

The Sustainable Is Illegal: A Socio-Economic Analysis of Indian Cities

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Abstract

The government of India introduced 'Smart Cities Mission' in the year 2015. As per their vision statement, this is to ensure an inclusive, culturally vibrant, efficient and financially viable city. Enhancing efficiency and transparency will not be sustainable, when the very foundation of the city is faulty. This paper discusses the economic reality of India – where income generation is the most important concern for the majority - and argues that Indian cities cannot be inclusive until there is a shift in planners' and resident's perspective. This paper uses the socio-economic survey data collected thru government and private surveys to illustrate how third-world countries with their first-world dreams fail its poor - denying them of a livelihood - the very basis for their survival.

Key words: Livelihoods, inclusive and sustainable cities, dream cities

1.0 Introduction

India is expected to surpass China and become the most populous country in the world by 2027 (Niti Ayog, 2021)¹, with urban population growing to 40% of total population (MGI, 2020)² as against the current 35% (Statistica, 2022)³ The majority of this urban population surge will be attracted in the existing mega cities - moving from the core to the periphery in some, densifying the core in others with reduction in growth in Eastern metros (Haque & Patel, 2017)⁴.

Cities are regarded as the engines of economic growth and 70-75% of the current GDP of India is generated in her cities (Rajbir Sandhu, LinkedIn)⁵. Indian cities lack adequate and efficient sanitation, transportation, waste disposal, housing and transparent governance to name a few. This paper postulates that the problem of Indian cities is not just quantification and efficient

management but that the very basis of our urban planning is flawed and until that is rectified, the problem of under-performing cities will not be solved.

2. Literature Review

Economic changes during British era
The European powers colonized Latin America, Africa, Asia and Australia to exploit and profit from their natural and human resources. India before the advent of the colonizers commanded 28% of the world trade with spices and textiles being its main exports with gold and silver being its main imports. There were many handicraft workshops including royal 'karkhanas' and almost every village had weavers. When the British left, India was exporting raw material to the industries in the west, and its share of world trade was down to 2%. Indian handicrafts were in neglect with the elite preferring refined imported industrial products leading to deindustrialization in India (Meena, H.K., 2017)⁶.

“Empirical studies show that in 1881, the number of workers engaged in agricultural activities stood at 71.7 million which swelled to 100.2 million by the end of 1931, as against this, people engaged in industrial activities declined from 21.1 million to 12.9 million between 1881 and 1931.” (ibid)⁶

Historically, the traditional Indian village was a self-sufficient entity with land being held commonly by the community and individuals simply living and farming on the parcel of common land they could till. The British, by decree, made land a personal commodity. They allotted large tracts of land to Zamindars under ‘permanent settlement’ to collect tax on their behalf, or initiated the Roytwari and Mahalwari systems where tax was collected directly from each individual farmer or the village committee respectively. (ibid)⁶. When unable to pay tax, the peasants were forced to borrow money from the money lender and when unable to pay back, lost their land. This rendered many people landless. The unemployed craftsmen, due to import of cheap machine goods from England, and the landless workers were exploited for their labour in the city-based industries. (Eric Stokes, 2009)⁷

2.1.2 Cities in the British Raj

Population in urban areas before the British Raj is understood to be about 10% which grew to 15% under Colonial Rule (Siddiqui M. A.,1971)⁸. Urban population recorded in 1951, the first census of independent India, was 17.3% (Pandey Abhishek, 2020)⁹. (United Nations Population Division gives population in 1960 as 17.92).

The Colonial city had a center and a periphery. The center accommodated power - the bureaucracy, the police, the military and the money to run it – banks, money lenders and merchants. (Fox, R.G., 2022)¹⁰. The British lived inside the Fort area or the area just outside it in the Civil Lines with the Cantonment area housing the armed forces nearby. The native officers of the Raj, the elite, who emulated British culture and values were also later permitted in while the rest of the ‘natives’ stayed in the periphery in the ‘black town’. And dotting the elite core were the hutments of their ‘khidmatgars’ or house help. All planning was done for the center. The periphery, considered inferior as they continued with their customs and beliefs, looked after themselves, came in to work in the formal city and went back into their spontaneous settlements. (Spodek,H.2013)¹¹

2.1.3 Colonialism, post-colonialism and Neocolonialism

a) Colonialism was direct control over the economic and human resources of the colonized. The Colonizers left a lasting impression on the colonized elite – imbibing in them a feeling of being aligned with the colonizers (Drew, C. 2022)¹² - whose ways were ‘superior’ and to be emulated.

b) Post colonialism is when the independent nation continues with the outlook, administrative and legal system of the colonizers. India, African nations, Thailand, Burma, Indonesia, Vietnam among others, struggle with the same baggage. Under the system of assimilation, the colonizers transformed the native elite and their local administrators to think, behave, and follow a lifestyle and thought process like them.

