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Regional Pattern of Urbanisation and Employment Structure in West Bengal

Madhusudan Pramanick

Assitant Professor, Department of Geography, Prabhu Jagatbandhu College, Howrah

Abstract

Urbanization is now the burning issue in all over the world and it related to the key dimensions to the pattern of economic activities. The present paper deals with spatial pattern and process of urbanisation as well as employment structure in West Bengal. The decadal growth rate of urban population was 28 % and 32% population is residing in urban areas that ranks fourth highest urbanised state in the country according census, 2011. The level of urbanisation, decadal growth rate of urbanisation, urban- rural differential growth rate and urban- rural ratio have been applied to show the pattern of urbanisation in the state. The urban population is more concentrated in Kolkata and neighbouring districts than other part of the study area, but decadal growth rate of urban population is lower in the concerned area than wetern and northern part of the state. Location Quotient (L.Q.) has used to present the spatial concentration workforce in West Bengal. It is found that high concentration of primary workers is observed in western and north-middle parts and quite balance in Barddhaman, Nadia and Murshidabad districts in the study area. Whaereas other than primary workers are high concentrate in Kolkata, North 24 Parganas, Hoara and Hugli districts and quite balance in Barddhaman and South 24 Parganas districts in the sate in 2011. The perfect positive relationship between urbanisation and occupation pattern is established in Koklata and contiguous districts than other parts of the state. This paper will help us to find out the scenario of urbanisation and employment structure in the study area.

Keywords: Level of urbanisation, U-R differential growth, location quotient, employment structure

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I. INTRODUCTION

Urbanisation of a country is the proportion of population living in urban areas. India has been considered as one of the major contributor for this urban explosion due to growth of population and rural to urban migration (Kundu, 2011). The West Bengal is considered as comparatively high level of urbanisation among the Indian states (Bagch and Chatterjee, 2015). In general the relative industrial stagnation and the population pressures determined the urbanisation process in West Bengal in the post-independence period (Giri, 1998). The larger cities have risen very fast in size than small and medium towns in West Bengal in the period 1901 to 2001 (Sarkar, 1989 & 2011). The changing pattern of economic activities from agricultural to industrial and other services activities promote the urbanisation of Howrah District in West Bengal (Pramanick, 2019). The change from agricultural to mining and industrial economic activities consequent rapid urbanisation and industrialization in Asansol and its effects on the current socio-economic, environmental condition (Auddya,1991). The rapid pace of urbanization in West Bengal did not create the corresponding economic growth to the extent that it has been observed historically in other countries (Chatterjee & Ayadi, 2001). The studies by Dasgupta (1984, 1988) have concluded that three types of inequalities i.e. a) inequality in the agrarian structure, b) inter-regional inequality and c) disparity in economic development have promoted rural to urban migration in West Bengal. These findings are similar to the views expressed by the theoretical modeling of Lewis (1954), Harris and Todaro (1970) for various developing countries. Dasgupta (1984, 1988) further observed that the rural population in West Bengal have been treated as a reserve pool of labour which could be tapped according to the needs of urban industrialization. Sustainable urbanisation and proper utilisation of workers should be introduced in present and feature society in any urban area of developing countries like India.

Study Area

The state of West Bengal in the eastern part of India lies between 21° 25′ 24″N and 27°13′15″N latitudes and 85°48′20″E and 89°53′04″E longitudes with three international boundaries i.e., Bangladesh, Nepal and Bhutan (Fig.1). It is bounded by Sikkim and Bhutan in the north, Assam and Bangladesh in the east, the Bay of Bengal in the south and Orissa, Jharkhand, Bihar and Nepal in the west. According to the Census of India (2011), West Bengal is the fourth most populous state in India with 91347736 population (7.55%) and 1029

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persons per sq. km. density (second rank among the Indian states). The topography of northern part of West Bengal touches the Himalayan range. Besides, Indo- Gangetic plain begins alluvial and fertile soil, is the alters topography of West Bengal. The climate of the state varies from tropical savanna in the southern portions to humid subtropical in the north. Agricultural and allied economis activities play the pivotal role in the economy while household and other services activities observe in urban area of West Bengal.

