RESEARCH ARTICLE

REGRESSION ANALYSIS OF URBANIZATION AND SOCIAL POLARIZATION

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ABSTRACT

The process of urbanization has made a remarkable shift in the economic development. These changes in the economy have bought many significant transformations to the society. India has been developed in its economical structure with increasing trends in GDP and HDI indices. Due to high economic development in most of the urbanized states is division of organized and unorganized set of occupational structures which gives rise to income inequality when there is economical inequality among the population that led in social disputes and crime rate. The social and physical aspects of the country suffers degeneration which led to the concept of "Social polarization

This paper is a critical study on social polarization through the use of statistical methods, a brief account of urbanization process tending towards social Polarization in India with different States has been analyzed in the paper. The data has been taken from different national agencies official websites and census of India etc... The data has been analyzed through statistical tools and identified that all the four variables are highly positively correlated and further regression analysis is carried out, the results shows GDP is the most significant for the growth of urbanization and social polarization. To proceed further, attention has been focused on effects of social polarization where the most developed states have high percent of inequality in income and associating with more violence.

INTRODUCTION

Urbanization is a process characterized by more and more people living in the urban areas and is one of the most important transformations the world has witnessed in recent decades. It is a major change taking place globally. The urban global tipping point was reached in 2007 when for the first time in history over half of the world's population 3.3 billion people were living in urban areas. It is estimated that a further 500 million people will be urbanized in the next five years and UN projections indicate that 60% of the world's population will be urbanized by 2030. India is an integral part of the process. In 2010, India accounted for 11 percent of the world's urban population; the United Nations projects it to be 15 per cent by 2030.

India is being developing nation is recognized to be at its peak of economic development since Independence 50 yrs ago India experiences concentration of high economic development around major centers, while a majority of the country shows a very low rate of development. The driving engines of the country have been the metropolitan regions Bombay, Delhi, Calcutta etc..They have historically been the employment magnets, education centers, industrial hubs and trade cores making them the most developed cities in the nation as well as the most diverse economies.

Although the urbanization process is widely acknowledged to be associated with increasing levels of national production and higher levels of per capita GDP, poverty remains a persistent feature of urban life in India eventually leading to overpopulation of these cities resulting in disintegrating social and physical structures. Extreme polarities between urban and rural areas in a country such as in India generate patterns of rural-urban migration into developed cities in search of better standard of living and employment. This trend of migration, to already overpopulated cities, contributes to elevated levels of poverty, illiteracy and crime rate.

An underlying phenomenon experienced by urban centers is the evolution of dichotomous economies where, an informal economic sector is created by the low-income groups. Workers migrating from rural areas are forced to take up informal sector jobs due to their lack of skills and education, which translates into lower wages and standard of living, contributing to proliferation of slums in the city. Thus while the economy of the city flourishes; the social and physical aspects of the city suffer degeneration which led to the concept of "Social polarization".

It is expressed by the inequality between the social castes which constitute the society by the effect of transition in the economical structure has reached to extreme points (Andersen,

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2004:146). Social polarization is also used to state the change which emerges in the economical and social structure in addition to being an extension of the inequality in the income distribution. In this context, there are plenty of economical and social cases which explain the level of polarization: in addition to the income distribution, dual economical structure, distribution of wealth and stratification of labor market are also used to explain the concept of social polarization (Aylin Koc,2013).

The point to be taken about the urbanization is how economical and social variation is affected by this process. Accepted opinion is that the urbanization and industrial change result in a changeover in the economical structure and a skilled polarization and this condition affects the inequality between the social group that constitute the society. Therefore, the significance of the study which examine if there is a significant relationship between the urbanization and social polarization and the direction of the influence of the urbanization on the social polarization increases gradually.

REVIEW OF LITERATURE

The polarization might be defined as an increase in the number of people with relatively high or low incomes "Income polarization". Secondly, this could be defined in terms of an increase in the number of people who belong to the upper and lower classes, as opposed to the middle classes, however these are defined "social class polarization". Thirdly, social polarization might be defined as an increase in disparities in social protection, including stability of employment and availability of social supports "insider/outsider polarization" The 1970s, economic growth has led to a "concentration of wealth at one pole of society and poverty at the other" (Burawoy, 2007, p. 503) The raise in the rate of the service sector within the global employment and the decrease in the rate of agriculture and manufacturing sector are evaluated as one of the reasons that reveal the social polarization .To the extent that the weakest members of the labor force circulate between low-skilled jobs, informal activities and spells of unemployment, they are not permanently excluded from work or the labor market Heshmati (2004) could not find a significant relationship between the globalization and the income distribution in 37 countries.

