



Spatial repercussion of Micro, Small and Medium Enterprises (MSME) and it's linkages in the Urban Areas

¹Raghavendra V S, ²Mayank Mathur

¹Research Scholar, Physical Planning Department, School of Planning and Architecture, New Delhi, India

²Head of the Department, Physical Planning Department, School of Planning and Architecture, New Delhi, India

Email - ¹raghavendravrurtur@gmail.com, ²mayank.mathur@spa.ac.in

Abstract: *The Global population growth is witnessing a makeshift in the coming years as the population projections are majorly in the Urban areas. The urban population in India, which is 31.8% in 2011, is expected to increase to 38.6% by 2036 (1), (2). As the Global and Indian Metropolitan population projections are to be on a rise, there will be a high demand for equitable distribution of Employment opportunities, Housing facilities, Transportation facilities, social services in both formal and Informal sectors to promote social inclusivity (3) along with good quality of life. MSME (Micro, small and Medium Enterprises) account for 11.10 crore jobs with 633.88 lakh enterprises in the country (4). Urban MSME's account for 55% of the total workforce in MSME (5) which is only set to increase. Currently many of the Urban Micro and Small Industries are run in the Residential and commercial areas as per their livelihood and available space which have spatial spillovers around them. Industrial Estates cater to the big players and are not affordable for small enterprises to move out of the city with high operational costs. Although MSME's are of social and economic significance, there are a few negative aspects also. It has been estimated that 70% of the total Industrial pollution is contributed by SMEs in India (6). Presently MSME's are defined based on the annual turnover, value of Investment (7), no of people employed but it has direct spatial repercussion on the physical space around its surroundings, which is not addressed. Effective planning is essential to overcome the severe consequences of urbanization, livelihood, increasing Urban MSME in the Non-Industrial areas. Effective spatial planning may bring about sustainable urban development.*

Key Words: *Spatial Planning, MSME, Urban planning, sustainable development, Industrial Policy.*

1. HISTORY:

The economic situation in India was strenuous at the time of independence, India's economic growth rate was in negative. The most important challenge put forward to the leaders of that time was to improve the economic condition of the country and to eradicate poverty. It was during this time that Industry was considered as the primary activity to bring overall growth of the country. Industrial development was considered as the economic growth engine which helped to improve agricultural activity by use of modern equipment's, prepare a strong economic base and also helped to improve defence of the country by manufacturing the required facilities. As per the world bank, Industry is one of the most important sectors which can provide faster positive results to the economy. The industrial contribution to India's GDP is around 27% in 2021 against 29% in 2011 (8). The industrial contribution plays a prime role in economic development of India. The reduction of percentage is mainly due to many factors, the most important being improper planning. Addressing this issue in a systematic and effective manner is the need of the hour.

2. IMPORTANCE OF INDUSTRY IN INDIAN ECONOMY :

Industrialisation is very important for economic development of the developing country like India which has huge man power and resources (Chowdhury, 2010). The foremost importance of industrialisation is rapid growth in income of the country. This is because there is increase in production and have higher per capita income. The second most importance of industrialisation is that it provides employment opportunities and further has the capacity to use the scarce resources available to produce valuable goods. Variety of consumer goods are produced at lower cost and makes it affordable for the people to use it. It provides base for agricultural and defence of the country and lastly brings about balanced development of the country. There are many different types of industries in terms of the size and production capacity such as large industries, MSME, etc. There are many schemes and programs that are enforced by the



government to bring about development of industries by providing them with required infrastructure facilities viz Industrial Estates, Industrial Corridors, Special economic Zone, Industrial clusters etc., which are mostly for Large Enterprises. The MSME accounts for more than 50% of industries in the country, and plays a major role in both employment and economic growth (5).