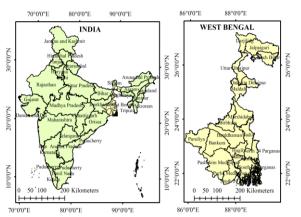


Fig. 1 Location of the Study area

Objectives

- 1.To study the process and trend of urbanisation in West Bengal since post independence
- 2. To show the spatial distribution of urbanisation as well as employment structure.
- 3. To establish the relationship the urbanisation an occupational structure in the study area.

II. MATERIALS AND METHODS

The entire analysis has been completed based on secondary data which is collected from District Census Handbook, Census of India. The following methods have been executed to show the pattern of urbanisation. These are: I. Level of Urbanisation (LU) = Total urban population $\times 100$ / total population, II. Urban population Density (UPD) = Total urban population / Area in Sq.km., III. Decadal Growth Rate of Urbanisation (DGRUP) = (UP₂₀₁₁-UP₂₀₀₁) $\times 100$ /UP₂₀₀₁, IV. Urban- Rural Growth Differential Index (URDGI) = (Gr UP²₂₀₀₁₋₂₀₁₁- Gr RP ₂₀₀₁₋₂₀₁₁), V. Urban- Rural Ratio = (UP/RP) $\times 100$.

Location Quotient (L.Q.) is a ratio of ratios. It is used to describe the relative concentration of an activity or socio-economic group in one section of a large area. It has been used to present the economic specialisation of the districts of West Bengal by using the following formula,

i

Where L.Q. = Location Quotient, e_i = District employment in each category in economic activities i year , e= Total district employment denotes the percentage value for segment i, E_i = State employment in each category in economic activities i year, E = Total state employment in each category in economic activities i year. The value of the LQ >1 indicates a higher concentration, L.Q.= 1 presents quit balance and L.Q. <1 also indicate dispersed pattern (Mahmood, 1977). In a regional context a higher or lower value of the L.Q. indicates relative concentration or dispersion of the concerned attribute (Isard, 1960).

The linear regression model has been used to established the relationship between the level of urbanisation and employment structure from the given formula,

$$Y = a + bx$$

Where 'Y' is the dependent variable and 'X' is the indepent variable, 'a' is contant and 'b' is parameter. The value of the correlation coefficient, r lies between -1.0 and + 1.0. The value r = 1.0 indicates percefect positive correlation and r = +1.0 indicates percect negative relation. The correlation and coefficient, r is the simply square root of the coefficient of of the determination (R^2).

III. RESULTS AND DISCUSSION

II. Process of Urbanisation

West Bengal remains one of the highly urbanised state of the country with currently 32% population residing in urban areas and it ranks fourth highest urbanised states in the country according to the Census of India, 2011. The West Bengal tops the list with more than 500 new towns, followed by Kerala (361). The process of urbanisation in West Bengal was strated late 18th century when the first port town and a commercial city developed in Calcutta. This deserves attention as the urbanisation of West Bengal was always characterised by primacy of Kolkata and dominance of big cities in Kolkata Metropolitan Area. Urbanisation was highly

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concentrated in the Calcutta region where British brought trade and commerc to here. Calcutta was the seat of colonial administration and the centre of colonial trade. Industrial growth around Calcutta was primarily based on export-oriented jute industry and was fuelled with the availability of favourable factors like access to port facility, inland water transport via the river-network supported by the Ganga and the railway infrastructure covering a huge hinterland. In course of history, there has been continual rise in the share of urban population in the state. The level of urbanisation in the state was 24% around independence, which was well ahead of several states in the country.