“The selfish and exploitative character of the master-colony relationship that reigned in the colonialism time continued in different forms even after colonialism was long gone, and continues to impact contemporary African politics” (Alemazung, J.A., 2010)¹³.

c) Neocolonialism is a situation when financial donors and international NGOs dictate policy in return for development funding. (Langan, M. 2018)¹⁴. Neocolonialism controls the developing country not by military power, but by cultural imperialism, financial aid and strategic military alliances (Drew, C. 2022)¹². Industries set up in the fast-developing industrial enclaves in Developing countries under foreign direct investments from ‘export capital from advanced industrial nations’ are more for export for the world market than for local consumption or for the home elite. They use the cheap labour available for their growth - attracting labour and talent from other parts of the country. As much of the labour is outsourced thru contracts hiring informal workers gives rise to shanty towns (Fox, R.G., 2022)¹⁰.

In her rejection of the colonial systems yet wanting to modernize and benefit from the industrial revolution of the west, India turned to USA for expert guidance and financial support. In 1954, the Indian health minister sought help from the Ford Foundation, (already working in India since 1951 to help increase productivity of farmers, planning, education and technology), to develop a regional plan for Delhi. American and British specialists were brought in by the Ford Foundation to assist in the making of Delhi’s Master Plan (Menon, N., 2021)¹⁵(Wells, S.C., 2020)¹⁶.

American cities were facing migration of African American and Puerto Rican people while the urban areas in the developing countries people were facing a similar challenge of migration from rural areas. Both were viewed as similar situations leading to delinquency, crime, under employment and poor living conditions. It was believed that people’s attitudes and not their pitiable exploited situation was responsible for their poor living standards. On finding that simply attempting to change people’s attitudes and organizing them into self-help groups was not solving the ghettos people lived in, Ford Foundation shifted its focus on attracting capital, businesses and the elite into the urban area. (ibid)¹⁶

In the 1950s and 1960s British planners and architects, such as Maxwell Fry, Jane Drew, and Roy Gazzard, among others, fanned out across the postcolonial world, building cities for the newly independent nations of Asia and Africa. Architect Albert Mayer, head of the Ford planning team in Delhi, was accompanied by British architect Gordon Cullen, an urban planner, a public administrator, an economist, a transport planner, a regional planner, and a urban sociologist on the Delhi Master Plan of 1962 and the Calcutta Basic Development Plan of 1966 (Subramaniam, D. 2020)¹⁷

2.2 Urban Vs Rural: Land area, population, GDP share

Urban India has 1/13th the land, 2/5th the population (Data, World Bank)¹⁸ and generates nearly double the GDP as compared to rural India (Sandhu R.,2020)¹⁹. Figure 1 below shows the land area, population and share of GDP for Urban and Rural India as per UN data of the year 2010.

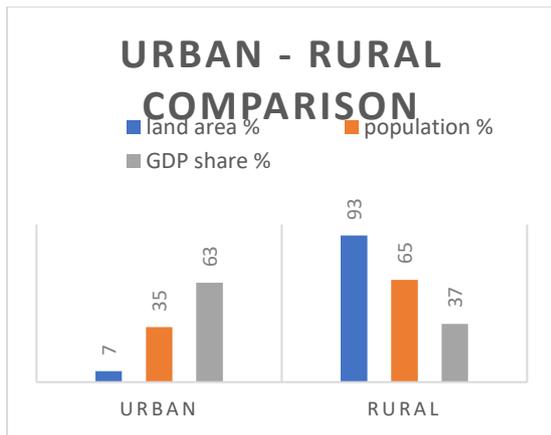


Figure 1: land, population, GDP share and income of Rural and Urban India

Source: World Bank Data - population and land area share, Rajbir Sandhu, LinkedIn: GDP & National income

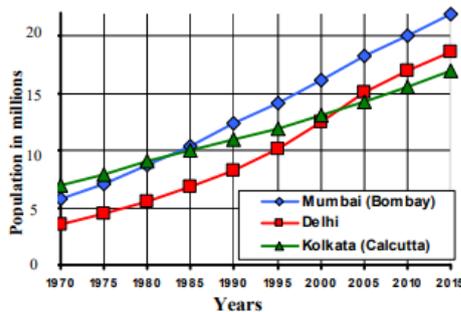


Figure 2: Population growth in Indian mega cities since the 1970s

Source: Tobenbock, H. 2008

Indian Urban areas have been steadily expanding incorporating the surrounding rural hinterland. Maximum growth however has been seen in the metropolitan cities of Delhi and Mumbai while growth of Kolkata has slowed down (Tobenbock, H. 2008)²⁰ See figure 2 above.