2.1 MSME AND ITS IMPORTANCE

The Government of India has introduced MSME or Micro, Small, and Medium Enterprises in agreement with Micro, Small and Medium Enterprises Development (MSMED) Act of 2006 (9). These enterprises primarily engaged in the production, manufacturing, processing, or preservation of goods and commodities (9). There are both Manufacturing and Service Industries in MSME. They are differentiated and defined based on the Investment and Turnover as per the Gazette released in June 2020 (7).

MSME's play a vital role in employment in India. MSME sector contributes to 30% of the country's GDP, 45% of the manufactured output and 40% of its exports (8). MSME provides employment to about 11.10 crore people through 633.88 lakh enterprises (4) of which 55% are in Urban areas. The labour to capital ratio and overall growth in the MSME sector is much higher than the large Industries. MSME's are estimated to manufacture over 6000 products ranging from handloom sarees, carpets, soaps, pickles to papads and machine parts mainly for large industries. (11th Five-year Plan, GOI (10)) (11)

Although MSME's are of social and economic significance, there are a few negative aspects that need to be addressed. It has been estimated that 70% of the total Industrial pollution is contributed by SMEs in India (6).

2.2 MSME AND ITS DEFINITION

	Investment	Turnover
Micro	Upto 1 Crore	Upto 5 Crore
Small	Upto 10 Crore	Upto 50 Crore
Medium	Upto 50 Crore	Upto 250 Crore

Table 1. Source: The Gazette of India dt 1st June 2020 (7)

MSME (Micro, Small and Medium Enterprises) are currently defined based on the Investment and Turnover in India as per the Gazette of India dated 1st June 2020 by the Govt. of India. Accordingly, Table 1 defines MSME.

This definition is different in many countries. Few countries define MSME based on the number of people working and few countries define based on the assets, turnover. This inconsistency has also been instrumental in identifying the

problems of MSME (12)

Albania defines MSME based on number of people employed, Micro enterprise as upto 5 employees, small enterprises as 6 to 20 employees and medium enterprises with 21 to 80 employees. Bahrain defines Micro enterprises to have upto 9 employees, small enterprises upto 19 employees and medium enterprises upto 99 employees. Brazil defines Micro enterprises as number of employees upto 9, small enterprises with 10 to 49 employees and medium enterprises ranging from 50 to 249 employees. Similarly, Australia, European Union, USA, China also defines based on the number of people and turnover (13) (14) (Ibid, 2010)

These enterprises do have spatial implication around its surroundings which may be positive or negative, this has to be researched under the planner's perspective, to have a cleaner environment and better urban morphology.

3. IMPORTANCE OF SPATIAL PLANNING :

Spatial Planning as a concept originated in Europe in 1960's as a criticism tool against Masterplan and gained momentum very soon across the Europe. During the Modernist Period(1970-80's) it gained much relevance and the concept started to transform from Product oriented to process oriented approach. Spatial Planning is more of an approach for Future distribution of activities. Moving away from traditional statutory Planning practices and aims to create a rational territorial organisation of land uses and the linkages between them to balance environment and development. Healey (1997) (15) defines spatial planning as: 'A set of governance practices for developing and implementing strategies, plans, policies and projects, and for regulating the location, timing and form of development'. Andreas Faludi says "Spatial Planning is not just the Technical Process of producing material things but mostly a process of mutual learning involving interaction between multitude of actors along horizontal and vertical coordination in Government and Private actors" (16). Although Master Plan is inherently Spatial as they impact Land use distribution, but received criticism in 1970-80's as it is only intended for Physical development. As a theoretical concept, Spatial Planning diverts its attention from statutory attributes of planning to broad based spectrum of non-statutory attributes that apply on a wider scale with an integrated approach of issues and scales of operations (17). Spatial Planning is an important process which tries to coordinate and improve the impact of all other sectoral policies on Land use, in order to create even



distribution of economic development within a given region which or otherwise will be a haphazard one. Spatial Planning takes place in various scales such as local, Regional, National and International levels. Spatial Planning refers to methods used by the public sector to influence distribution of people and activities in various orders. Separate Professional disciplines which involve spatial planning include land use, Urban renewal, Regional, Transportation, economic and community planning.