There has been spatial concentration of urban population in Kolkata urban agglomeration comprising the Kolkata Municipal Corporation Area and five other neighbouring districts viz. South 24-Paraganas, North 24 Paraganas, Haora, Hugli and Nadia. In 2011, Kolkata urban agglomeration was home to over 14.1 million populations, making it the third-most populous metropolitan area in the country (Census of India, 2011). As a saturated city, Kolkata is confronted with overpopulation, unsustainable development, infrastructure deficiencies, unregulated growth of slums/ poor settlements, inadequate municipal services, considerable urban pollution and many other associated socio-economic problems.

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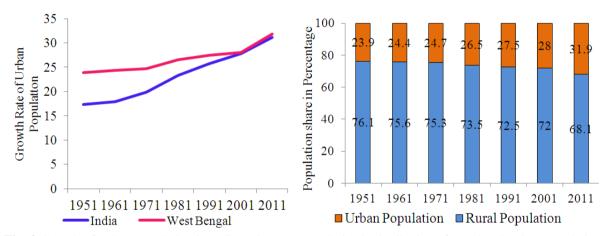


Fig. 2 Growth of Urban Population in India and West Bengal Fig. 3 Distribution of Rural and Urban Population in West Bengal.

The growth rate of urban population was higher in India (13.87%) comperatively West Bengal (8.00) respectively (Fig. 2). But it was rising as well as steady in West Bengal since post independence. The trend of growth of urban population has divided three phases. Firstly, the urban population have increased 0.8% from 1951 to 1971 due to independence of india and freedom fight of Bangladesh. As a result illegal internaltional migration have occurred in the study area. Secondly, the period from 1971 to 2001 the urban population have also increased 3.33% mainly causes of international migration and rural urban migration. Finally it has risen 3.86% during the last decades in India. The percentage share of urban population is less than rural population since post independence in India (Fig. 3).

The share of urban population in West Bengal was almost one-third of the rural population in 1951 and 1961. But it has increased and reached half of rural population in 2011. The decaldal growth rate of urban population has increased slowly and steadly from 1951 to 2001, but it has highly grown-up in the last decades here (Table 1). On the other hand growth of rural population was high above 20 percent from 1951 to 1971. After that the it has been reducing and reached 7.69 percent in the state in 2011.

Table 1. Decadal growth rate of urban and rural population in West Bengal (1951-2011)

Census Year	Total population	Rural population	Urban population	% Rural Population	% Urban Population	Decadal Urban Growth rate	Decadal Rural Growth Rate
1951	26299980	20018338	6281642	76.115	23.885	32.52	8.27

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1961	34926279	26385437	8540842	75.546	24.454	26.97	31.81
1971	44312011	33344978	10967033	75.25	24.75	28.41	26.38
1981	54580647	40133926	14446721	73.531	26.469	31.73	20.36
1991	68077965	49370364	18707601	72.52	27.48	29.49	23.01
2001	80176197	57748946	22427251	72.028	27.972	20.2	16.94
2011	91276115	62183113	29093002	68.12	31.88	27.99	7.69

Sources: Authors' calculation, Census of India, 2011

The trend of decadal growth rate of urban population is presented (Fig. 4) in districts level. The West Bengal had 42% decadal growth rate of urban ppulation in 9171. The neibouring country, Bangladesh was freedom in the reriod resulting a large section of migrants came to here and they were settled here and there in the frontier area. Hence the high decadal growth rate of urban population is observed in Dakshin Dinajpur, Purba Medibipur and Barddhaman districts, medium in southern and middle part and low in western districts in the state. Kolkata has lowest growth rate due to over urbanisation. Afterthat it has reduced in 37% in the period of 1971-81 when it was lower than previous period because the international migration has been reducing here. The high growth rate (50%) was noticed in Barddhaman, South 24 Parganas, Darjiling and Dakshin Dinajpur districts, medium in western, northern and sourthern excepting Kolkata and Bankura districts where have low (below 25%) decadal growth rate of urban population.

