

Growth of Industrial Cities in India: A Case Study of Jamshedpur

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Abstract: This paper seeks to examine the development and growth of Industrial cities in India using well-known industrial city Jamshedpur as a case study. Jamshedpur got recorded as an urban area in the Indian Census for the first time in 1911 with a population settlement of 5, 672 with establishment of a steel production unit in Sakchi in 1907. Jamshedpur town grew rapidly in size and has population over 677 thousand in 2011. While during the first fifty years, Jamshedpur experienced rapid growth but growth during the later part has been driven by growth of towns around Jamshedpur creating a vibrant urban agglomeration of 1.3 million in 2011. It is observed that despite being home of the oldest steel factory in India and recording creation of urban agglomeration of its own size, growth of Jamshedpur and its agglomeration has lacked the growth and development observed around other similar industrial towns in western and southern India. This may be due to a general regional sluggishness in the investment in the eastern region that has been marred by troubled industrial relation in the surrounding areas.

Keywords: Jamshedpur, industry, growth, agglomeration.

1. Introduction

Settlement of population since ancient times has attracted attention of scholars. Historically, major concern has been the size of the city from where the polity could have good governance (Mutlu, 1989). In modern times, the concern about cities is because of the size of the city that allows for economic efficiency and some degree of social equity (Mutlu, 1989). Drastic transformations in the state of knowledge and technology in the eighteenth and nineteenth century changed the production structure and processes (Dubey and Desai, 2014). These technological innovations required the setting up of the production processes in relatively smaller spaces. This process in technical terms is known as substitution of labour and capital for space (Dubey, 1991). This process of substitution brought together settlement of population to work on the newly emerging production processes that later on came to be recognized as industrial settlement giving rise to new type of urban settlement that has not been observed earlier. The primary driving force for such settlements is said to be significant productivity gains to factors of production (Sviekauskas, 1976). These significant productivity gains, dependent on the size of the settlement of population are also associated with rising labour incomes resulting in better living standards for the households (Nath, 1994; Dubey et al, 2001; Dubey and Mahadevia, 2001).

In many cases, these production processes were located at the existing sites having established port network, e.g. Manchester city in Britain. Further development of surface transport network with the development of railways facilitated settlement

of industrial units closer to the raw material availability. In India too, there were several cities that had emerged for a long duration as the places of governance, trade, religion and the like. But the development of railways in the 19th century started settlement of population at newer places like Jamshedpur.

Jamshedpur is one such town that was established in the beginning of the 20th century as home of the first privately owned steel factory in India at Sakchi in Singhbhum district. Subsequently, the town has got its name after the founder of the steel production unit, Sir Jamshedji Tata a little after the production unit became functional (Dutta, 1977). During the contemporary times, Jamshedpur is regarded as the industrial hub of the eastern region having a large number of sister concerns of TATA group of industries. In this paper, we investigate the growth of Jamshedpur as the major industrial city in contemporary India.

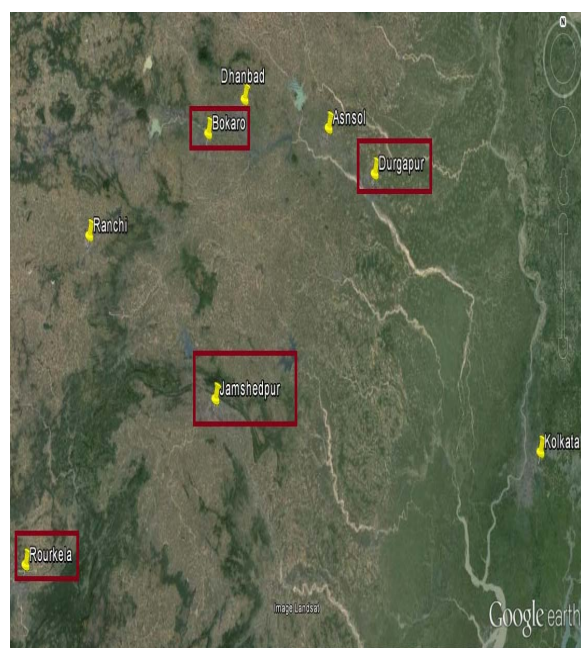
There are several studies that have investigated land use planning of Jamshedpur, e.g. Sinha and Singh. (2013). Kumar (2004) and Dutta (1977) is a comprehensive study of land use and population settlement from initial stage of development of Jamshedpur to the early 1970s. Studies by Singh (1993) compares the performance of steel industry in Jamshedpur and Rourkela while another study Chand (1990) examines the labour relations in the historical context. Clearly, there is scope to look at the evolution of Jamshedpur as one of the important industrial cities in India during the last one hundred years.