Thus, Spatial Planning moves a step forward and promotes improved Quality of life by integrating various actors and policies.

4. THEORIES RELATED TO INDUSTRIES – SPATIAL IMPLICATION:

- Agricultural Location Theory (1826): Von Thunen, a German agriculturist said that agricultural lands should be close to markets, industries and reduce the transportation costs. (18)
- Weber Location Theory (1909): Alfred Weber, a German Economist in his book Theory of Location of industries, emphasized that Transportation cost, labor cost and Raw Material cost are the variables to decide the location for any industry. (19)
- Multiplier Effect Theory (1936): British economist John Maynard Keynes formally introduced the concept of Multiplier in his 'The General Theory of Employment, Interest and Money' in 1936. An increase or decrease of one type of economic activity will affect the demand for goods and services, which leads to the development of economic activity in the same city/region. Hence Multiplier effect impacts the spatial distribution of industries. (20)
- Profit Maximisation Theory (1954): Formulated by August Losch, a German Economist against Weber Location theory. This theory said Profit is prime criteria for industry location rather than transport and labour. (21)
- Institutional Theory (1977): Proposed by Meyer and Rowan and focuses on innovation (22) (23)
- Resource based Review Theory (1984): Wernerfelt an Economist gave this theory and the theory focusses on the resources that are valuable and to utilize them. (24)
- Upper Echelons Theory (1984): Given by Donald C Hambrick in 1984, emphasis on organisational set up within the industry. (22) (25)
- Stakeholders Theory (1984): focuses on customers loyalty and benefits. (22)
- Contingency Theory: Maletie, Gomiscek (2018) acknowledged the utilization of contingency lens to sustainability and organizational performance practice, thus adoption of this will help small and medium enterprises grow. (26)

The above classic and contemporary theories are formulated by eminent people from various backgrounds apart from Planning. Planning being one of key tool which can bring sustainable growth in Industry and MSME, but very limited research is done about the locational implications of MSME. Most of the above theory emphasis on business growth, management, organisation and Innovation of large-scale industries in general, but not small-scale Industries in particular. Focus towards Physical Planning is also very important other than economic planning and business growth in MSME. Spatial aspects of Urban MSME's, its Location, MSME implications on its surroundings is something which needs to be researched.

5. POLICIES AND ACTS RELATED TO INDUSTRIES AND ITS IMPLICATIONS ON THE PHYSICAL SPACE:

Every Policy towards Industry will have direct or Indirect implications on MSME as they are linked to large scale Industries, this will further have direct implication on land and city even if it is growing or declining. Even a small Enterprise will have numerous forward and backward linkages. Minor changes in Industrial policies will also have cascading effect on the small enterprises and it is visibly seen. Indian Industrial Policies and its main focus are highlighted here and its spatial changes with respect to MSME are assessed.

5.1 INDUSTRIAL POLICY OF 1948 –

One of the Primary Acts for Industrial sector by the GOI, it majorly focuses upon, Licensing, Approval and Registration of Industries with the State Government (Small to Large Industries), Safety of Machinery and workers Health, Labor Welfare, Working Hours, Wages of Labors, Penalties, Procedures of Operation etc., Emphasis was laid on public sector Industries. This created support for MSME linkages in private sector and many small industries were setup as ancillary units around PSUs. This changed the landscape and Landuse marginally (10) (28) (29)



5.2 INDUSTRIES DEVELOPMENT AND REGULATION ACT 1951

Under this Act, all Industries using Power and employing 50 or more people or not using power with 100+ employees need to obtain license from Central Govt. It had a committee to approve and Location also was noted before approval of License. Small Industries with asset less than 25 lakh need not obtain License/Location Approval. This paved way for easy establishment of many small enterprises anywhere.