In the period of 1981-91 the growth rate of urban population has increased some than previous decade. The high growth rate (50%) has observed in Purba Medinipur and Uttar Dinajpur, medium in western, northern and sourthern excepting Kolkata, Puruliya, Dakshin Dinajpur and Panchim Medinipur Districts where have low (below 25%) decadal growth rate of urban population.

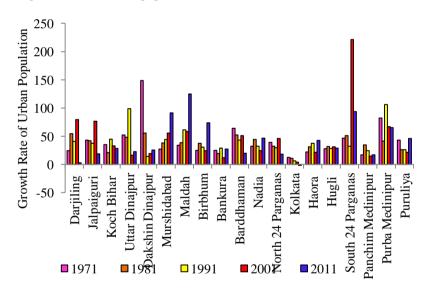


Fig. 4 District wise decadal growth rate of urban population (1971-2011)

In the period of 1991-01, the decadal growth rate of urban population has fastly risen than previous decade in the state. The high population was noticed in South 24 Parganas, Barddhaman, Murshidabad, Malda, Darjiling and Jalpaiguri Districts, Medium in western, middle and southern parts and low in Kolkata, Panchim Medinipur, Bankura and Uttar Dinajpur in the study area. Finaly, it is reduced in 41% in the of 2001-11 when high growth rate is observed in Malda, Mushidabad District and medium in remaining district excepting Darjelling, Jalpaiguri, North 24 Parganas and Panchim Medinipur District. The Kolkata district have negative growth rate of urban population due the overcrowded and urban explosion. So, it is noticed that trend of decadal growth rate of urban population in Kolkata and neighbouring district have lower than other parts of the state. The numbers of urban centres have increased in 62 towns to 130 towns i.e. almost double (Fig. 5) during the three decades (1951-1981). In the period of 1981 to 200, it has increased in doubly in the state. So, it is stated that the growth of rate towns was fast and steady since post independence in the study area. Lastly, the state has made phenomenal jump in the number of urban centres over the last one decade. The number of census towns has risen from 255 in 2001 to 909 in 2011 and the number of statutary towns have also increased from 375 in 2001 to 909 in 2011(Table 2).

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Censu	No. of Towns/Cities						Percentage of Urban population					
S	Class	Class	Class	Class	Class	Class	Class	Class	Class	Class	Class	Class
Years	-I	-II	-III	-IV	-V	-VI	-I	-II	-III	-IV	-V	-VI
1951	3	4	13	24	11	7	79.56	3.78	7.79	6.33	1.95	0.59
1961	4	10	29	29	26	4	76.6	7.19	8.59	4.74	2.7	0.18
1971	5	16	32	32	25	2	75.79	10.4	7.22	4.35	2.14	0.1
1981	12	21	35	35	20	7	77.72	8.85	6.6	4.86	1.7	0.27
1991	23	18	46	32	34	7	80.02	5.63	7.32	4.08	2.66	0.29
2001	27	16	43	49	83	21	83.51	4.35	5.98	3.15	2.58	0.43
2011	62	37	81	198	446	85	84.16	5.25	4.98	3.15	2.01	0.45

Table 2 The number of towns and percentage of urban population by size-class in West Bengal

Source: Authors' with data from Town series, Census of India

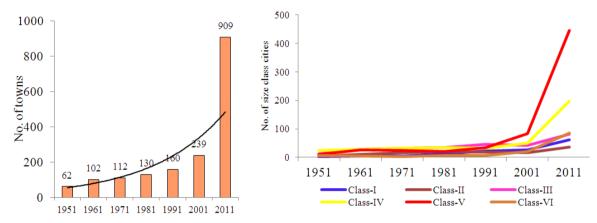


Fig. 5 Number of Towns/ Cities in West Bengal Fig. 6 Changing pattern various size class cities in West Bengal (1951- 2011)