2.3 Migration

Majority of migration in India is rural to rural – both seasonal and permanent. In rural-to-rural migration, less educated and more advanced age groups move with their household. Rural to urban migration may be on account of economic, educational or medical reasons. Younger and

comparatively better educated men make this move and may or may not bring their families depending on the level of their affordability. They are generally landless farm workers or from distressed farming families, with low skill levels finding employment as low paid unskilled informal or as contractual worker. Some of them are skilled or semi-skilled workers like plumber, carpenters, painters, masons etc. most of whom go back to their villages for crop sowing, harvesting, major festivals, and family events like marriages and death ceremonies. They also form the group who send maximum money home to their family in the village. Single women migrate generally due to marriage, though the percentage of single women moving for career advancement is gradually increasing. 70% of the study sample of people who migrated to Delhi NCR did not own any land in their village. Of those who did, 70% owned agricultural land of less than 3 Acres. As they come from low-income rural families, with villages lacking good education facilities, their education level is low. Three fourths of migrants in the study group owned a house in their village. (Bora,R.S. 2014)²¹

Facing acute economic stress with small and marginal farm holdings (below two hectares) constituting 86.21% of the total farm land (Krishnan V. ,2018)²², people are forced to migrate to cities to supplement farm income.

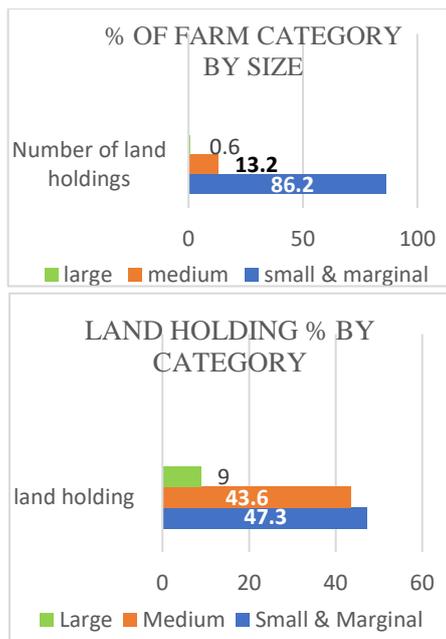


Fig. 18 a) Percentage of farmland holdings by size. b) Percentage of land held by category Source: Krishnan V, 2018⁴⁸ By Author

It has been observed that the poorest will not travel the farthest and tends to stay in the same district. The comparatively economically better off send their children to far off urban areas to earn. Family and extended family support is important to make this transition. (Keshari and Bhagat, 2010)²³

2.4 Skill levels in India

2.4.1 Skill level Classification

With Globalization and high worker mobility, common skill standards were set by the International Labour Organization and every country was required to map and classify the skill set and level of their work force. International Labour Organization under ISCO-88, 2004 (International Standard Classification of Occupations) defines ‘Skill’ as “the ability to carry out the tasks and duties of a given job”. This has two components:

1. Skill level: range of tasks and duties to be performed
2. Skill specialization: field of knowledge

Government of India classifies skill under 4 categories Levels 1 thru 4 (Ministry of Labour & Employment, 2015).

Skill level classification is not applicable on legislators, senior officials, and managers as skills required for these jobs went beyond skill in a particular field.

Skill Level	Skill Definition
I	Typically involves the performance of simple and routine physical or manual tasks
II	Typically involves the performance of tasks such as operating a machinery and electronic equipment, driving vehicles, maintenance and repair of electrical and mechanical equipment, and manipulation, ordering, and storage information
III	Typically involves performance of complex technical and practical tasks that require an extensive body of factual, technical, and procedural knowledge in a specialized field
IV	Typically involves the performance of tasks that require complex problem-solving, decision-making, and creativity based on an extensive body of theoretical and factual knowledge in a specialized field

Figure 3: National Classification of Occupations 2015

Source: Ministry of Labour & Employment, GOI

Each skill level was assigned a level of education that every country could modify as per their conditions. India has low penetration of formal education with skills learnt informally. With computer use entering many skills, some formal learning may also be required. Figure 4 below shows National educational classification by government of India against international standards.

2.4.2 Skill Availability in India

There is a range of skill estimation for various countries. Some surveys depict **formally** skilled manpower. Other mention skilled manpower. In 2014 skilled labour force in India was 2% of total workforce

(Labour Bureau, 2015)²⁵. As per the 2018 survey the proportion of **formally** skilled workers in India was 4.69% compared to 24% in China, 52% in the US, 68% in the UK, 75% in Germany, 80% in Japan and 96% in South Korea (Shukla, Rajesh et al., 2019)²⁶ as shown in figure 4 below. Skilled workforce will generally be more than **formally** skilled workforce, as many may have enhanced skill on the job instead of receiving any formal training



Figure 5: formally skilled workers in India in 2018 by the author. source: Shukla, Rajesh et al, 2019

85% of the population in India has skill levels 1 and 2 and 15% has skill levels 3 and 4 (The Hindu Data Team, 2018)²⁷. United Nations puts India's skilled workforce at 21% (UNDP, 2020)²⁸. Overlapping figure 4 with Human Development Report 2020, comparative global skilled manpower stood.