5.3 INDUSTRIAL POLICY OF 1956

Classification of Industries as Schedule A, B, C etc., part of State's Policy

- Public and Private owned Industries, both were financially encouraged and inter linkages among themselves developed.
- More Impetus to Cotton and Small-scale Industries as they provide large employment opportunities, resource mobilisation and further solves the problems which unplanned urbanisation would tend to create by equitable distribution of wealth.

Focused on Mixed Approach (Public sector and Private Sector) Development of Cottage and Village and Small-scale Industries, with this many houses were converted to cottage industries and small-scale economies during this period. (30)

5.4 INDUSTRIAL POLICY OF 1973

- Large Scale Industries definition was revised as per the "Monopolies and restrictive Trade Practices Act (MRTPA) 1969"
- Co-operatives, Small and Medium enterprises received more encouragement over large and foreign establishment
- Exemption from Licensing provisions for new undertakings up to 1 crore by way of Fixed assets in Land, buildings and Machinery, which paved way for many new enterprises without location restrictions.

Focused on investment for large scale industries from Foreign Investments, gave rise to big industries and were spread around the its resources which helped in overall growth of the regions (31)

5.5 INDUSTRIAL POLICY OF 1977

- Review of Industrial Products was made and list was made to identify products which are capable of being produced in the small-scale sector. This list of products was increased from 180 to 500 items, "District Industrial Centre" was setup
- Small Scale sector was classified into, Cottage and Household Sector, Tiny sector and small-scale Industries. More emphasis for Cottage and Small-Scale Industries by way of subsidies Khadi and Village Industries commission was remodeled. Subsidies were mainly in terms of power, tax rebate etc., which encouraged more units to setup and many residential areas also were transformed to house industries. (32)

5.6 INDUSTRIAL POLICY OF 1980

- Public sector Units were encouraged to assemble and Small ancillary units to produce/manufacture the parts and supply to public sector.
- Investment limit is increased to Tiny Industries (2 Lakh), Small scale units (20 Lakh) and Ancillary Units (25 lakh)
- Small Industries development Corporation in the State and National Small Industries Corporation in the centre were developed for building buffer stocks of raw materials
- Financial aid for technological development in optimum utilisation of energy and reducing pollution of air and water. (33)

5.7 INDUSTRIAL POLICY OF 1991 (LPG)

- Industrial Licensing- Derived from 1956 Industrial Policy, henceforth industrial licensing is removed for small and medium industries whose products are not hazardous of National security and cause environmental damage and social issues.
- Foreign Investment- FDI of 51% in high priority industries ('Appendix I Industries') mainly for large industries and large investment.
- Foreign Technology Agreement – No bureaucratic clearance required for technology research agreements with foreign organisation public sector Policy
- To retain and encourage well doing industries and disinvestment sick industries in a competitive world



- Monopolies and Restrictive trade practices Act (MRTP Act) –Controlling and regulating unfair trade practices, monopolistic and restrictive practices. No prior legal requirements for merger, amalgamation, takeover of companies etc., (34)

- **Small and Tiny Enterprises**

- Major focus was to increase encouragement to further employment, economy
- No license requirement.
- Increase in Investment limits in Plant and Machinery
- Small Sector (Other than Tiny enterprises) would mainly be entitled to one-time benefits of land allotment, power connection, skill/technology upgradation facilities.
- Financial assistance, single window loan scheme, state financial corporation, state small industries development corporation etc.,

- **Liberalisation of Location Policy**

- No Industry is allowed within 25kms of periphery of cities with 1 million population.
- Non-Polluting Industries such as IT, Printing, Electronics assembly etc., were allowed to operate
- Zoning and Land Use Regulations as well as environmental legislations had to be followed.