The population size of various cities have slowly increased in the study area where the number of Class-II, Class-III, Class-IV, Class-V and Class-VI towns have increased in 24 cities, 12 cities, 30 cities, 25 cities, 72 cities and 14 cities respectively from 1951 to 2001. In this period class-I, Class-IV and Class-V cities have grown comparatively than other cities (Table 2). The remarkable growth of size class cities has noticed that the state has reached 62 Class-I, 37 Class-II, 81 Class-III, 198 Class-IV, 448 Class-V and 85 Class-VI cities respectively during the last decade (Fig. 6). Therefore, medium and small size towns have high tendency for increasing than large cities in the state. Consequently, the urban centres are developing in the periurban area to larger cities in irregularly and haphazardly (urban sprawl) following the road connectivity. The eastern and northern parts of Kolkata is high urban sprawling than other part (Bhatta, 2009). The unprecedent growth of small and medium cities has brought in the problem of provision of public goods and services (Chatterjee, 2016). The population are reducing in class-I towns during the overcrowded and urban problems. It is interesting to note that as a consequence of forces of developmet around 580 villages have converted to the status of urban areas. As expected, towns and cities are largely concentrated in southern districts which accounted for almost 90% of class-I cities and 70% of class-II in 2011. North 24 Paraganas alone had a share of 27 cities in 2011. The population of satutary towns is reducing in Barrackpore subdivision in 2011 (Pramanick, 2018).

It is further noticed that the proportion of urban population in Class-I cities has risen over time. On the contrary, in Class-II, III and IV cities, the proportion of population is found to have come down. However, the last two categories present an increasing trend (Table 2). All these clearly reveal the enormity of the problems that has come up with the pace and nature of urbanization in West Bengal. Especially, the growth of Class-I cities across the southern parts both in terms of size and number may pose a serious challenge in terms of public health, safety and quality of life in general.

IV. SPATIAL PATTERN OF OF URBANISATION IN WEST BENGAL

The proportion of urban population to total population in any administrative area is called level of urbanisation. The level of urbanisation is 31.89% in the state which is marginally higher the national average of 31.16% in 2011 but lower than the those advanced states namely Tamilnadu, Maharastra, Punjab, and Gujrat etc. The high (above 60%) level of urbanisation is observed in Kolkata and Haora districts, medium (60%-40%)

in North 24 Parganas and Darjiling districts and low below 40% in western and northern parts in the study area (Fig. 7). Kolkata Metropolitan Area (KMA) is taking the vital role for high level of urbanisation for neighbouring districts rather than remaining parts in the state. The growth rate of urban population is relatively higher in most of the 'river bank' districts of the state signifying comparatively higher prospects for employment opportunities and developmental interventions. The analysis of the pattern and trend of urbanization indicates that it is not only concentrated around Kolkata metropolitan Area but also urban population spreads across the Gangetic West Bengal (Karmakar, 2015). Some of the districts with exceptional decennial growth in urban population during 2001-11 comprising Malda (129%), South 24 Paraganas (92%) and Murshidabad (92%) districts indicating phenomenal shift of population towards urban centres as well as graduation of previously relatively larger villages into smaller census/ statutary towns (Fig 4). On the otherhand, it is interesting to note that Kolkata which is over three year old city has recorded negative growth rate during the last decade, signifying saturation and decelaration. Evidentaly increasing pressure on infrastructure, rising real estate costs and declining quality of life in Kolkata has led to out migration.

The measure of density of urban population is expressed the population pressure in any administrative area. The high urban population density (> 6000 sq km) is observed in Kolkata, North 24 Parganas, Howrah, Maldah, Dakshin Dinajpur, Hugli Districts, medium (6000- 4500) Murshidabad, Nadia, South 24 Parganas, Uttar Dinajpur and Darjiling and low density of population (<4500) in Puruliya, Panchim and Purba Medinipur, Jalpaiguri, Bankura, Birbhum and Barddhaman districts in the state. So it is stated that southern region of the state is higher urbanised area than northern and western region in West Bengal.