In India there is poor quality of teaching up to secondary level as well as in vocational training. There is also a mismatch between the skill set available in the trained manpower and that required by employers (Mehrotra et al, 2013)²⁹.

2.5 India's Age Dividend – can be provider of manpower to the World

When the working population in the age group of 15 to 59 years supports fewer children (0 to 14 years) and old people (60+ years) there is great economic progress. Due to less dependents, the country's production of goods and services can outstrip consumption. According to 2011 Census, India's ratio of working age population grew to 60 percent while child population was at 30 percent, and the old age population grew to 8.6 percent. However, this age dividend will be offset by rising ratio of the old population in next few decades. (Bhagat R.B., 2014)³⁰

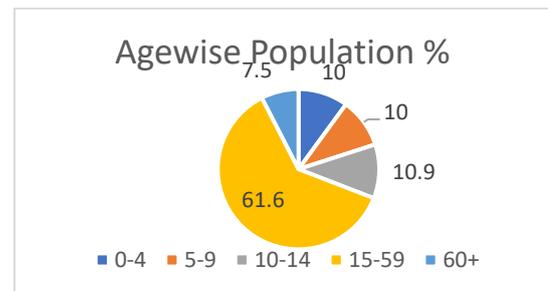


Fig. 7: Age structure of the Indian population in the year 2010 Source: Bhagat R.B.²⁹ By: Author

India has a golden window till the year 2050 when, as per UN projections, the working population percentage will peak. Refer fig. 7 below.

Projection of the Indian Population by Major Age Groups
Total population by major age groups

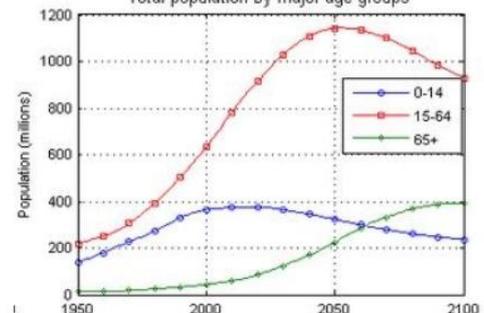


Fig. 8: Projection of the Indian Population till 2100 by Major Age Groups

The increase in workers cannot be absorbed by the primary sector, producing low value addition, as India already has a very high percentage of the workforce engaged in agriculture compared to the developed economies. The Manufacturing and Services sector will have to expand to absorb the increased workforce. Small and medium manufacturing enterprises as well as labour intensive manufacturing needs to be encouraged. This can lead to substantial increase in national income and a higher standard of living for all (Talreja C.2014)³¹. Health, education, infrastructure, good governance, trade as well as efficiency of good governance are also needed.

“On the supply side, a huge skill gap has to be bridged while on the demand side, there is need for skill matching and the creation of opportunities” (ibid.)³¹

The developed world and China have an ageing population due to increase in life expectancy and drop in fertility rate. The elders will need to work for longer years to reduce pension and social security load while the working population will need to pay higher taxes to support them. Japan had a 31% share of 60+ population projected to 42% by 2050. (Bloom et al., 2011)³². “By 2050, one in four persons living in Europe and Northern America could be aged 65 or over.” (United Nations, 2019)³³. To compensate for the aging population, a large number of immigrants would need to be brought in. However, no country would like to take in unskilled migrants and increase competition with their own citizens cutting their minimum wages. (Bloom et al., 2011)³². India’s trained workforce has a great opportunity to seek employment in the developed nations of the world, fluent

English skills being another great advantage. The demographic profile of Latin America is similar to India while Africa has a large dependent child population to support. Refer figure 6 below.

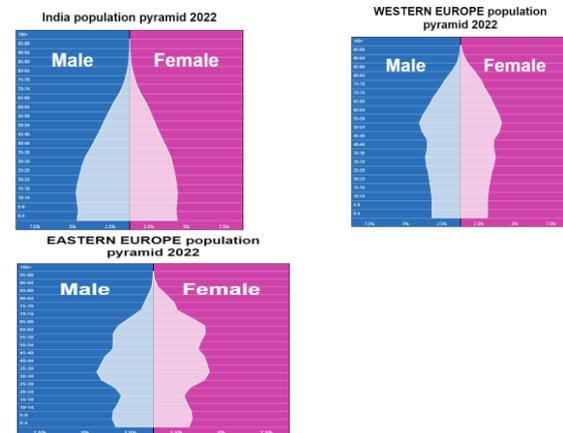


Figure 9: Age and Sex pyramid of various world regions and countries in 2022

Source:

<https://worldpopulationpyramid.info/> ³⁴
based on UN statistics

2.6 Employment in India

2.6.1 Employment Sectors - India’s GDP Composition over time

There are three main sectors contributing to GP:

1. **Primary Sector:** comprising agriculture, forestry, fishing, and mining & quarrying
2. **Secondary Sector:** comprising manufacturing, electricity, gas, water supply & other utility services, and construction
3. **Tertiary Sector:** Trade and Commerce, Transportation and Services

Primary Sector: India has traditionally been primarily an agrarian economy. Due to the historical crippling effects of colonialism and small unsustainable farm holdings due to population growth as well as increasing cost of production, the share of GDP from agriculture has steadily

declined even though it absorbs 43% of the labour force. Like all colonized countries, at the time of independence, India did not have capital accumulation for competitive industries, which grew at a very slow pace. The service sector became the highest grosser of GDP, currently at near 59%. (Mukunthan A., 2015)³⁵

Secondary and Tertiary Sectors: The industry and services sectors, which constitutes more than 80 per cent of the gross value added in the country, provides employment to 54.4 per cent of the workforce, and, agriculture, which accounted for 18.29 per cent of GVA in 2019–20, retains 45.6 per cent workforce (Chand & Singh, 2022)³⁶

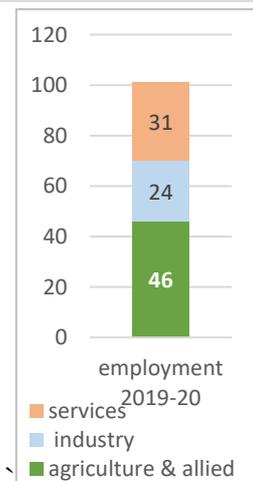
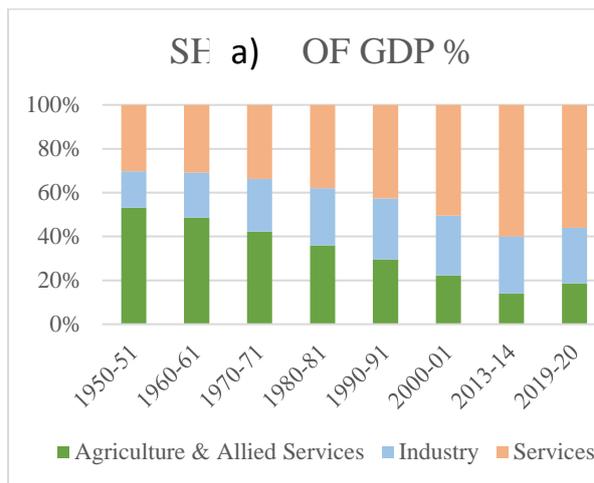


Fig 10: a) India's GDP composition over time b) sector wise

employment 2019-20

Source: Mukunthan A.2015, Niti Ayog 2022 & Statisticstimes.com³⁷
By Author.

The same data as above plotted in line form, refer figure 7 below, shows how the share in GDP of the primary sector, currently using traditionally trained workforce, has been steadily declining. GDP share of the skilled workforce in Industry has been nearly steady with slight increase, while GDP share of the higher skilled tertiary sector has been highest. Industry has seen an increase in GDP with automation without increase in manpower. Jobs in India will be created by micro, small and medium sized enterprises (Jha and Mohapatra, 2020)³⁸ and creative innovation.

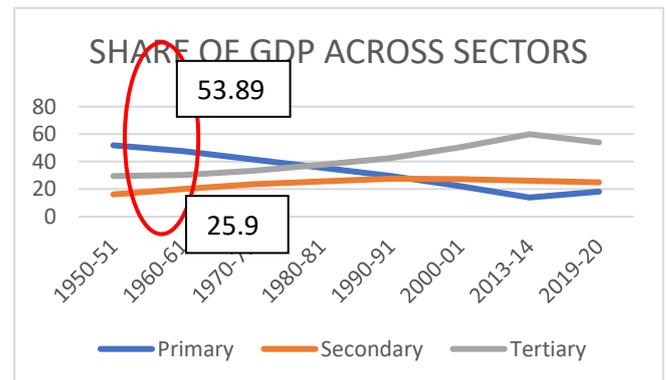


Fig 11: Same data as in Fig 6 above in different format By Author

Source: Mukunthan A.2015, Niti Ayog 2022 & Statisticstimes.com³⁷

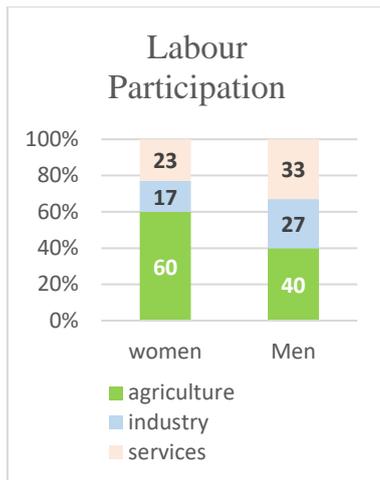


Fig. 12: Sector wise Labour participation 2019-20

Source: Chand & Singh, 2022³⁶ By: Author

2.6.2 Labour Force Participation

Labour force participation in the urban workforce of age group 15-60 shows that on average, 57% of men are employed as against 18% of women. Refer Table 3 below.