- **Environmental Clearances -**

- Statutory environment clearance relating to Pollution control and Environment for setting Industrial Project should be obtained as per EPA (Environment Protection Act 1986)
- Project must mandatorily get Environmental clearance from Ministry of Environment, Industries with less than 50 Crore Investment need not obtain clearance (Except Pesticide, drugs, Pharmaceutical)
- Small scale Industries with less than 1 crore Investment is also exempted from Environmental Clearance. (35)

5.8 INDUSTRIAL POLICY OF 1999

The Ministry of Micro, Small and Medium enterprises (earlier known as Ministry of small-scale Industries and Ministry of Agro and Rural Industries) came into force for focused attention to MSME (36)

5.9 INDUSTRIAL POLICY OF 2000

New policy in August address the problems relating to Credit, Infrastructure, technology and marketing. Many schemes related to credit were rolled out. (37)

5.10 MSME ACT 2006

MSME ACT was passed in March 2006. Many Packages for direct development and Promotion of Micro, Small and Medium Enterprises were announced. With these various Industrial policies related to MSME and Industries there is direct impact on ground be it formal or informal for which there is not any spatial planning is done. (9) (11)

5.11 NATIONAL MANUFACTURING POLICY 2011

- To enhance share in Manufacturing in GDP to 25% and creating 100 million jobs within a decade
- India's share in Manufacturing in GDP has stagnated at 15-16% since 1980, whereas share in comparable economies in Asia is around 25-34%
- This is a state – center integrated policy (38)

All of the above will be achieved through -

- a. **NIMZ AND INDUSTRIAL CLUSTERS -**

To overcome the Land constraint for Industrial growth, Centre and state are working to make Industrial land available through,

- Digitisation of Land and resource maps
- Programmes for Utilisation of lands locked under Non productive uses including sick/defunct Industries

These are Integrated townships with

- State of the art Infra, Land use on the basis of Land zoning, Clean and Efficient Technology, Social Infrastructure, Skill development facilities (38)



b. LAND FOR NIMZ –

- Land size should be minimum of 5000 Hectares, it is state government's responsibility to Identify, allocate, acquisition of land of which atleast 30% of the acquired land be utilised for location of Manufacturing Units and The State's may reserve a certain appropriate land percentage in a Zone for MSME's ("Industrial Policies in India: Did they work?", Raavi Aggarwal economist 2019, CSE working paper, Azim Premji University)
- c. Industrial Corridors – There are 11 Projects currently undertaken under this project spanning across multiple states.
- d. Modified Industrial Infrastructure Upgradation Scheme
- e. National Plan for Manufacturing Cluster (38)

5.12 SPECIAL ECONOMIC ZONE (SEZ)

It came into operation from SEZ Act 2005, and it is a Centre – State Integrated approach, where in either Government body or a private developer can develop land and obtain permission under SEZ Policy as per the rules. These are huge Industrial/ Office/ any other Production spaces. Currently there are 267 Operational SEZ's in India.

- Industrial Policy Pre Independence
- Industrial Policy of 1948, 1951, 1956, 1973, 1977, 1980, 1991, 1999, 2000,
- MSME Act 2006, NMP 2011, MSME Definitions
- NIMZ, Industrial Clusters, Industrial Corridors, SEZ, Five Year Plans and MSME

All of the above Policies, Acts related to Industries address issues related to Financial, Employment, Infrastructure (Large Scale), Sustainable growth etc., but subject related to Spatial Planning for Small scale industry is still void. There is a very strong need to address this issue.

6. SPATIAL PLANNING AND MSME :

Definition of MSME in various countries and in India are based on number of people employed and financial turnover respectively. But the spatial implications of MSME are never addressed nor considered for defining, spatial planning has never been a case in MSME policy or development.