2. Growth of Jamshedpur

As pointed out above, as an industrial city, Jamshedpur is

located in one of the major industrial regions of India, the eastern region (Chhota Nagpur Plateau) (see Map 1).

Map 1: Industrial Regions in India



Historically, along with the development of Jute industry in the eastern region, Tata steel industry in Jamshedpur made the eastern region among the most industrially advanced regions.

Jamshedpur has been well researched in settlement geography and land use pattern. Jamshedpur is also known for its city management structure as large part of the Jamshedpur city is governed by the Tata group that manages the provision for basic urban services in Jamshedpur.

3. Population and Area

Starting with a small village of Sakshi in 1907 and initial population of 5,672, Jamshedpur is a large urban agglomeration with population of 13,47,595 comprising of three municipalities break-up of Jamshedpur and its constituents are given in table 1 below.

Like other urban areas and agglomerations in India, total workers within the Jamshedpur Urban Agglomeration are under 31% with very little variation in WPR across the NACs, CTs and OGs. Change in the population size of Jamshedpur since 1911 census is reported in figure 1. In the initial stages, population of Jamshedpur grew rapidly, recording decadal growth of 40% or more--- in fact within a decade, from 1911 to 1921, population of Jamshedpur grew nine time (911.3%). Thereafter, growth has been 46%, 77.6%, 46.7% and 39.1% between 1921 to 1931, 1931 to 1941, 1941 to 1951 and 1951 to 1961, respectively.

As apparent from figure 1 and 2, the rate of population growth of Jamshedpur NAC slowed down considerably after 1961. However, the effect of Jamshedpur has been felt on the surrounding areas as several census towns emerged around Jamshedpur expanding area of the Jamshedpur Urban Agglomeration (JUA). As apparent from table 2, the deceleration of population growth in Jamshedpur and Jugsalai is somewhat compensated by that of the population growth among the almost all of the census towns and about ten census towns around it. The detailed population

However, one of the important features of the population growth of Jamshedpur and its three important UAs shown in the figure above is that the population growth has stagnated in the older settlements. This is somewhat similar to the trend observed in India and Bihar (Jamshedpur has been part of Singhbhum district in Bihar before the formation of Jharkhand in 2001). What is surprising in the observed growth of population in JUA is that it has slowed down during the period when there is marked change in the Indian policy regime for encouraging industrial investment.

A possible explanation of relative slow down is the overall sluggishness in the investment in the eastern Region itself. Since the eastern region has been struggling with various kinds of industrial disputes that has resulted in not only new investments going to Western and Southern regions but also reported flight of capital and investment from Eastern Region to the other regions. This could be seen from the stagnation of population in and around Kolkata Urban Agglomeration that has been less than 10% in recent decades.