Growth-affecting mechanisms that originate from the situation of the poor include credit constraints, indivisibilities in investment, engagement in property crimes, and high fertility rates (Galor and Zeira, 1993; de la Croix and Doepke, 2003; Josten, 2003).The distance between different social or economic groups in society serves as the origin of the growth-influencing effect. One approach belonging to this group argues that distribution may have an adverse effect on trust and social capital An-other thread suggests that increasing social disparities, and in particular, rising social or economic polarization, lead to social discontent and create or intensify social conflicts (manifested in strikes, demonstrations, riots, or social unrest) and political instability (Esteban and Ray, 1994, 1999, 2011; Alesina and Perotti, 1996). This has direct and negative consequences for growth by disrupting market activities and labour relations and by reducing the security of

property rights (Be nhabib and Rustichini, 1996,Keefer and Knack, 2002)

Objectives

This paper focuses on the following objectives

1. To study the significant relationship between economical structure and social polarization in the process of urbanization.
2. To study the correlation between the factors associated with social polarization.
3. To identify the effects of social polarization in the process of urbanization and economic development.

METHODS AND MATERIALS

There are four variables in the study one of them is dependent factor and three of them are Independent factors influencing on it. The State domestic product data was collected from www.indiabudget.nic.in economic surveys 2012-13 with different states and union territories for year 2003 to 2012.The literacy rate information is taken from census of India and as it was in decadal form we have projected as for the requirements of the study by using least square technique. The urban population is collected from the report of "Selected Socio-Economic Statistics of india-2011" published by MOSPI, Government of India where we calculate the degree of urbanization by taking urban population and total population for different states with the years 2003-2012. The statistics of crime population is collected from the reports   of "Crime Statistics" published by the National Crime Records Bureau, Government of India for different states with the years 2003-2012. . The data has been analyzed through statistical tools like Karl Pearson's correlation and linear regression in this paper.

Analysis and Interpretation of data

Trends of the indicators for social polarization in India

A brief relation of urbanization process tending towards Social Polarization in India with different States has been analyzed in the paper.
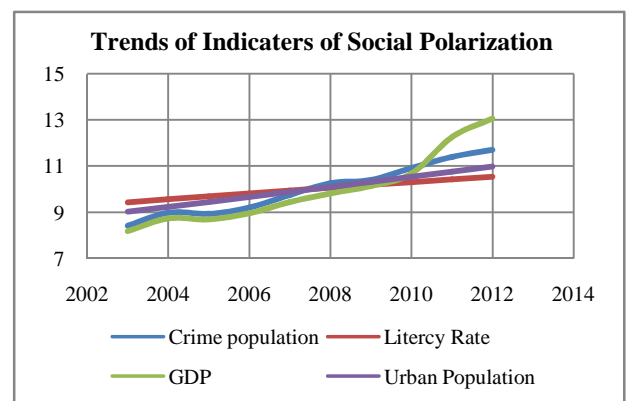

Figure 1 Represents the growth pattern of variables Crime population, Literacy Rate, GDP and Urban Population.

Figure 1 below presents the growth of factors undertaken for the study from the years 2003 to 2012 in India. The growth rates of these associated factors are intended to study in a decade where the figure is indicating trend that, here literacy rate and urban population are following the trend of linearity whereas the other two factors viz. crime population and Gross Domestic Product is observed that it is increasing at exponential trend. This may be true fact, because as the process of urbanization increases Literacy rate increases unfortunately crime population is also increases which lead to Social Polarization in India over a period of time.

To study the relationship between the factors associated for the Social Polarization that is Urban Population, Gross Domestic Product, Literacy Rate and Crime Population. The Karl-Pearson's coefficient of correlation is calculated.

Table 1 Represents the correlation between variables Crime population, Literacy Rate, GDP and Urban Population

	Crime population	Literacy Rate	GDP	Urban Population
Crime population	1	.990**	.963**	.991**
Literacy Rate	.990**	1	.940**	1.000**
GDP	.963**	.940**	1	.948**
Urban Population	.991**	1.000**	.948**	1
	Regression Coefficient	t	Sig	
GDP	.231	1.812	.113	
Urban population	.773	6.052	.001	

** Correlation is significant at the 0.01 level (2-tailed). *1% shows significant level**5% shows significant level

Table 2 Represents the average of all the indicators with respect to states in process of social polarization.