MSME Enterprises needs to be spatially addressed under the Planner point of view also -

- Space Occupied
- Geographical location and distribution
- Raw Material linkages
- Effluents and waste outputs
- Different enterprises need different spaces
- Employers' linkage to industry (Viz., Housing, Banking, Schools, Market, training center, surrounding etc.,)

7. MASTER PLANS OF VARIOUS METROPOLITAN CITIES :

Master plans of Chennai, Bengaluru, Mumbai, New Delhi, Kolkata and Hyderabad is analysed and that brings out to be provision for MSME or ancillary activities in the Main Land use provisions are very similar to most of the cities. They all marginally overlap with the restrictions and provisions made. As per the respective city Master plans and regulations

Chennai – Chennai allows ancillary activities of professional consulting offices with floor area not exceeding 40 sqm, cottage industries with not more than 8 employees and machinery not exceeding 5HP, garment industries, craft centers and assembly of electronic parts with not more than 25 employees and machinery of 5HP in the Primary Residential landuse area (39) (40).

Bengaluru - Bangalore, ancillary activities listed in the classification C1, C2, I1, I2 which are basically household and service Industries upto 20% are allowed in the Residential main landuse with similar restrictive caps as Chennai (41 - 45).

Mumbai - Mumbai allows home based economic activities, offices of professionals under urbanisable Zone. (46 -48)

New Delhi - New Delhi allows Industries of classification A, A1 in the residential areas which have restrictive cap of maximum of 5 workers and 5 kw power consumption subject to condition that they are non-polluting industry. They also have area restriction of 50% of entire usable area for household industry with a separate electric connection. There



is no provision for storing of hazardous and flammable materials. Provisional registration is mandatory with NCTD. (49)

Hyderabad – Hyderabad City Master Plan allows ancillary activities in the Residential Main landuse such as customary home occupation or household units, professional offices not exceeding 40 sqm in area, IT/ITES as per the IT policy (50)

Major metropolitans have similar restrictions in terms of provision for MSME Operations in the Residential, commercial and other landuse areas. This provision for ancillary activities tend to have spatial repercussions in the immediate vicinity. These are in terms of transportation – staff movement through public transport and own vehicles, material movement including loading, unloading and storage on the footpath etc., in terms of land – change in land rental values, demography, landuse, locality environment etc., in terms of environment – air noise and water pollution changing the micro climate of the locality, waste disposal and treatment of it is another hassle. There will also be social change in the environment due to these operations on the residential locality for the native families. MSME's contribute to the economic growth certainly but also come with some spatial implications which also needs to be addressed.

8. CONCLUSION :

Based on many studies and reports, growth of Urban areas is evident in the coming years. And accordingly work opportunities, facilities, quality of life, infrastructure needs to be planned prior to avoid haphazard growth. MSME plays a major role in employment opportunities in the Urban areas and has spatial spillovers around it. As of now, most of the Urban Micro and Small Industries are run isolated within private properties in the Residential, Commercial and other land uses, there is scarce in space dedicated for the same, an industry which is contributing almost 30% for Secondary sector and with future prospects of reaching up to 50% in the coming years has no defined physical space for its operations. Existing set of Enterprises which are currently working as part of the residential and commercial areas also come with its own spillages, disturbance, pollution, on ground connection due to its operations and linkages. Addressing this space has to be through structured research and the outcome should be able to define, detail and propose a sustainable solution with future prospects. Earlier Theories from eminent Scholars and researchers and Government's initiatives towards economic growth of industries address majorly large-scale Industrial development and its Infrastructure. Major focus towards MSME has been towards grants, financial aid and employment generation, which is equally important. Industrial Policies from inception have been giving aid to all scales of Industries without assessing the impacts on ground, but from Planners perspective much research in this arena is required as Urban MSME's have spatial impacts on its surroundings. Effective spatial planning may bring about sustainable urban development.

