secondary of sectors.

  (b)   High proportion of population belongs to scheduled caste and scheduled tribes.

  (c)   Low level of literacy.

  (d)   Distance from the major urban centres like Kota, Bundi, Jhalawar and Jhalrapatan.

  (e)   Low availability of social amenities like education, medical, communication etc.

Very Low Level of Urbanisation

Low level of urbanization has been observed in only Atru tehsil. Geographically Atru is located in the south of Baran town. This area does not have high level of urbanization, it has only 18.4% population residing in urban areas. The following factors are responsible for the same.

  □   Interior location.

  □   Adverse Geographical conditions for human habitation

  □   Physical Factors are not suitable for urban growth like relief, soil etc.

Atru is located at very far from Kota city about 150 km, which effect its growth and expansion. If we analyse the overall development of these particular town, we find that the Atru historically does not have much economic strength. Consequently it remained as backward area due to inaccessibility and remained out of fringe of Kota city.

Without Urban Centres:

There are six tehsils, which do not have existence of urban centres. These tehsils are namely, Kishanganj, Shahbad of Baran district, Khanpur tehsil of Jhalawar district. Digod and Pipalda of Kota district and Hindoli tehsil of Bundi district are considered as rural dominated areas, where no urban unit have developed. It will suffice to say these tehsil centres are located either in eastern part of the hadoti plateau near the border area of the region. It is expected that in future some centre will grow in like Kishanganj, Pipalda, and Khanpur etc. tehsil areas.

GROWTH OF TOWN ACCORDING TO THE SIZE CLASS

The two methods have been taken into consideration for the study of urban centres. Here, in research we have studied two aspects firstly the size of towns, which are based on the town's population and second one is area. In this study the distribution of urban centres have been taken into account of research work on the basis of size.

During 1991, there was only one town lying in this category of First (I) class town. The size of population of first class towns is more than one lakh persons. In this category, the industrial city of Rajasthan like Kota was recorded. It has 5.16 percent to the total town and has the maximum percentage of population i.e. about 54.08 percent. But in 2011, the total number of towns decreases upto 3.70 percent and also decrease percentage of population as compare to census of 1991 i.e. 52.61 percent.

The second category that varies from 50,000 to 99,999 persons have only two towns like Bundi and Baran districts, which were having a proportion of population about 14.36 percent of population in 2011. The percentage of population slightly increases in 2011. The number of towns has decreased from 12.49% to 11.13%. Hence, the growth of population in urban has also decreased from 66.36 percent to 65.21 percent. There was some decrease in proportion of towns and the proportion of population particular in this category.

In case of third category, that belongs from 20,000 to 49,999 persons, the towns that has been recorded only five in number during 1991 and ten towns during 2011. It is surprising that the number of towns have been doubled in 2011. In other words, the growth of towns numerically has grown 100 per cent and the proportion of towns has grown from 33.32 percent to 48.16 percent. The growth of population increased from 82.07% to 88.73%.

In the category of 10,000 to 19,999 persons, the number of towns have decreased from 11 to 8. The proportion of towns and proportion of population were also decreased minutely in 2011.

In the category of 5,000 to 9,999 persons the number of towns doubled in this particular category. It has been recorded that the proportion of towns and proportion of population also increased.

So, far the small towns are concerned, the number of towns have decreased. Here, it has been recorded that the proportion of towns and the proportion of population are decreasing in 2011.

In conclusion, it has been observed that the rapid of urbanization can be seen particularly in middle size of urban centres.

SPATIAL DISTRIBUTION OF URBAN CENTRES

The spatial distribution of urban centres has significant role in terms of regional development of any region. In other words, urban centres are the indicators of any region in terms of their economic growth because urban centres play vital role to provide more job opportunities to the population living in the surroundings or in the peripheral zone of the region. In case of hadoti region their are about 27 towns or cities emerged up to 2011 have been categorized in 6 major categories.

The Towns of First Category

The first category of urban centres has more than one lakh population. In this region only Kota City occupy the place at in the first category. It has become the Primate City of the region due to its highest population. The proportion of number of towns has 3.70% out of 27 towns but the proportion of population has the highest level i.e. 52.61 per cent due to its size of population. It is only Single City in the Hadoti region in terms of industrial development not only for the region but also for the state.