STATES	Crime Rate	Literacy Rate	SDP(%)	Urban Population (%)
Andhra Pradesh	2.13	66.33	9.65	27.58
Arunachal Pradesh	1.94	69.29	0.14	27.89
Assam	1.79	82.25	1.85	14.24
Bihar	1.25	65.45	3.46	10.49
Chhattisgarh	2.10	61.70	1.98	22.05
Goa	1.72	84.16	0.53	55.70
Gujarat	2.09	59.76	7.82	39.32
Haryana	2.16	72.37	4.30	32.03
Himachal Pradesh	2.00	85.61	0.87	10.61
Jammu & Kashmir	1.97	89.62	0.87	26.13
Jharkhand	1.22	66.16	6.69	22.93
Karnataka	2.20	70.78	4.61	36.09
Kerala	3.65	90.61	4.47	25.68
Madhya Pradesh	3.00	60.23	1.96	27.27
Maharashtra	1.81	69.30	5.01	44.95
Manipur	1.28	70.53	0.17	25.97
Meghalaya	0.87	92.96	0.24	20.27
Mizoram	2.19	93.20	0.10	51.96
Nagaland	0.50	71.20	0.21	17.25
Odisha	1.40	81.88	3.14	16.15
Punjab	1.23	76.68	3.81	36.98
Rajasthan	2.42	75.64	5.25	23.73
Sikkim	1.03	74.21	0.10	12.66
Tamil Nadu	2.64	85.95	9.16	50.85
Tripura	1.35	56.55	0.32	18.31
Uttar Pradesh	0.81	87.17	10.01	21.55
West Bengal	1.16	54.80	8.12	28.31
Chandigarh	2.78	75.56	0.35	89.82
Delhi	3.16	89.25	4.57	94.76
Pondicherry	0.20	60.15	0.22	68.26

Source: - www.censusofindia.gov.in, www.ncrb.gov.in, www.mospi.gov.in & www.indiabudget.nic.in

The result is presented in table 1 shows that there is a very high positive correlation between urban population where it indicates that urbanization have a strong impact with crime population which is associated factor for polarization. When we observe the correlation between urban population and literacy which has a perfect positive relationship. At surprisingly we have strong relationship with literacy rate and crime population which showing impact on social polarization. To proceed further we have carried out linear regression analysis for the data of India by taking urban population as dependent variable and three other factors as independent variables the results shows that there is 1% level of significance in case of literacy and GDP but it is showing Social Polarization across states.

Further the relation between crime rate and GDP and urban Population was studied results found that 1% significant relation between them is observed. It is true because as urbanization increases crime rate increases.

The averages of all the four indicators with respect to all the states in India with the process of social polarization in the context of urbanization process are considered in table 2. Here the indicators are Literacy rate, State Domestic Product, Crime Population and percentage of Urban Population for all the states.

Analysis of study reveals the average Crime Population for different states of India different Analysis of study indicates crime population we can observe that the states of Kerala, Madhya Pradesh, Maharashtra, Tamil Nadu, Goa, Rajasthan, Chandigarh and Delhi are showing high in the crime rate but in the states Pondicherry, Uttar Pradesh, Sikkim, Nagaland, Orissa, West Bengal are showing low crime rate.

As per the literacy is concerned, from the table 2 we can observed that in the states of the states of Kerala, Assam, Mizoram, Meghalaya and Tamil Nadu has shown high per cent of literacy rate whereas in the states of Bihar, Gujarat, Madhya Pradesh and Uttar Pradesh are showing low per cent of literacy rate. When we observe the State Domestic Product of all the states as per the table 2, Maharashtra, Delhi, Uttar Pradesh, Andhra Pradesh, Kerala, West Bengal and Karnataka are showing high SDP where as the North-Eastern states and some of states like Chandigarh, Orissa, Bihar and Goa are showing low SDP. As we notice from table2, the percentage of urban population for all the states viz. Maharashtra, Goa, Mizoram, Tamil Nadu, Delhi, Chandigarh and Pondicherry are showing high per cent of urban population and rest of the states are showing low percent of urban population in their states. As surprisingly observed that in state of Kerala and Delhi with high percent of literacy. We observe high crime rate pertaining to social polarization and in the states of high urban population like Delhi, Chandigarh and Maharashtra has high crime rate. As per our study all four indicators may cause social polarization in their own aspects. The high Crime Rate states are corresponding to states with high economic states and literacy.

The results of Table 3 were obtained by the method of linear regression analysis and by taking all the four factors into

consideration as urban population are dependent and another three factors are independent variable for all the states in India and results were obtained.