Year	Employment status	Rural			Urban			Rural + Urban		
		Male	Female	Person	Male	Female	Person	Male	Female	P
2017-18	US	54.90	18.18	36.99	56.98	15.87	36.79	55.51	17.50	
2018-19	US	55.14	19.65	37.71	56.72	16.10	36.94	55.62	18.58	
2019-20	US	56.33	24.68	40.78	57.84	18.49	38.59	56.79	22.80	
2017-18	CWS	54.25	16.04	35.61	56.60	15.28	36.31	54.93	15.81	
2018-19	CWS	54.36	16.70	35.86	56.63	15.54	36.62	55.05	16.35	
2019-20	CWS	55.35	21.08	38.51	57.13	17.51	37.75	55.89	20.00	

Table 1: Labour force participation rate (%) in rural and urban households by gender and work status 2017-18 to 2019-20 Note: US (Usual status) include principal and subsidiary status and CWS refers to Current Weekly Status

2.6.3 Level of Informality in Employment

Labour absorption has been highest in the primary sector, near steady in the manufacturing sector and steadily increasing in the tertiary sector. Refer fig.3 above. The major employer in the secondary sector, under non-manufacturing has been construction sector buoyed by the large sale infrastructure

development. In the tertiary sector, largest employer has been wholesale and retail. A large part of the organized sector employment is of an informal nature. (Talreja C., 2014)³¹.

More than 90% of employment and about 50% of the National Product is accounted for by the informal economy (Ministry of Labour and Employment, 2014)³⁹. The informal economy consists of the informal employment and the informal enterprise. Every country defines its own criteria for defining job informality thresholds. In India an informal factory is that which employs or has employed in the past twelve months, less than 20 workers for an enterprise not requiring power, and employing up to 10 workers for power-based production (Ministry of Labour and Employment)⁴⁰. Now with many villages getting an electricity connection, the limit has been increased to 20 workers with or without power. Informal employment is any employment without a formal contract or term with no social security. An informal enterprise will be one run by an individual or by family members with or without employing informal workers. Informality of employment and informality of enterprise is less than 20% in developed countries, (Ohnsorge and Shu 2021)⁴¹, and above 50% in poor developing countries (Chen et al 2018)⁴². Most retail, professional activity as well other skilled and semi-skilled work will fall under informal sector.

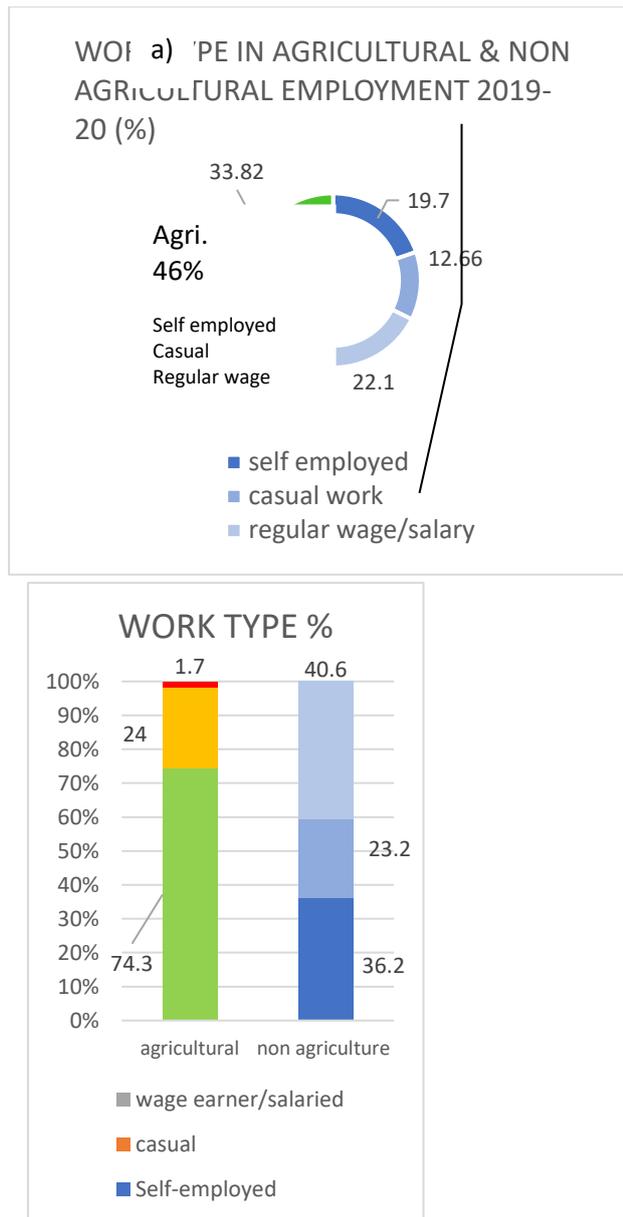


Figure 13: a) Percentage of Self-employed, salaried, casual worker in non-agriculture and agriculture sector combined. b) same as a) but percentages shown separately for agriculture and non-agriculture employment.