In locational analysis some geographical variables can also be analysed that the city is growing due to the River Chambal and its tributaries which provide geographical environment to develop this urban area.

The Towns of Second Category

The distribution of Second category towns shows by the central towns, like Bundi and Baran. Both the urban centres are located in different directions. The Bundi town is located in the north-western part of the region. Baran town is located in the central eastern part of the region. Both the towns are growing along with the main transport routes of the south-eastern Rajasthan. Both the towns are well connected through highways and near to the first order city Kota.

The Towns of Third Category:

The category of class third towns varies from 20,000 to 49,999 persons according to the population size of urban centres. Ten towns have been identified in this particularly category. Out of ten towns three towns are situated in Baran and also three towns are located in Jhalawar district. In Baran district have major towns namely,

Mangrol (25073), Antah (32377), Chhabra (32285), and in Jhalawar districts towns are located namely, Jhalawar (48049), Jhalrapatan (114237), and Aklera (26240). In Bundi district towns are known as Keshoraipatan (45375) and Kota district also has two towns namely Kaithoon and Ramganj Mandi (128804).

It has been observed that the most of the towns are located in peripheral zone of the region. The geographical location of these towns taking into consideration, Lakheri which is located in the north of the hadoti region, whereas Bhawani Mandi, Jhalrapatan and Jhalawar are in the south of the region. On other hand the Keshoraipatan, are in the western side of the hadoti region and Chhabra are located in the eastern side of the region. It reveals that all towns providing marketing facilities to the vicinity at some extent. It has been observed during the field work that Bhawani Mandi, Chhabra, Jhalrapatan, Ramganj Mandi towns are emerging as city centre.

Towns of Fourth Category:

The category fourth of small towns varies from 10,000 to 19,999 persons. It has been observed that this category has more towns, which indicates that the small towns are emerging in different sides of the region. There are three towns in Kota district like Suket, Setalkheri, Sangod. On the other hand, in Jhalawar, these are towns like Aklera, Pirawa and in Baran district there is only one towns can be seen like Chippabarod in this category. Bundi district has two towns like Nainwa and Kapren. It is the matter of fact that, all the districts of the Hadoti region have two or more urban centres, which serve the large proportion of population.

Small Towns

Six towns have been recorded in the category of 5,000 to 9,999 namely Bakani, Mandi Rajendrapur, Manohar Thana (Jhalawar), Ladpura (Kota), Indragarh (Bundi), Khedliganj (Baran). These towns have some important role to provide social amenities like medical communication, education, and transportation to the peoples of the surroundings region.

CONCLUSION

After analysis of the urbanization process, trend and its level, it seems that central areas of hadoti have become the pivotal of industrial growth not only to hadoti region but also for Rajasthan State. Areas lying near by the boarder of the State in hadoti region are lacking in availability of infrastructure facilities, which creates low level of urbanisation. In future, the hadoti region will have more rapid urban growth along with main railway

tracks and highways, due to the availability of water from the river Chambal. The results of these researches provide more information or indication about the growth of cities and towns of Hadoti region. It is surprised that after the fifty year of independence the region requires much attention to reduce imbalances, in-terms of regional development. Finally, it can be concluded that the urban centres evolve more dynamics to provide job opportunities to the people of the region and more interactions for development of and more attraction for the overall development of each area of tehsils.

REFERENCES

1. Census of India, 2001 & 2011. District Census Handbook of Kota District Dectorate of Census Operation, Jaipur.

2. Census of India, 2001 & 2011. District Census Handbook of Jhalawar District Dectorate of Census Operation, Jaipur.

3. Census of India, 2001 & 2011. District Census Handbook of Bundi District Dectorate of Census Operation, Jaipur.

4. Census of India, 2001 & 2011. District Census Handbook of Baran District Dectorate of Census Operation, Jaipur.

5. G. Talyer, 1964. Urban Geography, a Study of Site Evolution pattern and classification in Village, Towns and Cities.

6. J.H. Johnson, 1957. Urban Geography. Introduction Analysis. An Pergamon Press Publication.

7. G.T. Trawartha, 1969. A Geography of Population : World Pattern Wiley.

8. www.censusindia.com