The urban-rural differential growth rate (URDGR) of population is the measure to show the difference of urban-rural gowth of population. This index lies between zero to infinity. The value closer to '0' represents the high concentration of urban population and nearer 100 and above indicates less concentration of urban population. The West Bengal has 22.14 urban-rural differential growth rate of population which is higher than the country of India (20.02) during the last decade. The urban-rural differential growth rate of population is high (above 100) in Barddhaman and Maldha disitricts establishing an urbanization. The Haora, South 24 Parganas, Mushidabad and Jalpaiguri districts have medium (50-100) urban-rual differential growth rate getting the urban population in the sate(Fig. 8). The low or balnced (below 50) differential growth is noticed remaining districts namely North 24 Parganas, Hugli, Purba and Panchim Medinipur districts which are representing quite progressive region in this aspect here. Lastly, the negative differential growth rate is observed in Birbhum and Uttar Dinajpur districts where rural population is domination than urban population in 2011.

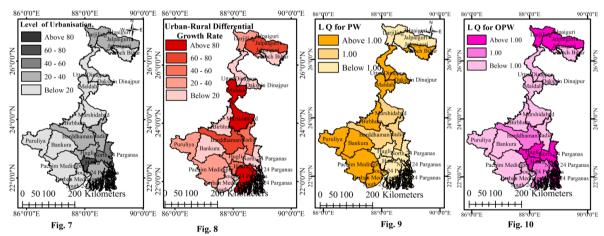


Fig 7 Regional distribution of level of urbanisation in 2011 Fig. 8 District wise uban rural differential growth rate in 2011

Fig 9 Spatial distribution of primary workers (PW) Fig. 10 Spatial concentration other than primary workers (OPW), 2011

Urban-rural (U-R) ratio of population is the another parameter for measures of population concentration in any administrative region. The urban-rural ratio lies between zero (lower limit) and infinity (upper limit) i.e. $0 < U/R < \infty$. The U-R ration is nearer zero (0) indicates the concentration of rural population and upper limit nearer infinity (∞) indicates high concentration of urban population. Theoretically upper limit will be infinite when there is no rural population. The urban-rural ratio in West Bengal is 46.78 percent, it means there 46 persons urbanites in every 100 ruralites. The high urban-rural ration (above 100 percent) is noticed in Kolkata, North 24 Parganas and Dakshin Dinajpur districts, medium (50 -100 percent) in Barddhaman, Haora, and Darjiling district and lastly low (below 50 percent) in northern and western part namely Birbhum, Bankura, Purba and Panchim Medinipur districts in West Bengal in 2011. So, it is clearly stated that the Kolkata and

neighbouring districts have dominant pattern of urban population due to urban facilities, rural- urban migration and employment opportunities in household an other services sectors in Kolkata Metropolitan Area (KMA). In contrary, the western and northern parts have less concentration of urban population or retained rural status due to less urban infrastructure and socio-economic facilities in the state. Consequently, primary economic activities are the main employment opportunities in the rural Bengal in the state in 2011.

V. REGIONAL CONCENTRATION OF EMPLOYMENT STRUCTURE

The primary, secondary and tertiary sectors are the main occupational structure in any region. The percentage of each sector changes from one place to another place depending on its level of socio-economic infrastructure and development. The state of West Bengal in the early stage of development usually have a high percentage of the population in primary occupations. This is because most people are engaged in agricultural activities. As a state begins to develop an industrial base there is an increase in the secondary sectors. An increase in machinery on farms means fewer people are needed. People tend to migrate to urban areas to get jobs in secondary and tertiary sectors. When a state becomes more economically developed there is a greater demand for services such as education, health care and tourism. By this time computers, machinery and robots replace people in the secondary sector hence the decrease in secondary jobs. As a result, the job opportunity will increase in tertiary and service sector in any region.