According to obtained results in the Table3 there was statistically significant relationship between literacy rate and SDP on the other hand no statistically significant relationship was found with the variable crime population and there is statistically significant at 1% significance level positive relationship between literacy rate on urban population in the states of Andhra Pradesh, Jharkhand, Manipur, Rajasthan, Sikkim, Tamil Nadu and Pondicherry.

As it is observed in Table 3 there is relationship at 1% significance level relationship between literacy rate as well as State Domestic Product on urban population in the states of Arunachal Pradesh, Assam, Chandigarh, Haryana and Himachal Pradesh.

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Table 3 Represents the Regression coefficients of the variables Literacy Rate, GDP and Crime Population.

States	Regression Coefficients of Variables		
	Literacy rate	GDP	Crime population
Andhra Pradesh	227.92*	0.00	0.00
Arunachal Pradesh	5.830*	0.011*	0.00
Assam	122.10*	0.00*	0.001*
Bihar	149.111*	0.00028*	0.00003**
Chandigarh	125.99*	0.002**	0.00
Delhi	879.06*	0.004**	0.0031**
Goa	125.99*	0.002**	0.00
Gujarat	125.99*	0.002**	0.00
Haryana	195.81*	0.001*	0.00
Himachal Pradesh	19.64*	0.0006*	0.00
Jammu-Kashmir	55.20*	0.00	0.00
Jharkhand	105.42*	0.00	0.00
Karnataka	462.50*	0.001*	0.00
Kerala	162.73*	0.0001*	0.00*
Madhya Pradesh	321.68*	0.006**	0.00
Maharashtra	1554.97*	0.00	0.0137**
Manipur	5.34*	0.00	0.00
Meghalaya	6.62*	0.002**	0.00
Mizoram	20.42*	0.00	0.00
Nagaland	3.93*	0.001*	0.00
Orissa	138.25*	0.0005*	0.001**
Pondicherry	48.04**	0.01	-0.03
Punjab	261.92*	0.001*	0.005*
Rajasthan	311.60*	0.00	0.00
Sikkim	2.48*	0.00	0.00
Tamil Nadu	1241.78*	0.00	0.00
Uttar Pradesh	853.87*	0.001**	0.00
West Bengal	686.14*	0.00	0.001**

*1% shows significant level**5% shows significant level

As it is notice form Table 3 that in the states of Delhi, Bihar, Maharashtra, Kerala, Orissa, Punjab and West Bengal crime population is also one of the influencing factor for urban population and economic development because there is 5% significance level relationship between the different factors i.e. Urban Population, Crime Population, SDP and Literacy Rate. The R^2 value nearly 100% variation in observation further, test for measure of multi co-linearity between the variables tested. It is found that there is no presence of multi co-linearity.

SUMMARY AND CONCLUSION

A attempt is made to recognize the effects of social polarization with respect to India and its cities, if we consider metropolitans like Bombay and Delhi in India, experience excess migration and supply of labor leading to unemployment of immigrants. Illiteracy and lack of skills causes incompatibility between the migrants and the recipient city.

This incompatibility enables a band circle leading not only to unemployment, but, Incompatibility between demand and supply of labor is responsible for the creation of an 'urban underclass' with totally different standards and values. This phenomenon is followed by degradation of such settlements and an increase in crime.

In the case of India, major regions like Mumbai, Delhi and Kolkata are highly dependent on the informal sector for employment generation. (Breman, 2002) describes the realities of the informal sector as vividly expressed in the existence of slums. In developed cities like Bombay, a major reason is traced to the scarcity of land and unrealistic real estate prices. Developing countries, marked by vast poor populations, see a rising trend of terrible living conditions and a divided urban social background

The relationship between the urbanization and the social polarization has a rather difficult and changeable according to the conditions of economic structure. The common belief about this issue is that a change in the economic structure and an occupational polarization emerges by the effect of the globalization and technological change and this affects the inequality among the castes that form the society.

In this context, the urbanization process and the effects of this process on the social polarization and income distribution. The changing industrialized structure together with the urbanization affects the working conditions, the employment of the workers in the manufacturing sector and their living conditions. As a result of this, the inequality of income distribution in the economies increases and social polarization might appear.

The analysis result shows that where there is development of economy in urbanization process of the states or cities there affects the inequality between formal and informal occupational structure then one of the output is increasing in crime rate and social dispute. Proper initiatives should be taken by the government to reducing the slums and redeveloping of settlements by concentrating on secondary settlements which are tending to develop as cities or towns.

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