Table 1: Jamshedpur Urban Agglomeration in 2011

Name	TOT_P	TOT_WORK_P	WPR	%Cult	%Alab	%HH	%OT
Mango (NAC)	223805	64039	28.6	0.4	0.7	1.5	97.4
Jamshedpur (NAC + OG)	677350	211538	31.2	0.2	0.6	2.0	97.2
Jugsalai (M)	49660	14729	29.7	0.3	0.4	3.8	95.6
Bagbera (CT)	78356	24630	31.4	0.5	0.9	1.7	96.9
Haludbani (CT)	25360	8117	32.0	0.4	0.7	1.8	97.1
Sarjamda (CT)	23788	7411	31.2	0.2	1.3	1.5	97.0
Gadhra (CT)	18801	5716	30.4	0.9	1.1	2.1	96.0
Chhota Gobindpur (CT)	31843	8928	28.0	0.3	1.1	1.9	96.8
Ghorabandha (CT)	20718	6127	29.6	0.4	0.3	1.6	97.7
Purihasa (CT)	7897	2454	31.1	0.1	5.7	1.4	92.8
Adityapur (NP)	174355	53457	30.7	1.0	1.5	1.9	95.6
Kandra (CT)	8157	2612	32.0	1.6	1.0	3.0	94.4
Chota Gamahria (CT)	7505	2214	29.5	0.1	0.4	2.7	96.8
Jamshedpur UA	1347595	411972	30.6	0.4	0.8	2.0	96.9

Source: Census of India, 2011.