Table 3 Location Quotient (L.Q.) for Occupational Structure in West Bengal, 2011

Sl No	Name Block	LQ for PW	LQ for OPW	Higher Concentration	Quit Balanced	Dispersed
1	Darjiling	0.459	1.376	OPW	-	PW
2	Jalpaiguri	0.869	1.149	OPW	-	-
3	Koch Bihar	1.601	0.618	PW	-	OPW
4	Uttar Dinajpur	1.388	0.587	PW	ı	OPW
5	Dakshin Dinajpur	1.684	0.643	PW	-	-
6	Murshidabad	1.027	0.903	=	PW	-
7	Maldah	1.197	0.867	PW	-	-
8	Nadia	0.998	0.888	=	PW	OPW
9	Bankura	1.587	0.664	PW		OPW
10	Barddhaman	1.016	0.970	=	PW, OPW	-
11	Birbhum	1.428	0.660	PW	-	OPW
12	North 24 Parganas	0.529	1.259	OPW	-	PW
13	Haora	0.322	1.507	OPW	-	PW
14	Kolkata	0.038	1.844	OPW	-	-
15	Hugli	0.911	1.114	OPW	PW	-
16	Puruliya	1.549	0.783	PW	-	-
17	South 24 Parganas	0.849	1.036	=	OPW	-
18	Purba Medinipur	1.476	0.722	PW	-	OPW
19	Panchim Medinipur	1.452	0.68	PW	-	OPW

Source: Authors' calculations, Census of India, 2011

The employment structure of the state is divided into two sub categories i.e. primary workers (PW) including agricultural and cultivators allied activities and othe than primary workers (OPW) including household and other services workers. The West Bengal have various of regional pattern of primary and other than primary workers in 2011 (Table 3). The high concentration (L.Q. = > 1) of primary workers are noticed in western and northern part of the state namely Purba Medinipur, Panchim Medinipur, Bankura, Birbhum, Maldah, Uttar Dinajpur, Dakshin Dinajpur and Koch Bihar districts (Fig. 9). In the Barddhaman, Murshidabad, Nadia, Darliling and Jalpaiguri districts have the quite balance (L.Q. = 1.00) of primary workers. Lastly southern part of the sate namely Kolkata, North 24 Parganas, Haora and Hugli Districts have low concentration or dispersed (L.Q. = < 1) pattern of primary workers in the study area. So it is clearly stated that the major districts of the state are depending on primary economic activities excepting the Kolkata and contiguous districts.

On the other hand, the other than primary workers (OPWs) who are comperatively educated and choice to resides in urban area in developing countries like india. The high concentration (L.Q.= >1) of OPWs are observed in northern part namely Darjiling and Jalpaiguri districts and southern region namely Kolkata, North 24 Parganas, Haora and Hugli districts where urbanisation is also high here in 2011(Fig. 10). The Barddhaman and South 24 Parganas districts have the quite balance (L.Q.= 1.00) of other than primary works

in the state of West Bengal. Lastly western part namely Purba and Panchim Medinipur, Bankura, Puruliya districts as wel as middle part namely Uttar and Dakshin Dinajpur, Koch Bihar, Malda, Nadia, Murshidabad and Birbhum districts have low oncentration or dispersed (L.Q.=<1) pattern of other than primary workers. So it is revealed that the major districts are not depending on other than primary economic activities. While the employment pattern of southern and northern region are depending on other than primary works (OPW) in the study area in 2011.