REFERENCES:

1. Population projections for India and states 2011 – 2036”, Ministry of Health and Family welfare, GOI
2. Census of India 2011 Report, GOI
3. Ransford A. Acheampong (2018): The Concept of Spatial Planning and the Planning System, The University of Manchester
4. National sample survey 73rd round, Ministry of Statistics and Programme Implementation, GOI
5. MSME Annual Report 2019-20, Govt of India
6. India: Strengthening Institutions for sustainable growth country environmental analysis, world bank December 2006
7. The Gazette of India dated 1st June 2020
8. Central Statistics Office, Ministry of Statistics and Programme Implementation
9. MSME Development Act 2006
10. Planning Commission, Five Year Plans, GOI
11. Dr Astha Ahuja (2020) Micro, small and Medium Enterprises in Post Covid Era. New Century Publications
12. Manish, K. J., & Sunil, K. G. (2016). Defining Indian SMEs: A Critical Analysis. *International Journal of Arts, Humanities and Management Studies*, 2(6), 12-25
13. Khrystyna, K., Melina, L. M., & Rita, R. (2010): How do economies define MSME, *International Finance Corporation World Bank Group*. Retrieved on March 6, 2017
14. Amare , A. E., & A. Raghurama . (2017). Micro, Small and Medium Enterprises (MSMEs)Development Strategies in Ethiopia: Retrospective and Prospective Analysis. *International Journal of Commerce, Business and Management*, 6(1), 11-20
15. Patsy Healey (1997): Collaborative planning in a stakeholder society



16. Andreas Faludi (2010): The Performance of Spatial Planning. Taylor & Francis
17. Iuliana Nichersu, Cristina Iacoboaia (2011) Systematic spatial planning - Theoretical and Empirical Researches in Urban Management Volume 6 Issue 2
18. Von Thunen (1826): The Isolated State. edited by Peter Hall, Pergamon Press
19. M Birkin, A G Wilson (1986): System Analysis in Geography Book, 'Industrial location models 1: a review and an integrating framework' Environment and Planning A, 1986, volume 18, pages 175-205
20. Oscar Lange: The Theory of Multiplier, Maynard Keynes (1936): The General Theory of Employment, Interest and Money
21. August Losch (1954): Profit Maximisation Theory
22. Danjuma T Nimfa, Ahmad Shaharudin Abdul Latiff, Sazali Abd Wahab (2021): Theories underlying sustainable growth of small and medium Enterprises"
23. Henrich R. Greve, L. A. (2015). Institutional Theory. International Encyclopedia of the Social & Behavioral Sciences (second Edition).
24. Onnu Truijens (2003): A Critical Review of the Resource-based View of the Firm
25. Donald C Hambrick (1984): Upper Echelons Theory
26. Maletie, Gomiscek (2018): Contingency Theory
27. June Kaminski (2011): Diffusion of innovation Theory
28. Irvin Roth (1970), 'Industrial Location and Indian Government Policy', University of California press, Asian Survey, Vol. 10, No. 5 pp. 383-396
29. Factories Act 1948, GOI
30. The industries (Development and Regulation) Act, 1951, GOI
31. Industrial Policy Of 1973, GOI
32. Industrial Policy Of 1977, GOI
33. Industrial Policy Of 1980, GOI
34. Industrial Policy Of 1991 (Lpg), GOI
35. L G Burange, Shruti Yamini, (2011): A Review of India's Industrial policy and Performance.
36. Industrial Policy Of 1999, GOI
37. Industrial Policy Of 2000, GOI
38. National Manufacturing Policy 2011, Department of Industrial Policy & Promotion GOI
39. Second Masterplan 2026 of Chennai Metropolitan Development Authority (CMDA)
40. Volume II Development Regulations, Volume III Land Use planning and strategy, Existing Landuse Chennai 2006
41. Revised Master Plan 2015 Bengaluru
42. Bengaluru BBMP Bye Laws 2003
43. Proposed Land use 2031 Draft copy
44. Bengaluru BMP Vision document 2015
45. Bengaluru Zoning of Landuse and Regulations 2015
46. Masterplan for 2034 laid out by the Mumbai Metropolitan Development Authority
47. Final Regional Plan for Mumbai Metropolitan Region
48. Maharashtra Industrial development corporation Revised Development control Regulations 2009
49. Masterplan for Delhi 2021 by the Delhi Development Authority (DDA)
50. Revised Masterplan for Municipal corporation of Hyderabad Area (HMDA Core Area) 2010