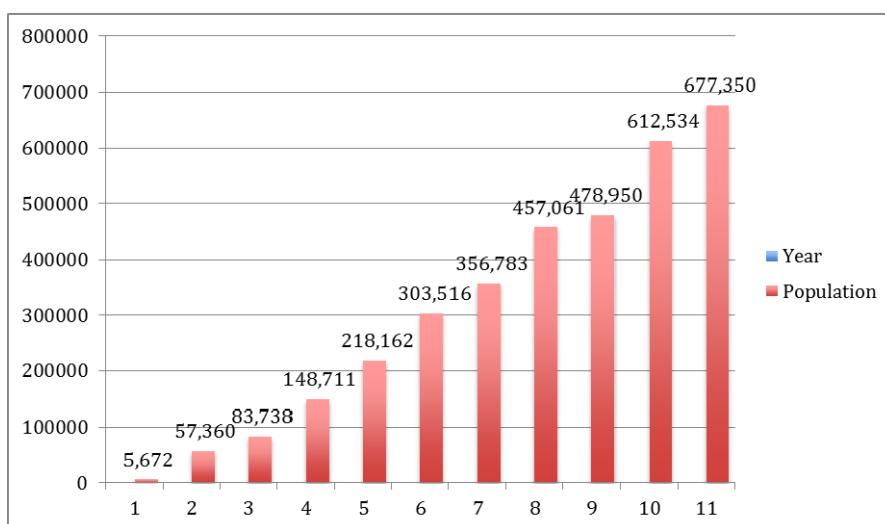


Figure 1: Population of Jamshedpur NAC and OG since 1911

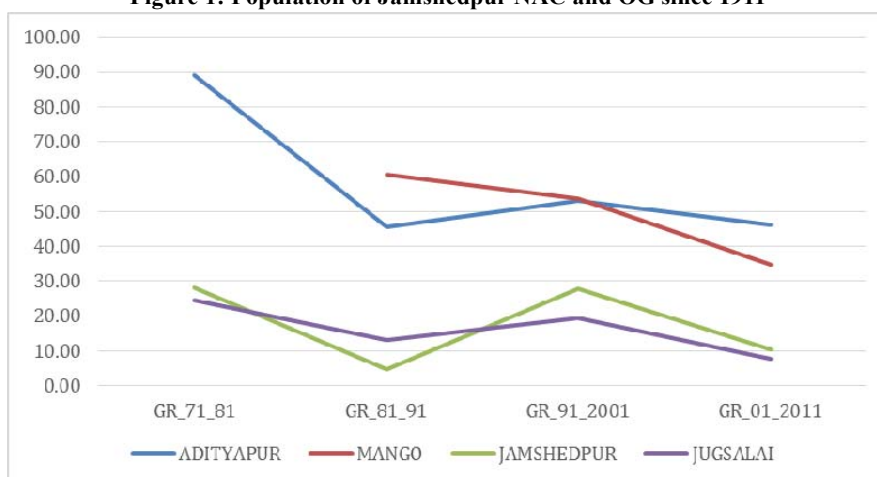


Figure 2: Decadal Population growth of towns around Jamshedpur

Table 2: Decadal population growth of Constituent towns of JUA

Town_Name	STATUS	GR_61_71	GR_71_81	GR_81_91	POP_2001	GR_91_2001	POP_2011	GR_01_2011
Adityapur	NP		89.26	45.64	119,233	53.25	174355	46.23
Mango	NAC			60.66	166,125	53.68	223805	34.72
Jamshedpur	NAC	17.55	28.11	4.79	612,534	27.89	677350	10.58
Jugsalai	M	11.56	24.69	13.20	46,114	19.40	49660	7.69
Bagbera	CT		52.25	33.55	67,121	17.68	78356	16.74
Haludabni	CT			0.00	19,929	34.38	25360	27.25
Sarjamda	CT			0.00	18,385	77.84	23788	29.39
Gadhra	CT			39.27	15,767	8.09	18801	19.24
Chhota Gobindpur	CT			29.25	24,781	27.95	31843	28.50
Ghorabandha	CT			0.00	14,724	54.45	20718	40.71
Purihasa (CT)	CT						7897	
Kandra (CT)	CT						8157	
Chota Gamahria (CT)	CT						7505	

Source: As in Table 1

Table 3: Growth of the urban population in India and Bihar (1901-2011)

Census Year	India	Bihar	India	Bihar	India	Bihar	India	Bihar
	No of Towns		Urban Population in Million		% Urban to Total Population		Decadal Gr Rate of Urban Population	
1901	1834	44	25.6	0.9	11.0	4.01	-	-
1911	1776	43	25.6	0.9	10.4	3.80	0.0	0.6
1921	1920	46	27.7	0.9	11.3	4.15	0.79	0.0
1931	2049	47	33	1.0	12.2	4.54	1.77	1.9
1941	2210	52	43.6	1.3	14.1	5.41	2.82	2.3
1951	2044	67	61.6	1.8	17.6	6.70	3.52	3.3
1961	2330	85	77.6	2.5	18.3	8.43	2.34	3.9
1971	2297	97	107	3.3	20.2	7.97	3.26	2.9
1981	3245	114	156	5.1	23.7	9.84	3.86	5.5
1991	3609	127	224	6.7	25.7	10.40	3.64	3.0
2001	5161	130	286	8.6	27.8	10.46	3.15	3.3
2011	7935	199	377	11.7	31.2	11.30	3.18	3.5

4. Discussion and conclusions

The preliminary investigation of growth of Jamshedpur as an industrial town in India suggest that since the inception of Tata Steel industry in 1907, there has been several fold increase in the economic activities in Jamshedpur by the Tata Group in recent decades. This expansion of economic activities has generated substantial economies of scale and stimulated settlement of a large number of institutions in and around Jamshedpur. But it is surprising to note that somewhat limited number of other industrial firms from other groups is located in and around Jamshedpur. As pointed out earlier, one possible explanation for the recent stagnation in growth of Jamshedpur could be the general stagnation in investment in the eastern region in India. Beginning with the decade of 1970s, primate city agglomeration in the region, Kolkata UA has been on the

decline because of growing number of industrial disputes. This is perhaps triggered flight of capital from the eastern region in general affecting the investment climate in the region as a whole. Despite the industrialisation friendly policy regime that India has been following for last three decades or so, eastern region in general and Jamshedpur in particular could not attract newer investment resulting in the stagnation in its growth. This sluggishness in investment has been making southern and western region as important industrial region (see Map 1 above for the location).

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