2.6.4 Employment Opportunity

As per the socio-economic survey conducted by the Government of Delhi, 41% of all business establishments were Own Account Establishments (OAE) manned by one person or by members of a family with no hired help. Retail trade formed the largest number of establishments with a near 50% share of the total establishments, engaging around 25% of the working population. This means that though there are many outlets, they are mostly run by the owner and his family. Community/social/personal services came next and comprised 9.99% of the total establishments, engaging near 16% of working population. Services thus offers employment for more people per establishment but its share is smaller than retain and manufacturing. Manufacturing and Services was the largest employer with 18% of establishments engaging 31% of the working population (Ed. Directorate of Economics & Statistics 2005)⁴³. Refer Fig. 10. Retail and manufacturing offered dispersed informal earning opportunity, and between them cornered two-thirds of the economic establishments. Nearly 5% of the total employment in Delhi did not have a fixed place of operation – this would include plumbers, electricians, street vendors etc.

The 2020-21 sixth socio-economic survey of Delhi, during COVID lockdown, shows a similar inverse proportion in Manufacturing and Retail. Manufacturing has 18% of establishments and is a source of livelihood to near double that number of people at 33% while Retail has 36% of establishments and is a source of livelihood for 2/3rd of that at 22% of people. Together Manufacturing and Retail have 54% of establishments with 55% of

employment. So, these are the two strongest sectors of employment. Transport-and-storage comes a far third with near 9% establishments and 6% employment. In 2005-6 the third place was of Services with nearly 10% of enterprises employing 16% of the working population, which would have been negatively impacted due to COVID in the 2020- 21 and so reflected in the survey.

India has a very different economic profile and affordability threshold than the countries of the global North. World Bank presents economic profile of various countries expressed in 2011 purchasing power parity, where poor and low income earn less than or equal to \$4 per person per day, middle income earns \$4 to \$10 per person per day and High Middle and high income earn more than \$10 per person per day. Where USA and Europe have a near 90% of population being High Middle and High income, 95% of India's population are in low middle and low-income category. (World Bank)⁴⁴

2.7 Use of Urban Space

2.7.1 Public Space

In the academic discourse of public spaces, the main forms are:

1. Streets and sidewalks
2. Boulevard and Promenades/Arcades
3. Parks and beaches
4. Public buildings including government buildings, offices and museums

The key functions attributed to the spaces listed above are:

1. Leisure and sports
2. Political: to hold rallies and meetings
3. Culture and History: cultural and/or historic buildings
4. Consumption: markets and malls

5. Traffic and Transport: vehicular, bicycle and pedestrian pathways and hubs (Chen et al, 2018)

Informal activity is considered disorderly and a source of crime. Informal activity faces a 'hostile, legal and regulatory environment' (Brown, 2006)⁴⁵. The rich and powerful tend to lay permanent claim to public land (Hackenbroch 2012)⁴⁶ while the poor have to negotiate and bargain using their political voting strength for permission to use gaps in the city like spaces under bridges, edges of railway lines, steep slopes, low lands prone to flooding, lands without legal title like urban villages etc. with the constant fear of harassment, eviction and confiscation. The poor use public space for living, as extended social spaces and for economic activity. Informality by the elite, by way of roadside parking etc. is legal but informality of the poor is criminalized. Visual order is often mistaken for progress and modernism (Chen et al. 2018)⁴².

2.7.2 Percentage of people who live in unplanned areas of the city and why

Mega cities of Asia, Africa and Latin America are seeing growth of slums. In the year 2001, 31.6% of the world urban population and 43% of the total population of Developing Countries lived in slums. 71.9% of Sub-Saharan Africa and 58% of south-central Asia lived in slums. (UN Habitat report, 2003)

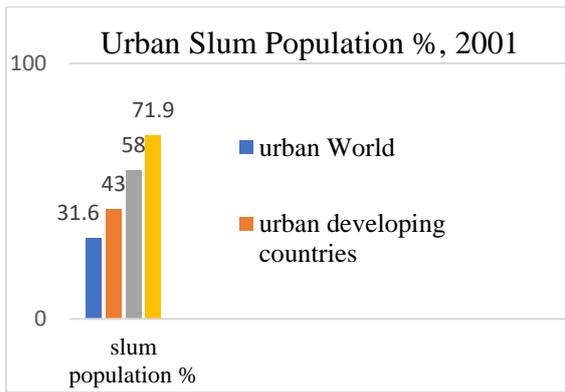


Fig. 16. Urban Slum Population Percentage Source: UN Habitat Report 2003⁴⁷ By: Author