Therefore, the sate of West Bengal have various of regional concentration of employment structure by which it expresses the scale of progressive in the study area in 2011. The change rural agrarian economy to non-agricultural economic activities due to progress of literacy, urbanization, job opportunities and high wage rate of non-agricultural labour are factors of increasing of non-agricultural activities in employment status of Barasat, Bongaon and Basirhat subdivision in North 24 Parganas District (Halder, 2009). The western and middle parts of the state have high concentration of primary workers indicating the less developing region in the sate. The Bardhaman, South 24 Parganas Nadia and Mushidabad distrcts have quite balance of primary works as well as other than primary workers, which reveled that this region have balance workers people. So, these districts are developing based primary workers as well as other than primary workers in the state. Finally southern part of the state is more advanced depending on other than primary workers in the sate in 2011. The issue of migration from rural-to-rural and rural-to-urban areas and try to understand whether rural industrialization helps rural people find gainful employment in local villages or nearby small towns (Dutta & Chakrabarti, 2014).

VI. REALTIONSHIP BETWEEN URBANISATION AND EMPLOYMENT STRUCTURE

Economic development is generally associated with the growth of urbanization. Lewis (1954) argued that the acid test of development lies in the shift of population from the rural to the urban areas. Specifically, Dutt and Sundharam (1988) have observed that the rural land reform and rapid urbanization with the supply of cheap industrial labor (displaced agrarian labor) have provided critical ingredients in fueling economic and industrial growth.

The relationship is established between level of urbanisation and other than primary workers (OPWs) to the perspective of districts level in West Bengal to show the role of urbanisation on employment structure. In this regression analysis, the level of urban population presents independent (X axis) and other than primary workers shows dependent variable (Y axis). The positive and strong relationship has been established between two said variables (Fig. 11). This modal has R2=0.879, it means modal explain 87.9% of the relationship between independent variable i.e. level of urbanization to other than primary workers.

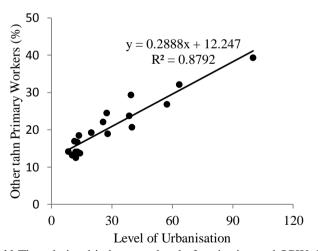


Fig. 11 The relationship between level of urnisation and OPW, 2011

Therefore this relationship is highly established in Kolkata and adjacent districts where workers are more engaged in other than primary workers as well as good socio-economic infrastructure and job opptunities in secondary and tertiary sectors are promoting high level of urbanisation in the state. In contrary, apart from these regions have more primary employment structure as well as poor socio-economic infrastructure and job opptunities in primary sector endorsing low level of urbanisation in West Bengal. The 'river bank' districts are high urbanised due to industrialisation and job opportunities in industrial sectors mainly Jute and Cotton Textile Indutries since 1901 in the West Bengal (Roy, 1988)

VII. CONCLUSION

Urbaisation in the state was highly concentrated in Calcutta region, in the interior district had very low level of urbanisation (Giri, 1998). West Bengal has experienced a high level of urbanisation during 2001-2011 though high inter-district disparity exists in urban population distribution (Ghosh & Chakma, 2014). The rate of urbanisation has experienced a slower but steady in West Bengal compared to India. West Bengal has typical urban feature that is its high degree of spatial concentration with a enormous dominance of Kolkata urban agglomeration. The unprecedented phenomenon in urban scenario is noticed in West Bengal during the last two decades. The five hundred and above census towns in the state, most of them are small towns, ranging between five thousand and twenty thousand in population. They have changed the mono-centric pattern of urbanisation to a more diffused pattern, both spatially and functionally. The high rate of urbanisation is in the southern part of state namely Kolkata, Haora, North and South 24 Parganas and Hugli districts taking pull factors of urbanisation than other parts.

So, it is clearly stated that the Kolkata and neighbouring districts have dominant pattern of urban and employment opportunities in other than primary workers comperatively primary workers. On the other hand, the western and northern parts of the sate have less concentration of urban population or more concentration of rural population due to employment opportunities in primary sectors. Therefore, the processes of urbanisation and spatial distribution of urbanisation are influencing the changing pattern and regional distribution of occupational structure. Sustainable urbanisation with following 'smart ctities' policies and proper utilisation of workers should be emphasized in present and feature socity. So proper synchronization between urbanisation and employment structure is needed for justifying development in any urban area in developing countries like india

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