In urban India, 20% of land is occupied by over 70% of the under-privileged and low-income categories whereas 30% middle and higher-income class have access to 80% of land. A little less than one fourth of Delhi residents live in planned areas (ibid)⁴⁷, refer figure 11 below. In 2020, 65% of Mumbai’s population lived in slums (Reuters, 2020)⁴⁸ up from 62% in 2010 (Hindustan Times, 2010)⁴⁹

While the cost of land and development should reasonably be 20-40% of property cost and building construction cost should be 60-80%. There are many situations where land and development cost alone accounts for 80-90% of the cost of the product with only 10% going into building construction cost. (Kaushik, I. 2013)⁵⁰

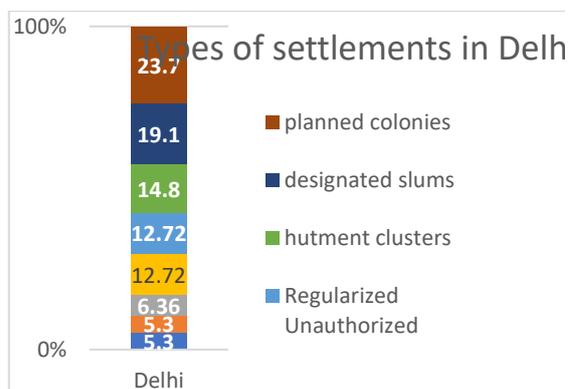


Fig. 17: Types of Settlements in Delhi

2.7.3 Slums offer challenges and opportunities:

Slums provide the cheapest accommodation to new migrants who provide the cheapest workforce to the city. They are often evicted from their place of stay or work as they do not have legal right over the urban land they occupy. (Dutta, A.2016)⁵¹. The problem of slum dwellers is employment and ensuring them good physical and social infrastructure alone will not help. They need better livelihood opportunities. In Kenya the UN funded projects were shifting the slum dwellers to better accommodation on the periphery of the city, but they refused to go asking instead for low rise tenanted accommodation near their place of work (Warrah, R. 2003)⁵².

Smart City Mission, GOI

Five Dimensions of urban prosperity were listed out in UN-Habitat 2013: Enhanced productivity, infrastructure development, equity and social inclusion, quality of life, and environmental sustainability (UN-Habitat, 2013)⁵³. In 2015 GOI launched the ‘Smart Cities Mission’ subdividing it into sub missions for clean, transparent governance, culture specific development, clean India drive, greenfield and brownfield redevelopment. It was further added to Clean India, skill India and Make in India Missions (Ed. Verma and Bansal, 2016).

2.9 Cities and Complexity

“Cities are largely unpredictable because they are complex systems that are more like organisms than machines” – Batty, M 2018

3.0 Summary and Analysis

The acute financial crisis due to farm distress drives many young people to migrate to the city for employment. The attitude of the State - inherited from the Colonizers – has been keen to keep the ‘natives’ at the city periphery. The idea of sanitized, clean and green neighbourhoods does not allow the poor their right to place, even though they are 97% of the country’s population. In the absence of job opportunities due to their low skill levels, many migrants take to street vending, rickshaw pulling and roadside food stalls while others find informal employment in homes, factories and offices. Small-micro-medium industries and small-scale retail are needed for maximizing livelihood opportunities until upskilling is achieved on a large scale to benefit from the demographic dividend. Urban planning has rigidly followed the borrowed concept of the ‘garden city’ keeping the poor out of sight and out of mind as they struggle to increase their earnings.

4.0 Conclusion

Cities are complex entities and simply providing efficient infrastructure services thru a responsive government will not solve the economic crisis of the poor. The poor must be provided land clusters with affordable rental low-rise housing within 3km from planned urban areas so that they can walk to work. Land areas in planned colonies must be demarcated for kiosks, resting places and toilet facilities for the poor. The planned areas must share their social infrastructure with the poor in the vicinity so that property prices in the poor areas are kept affordable. Factory sheds and business premises should be provided for the poor near their place of stay. Hubs of transport networks should be near their

highly dense residences and layout should be such to avoid gentrification. Reskilling and upskilling takes time, as does setting up new industries fed with micro-manufacturing units. Town planners must actively work with economists and scientists to provide a dynamic and responsive town plan model for a fast-transforming India. Government of India has realized the importance of developing the manufacturing sector, the export sector and skilling the workforce. Town planning regulations have to be indigenous and flexible to evolving situations and economic realities with an inclusive mindset.

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