

Comparative Analysis of International and Local Ranking Organisation Themes: an Approach to Identify the need of Physical Development in India

Richa Ankush Pathe, Anupama Sharma

Abstract: Urbanization is simultaneously a boon and a threat, as it reflects economic development on one hand and on the other hand affects urban environment adversely. Urban planning and its development issues is and would be a well- established concern cited at various international and national agendas. Urbanization has led to urban development issues like gap in demand and supply of physical services, lack of green spaces, unhygienic streets etc, hence contributing to the degradation of quality of living in cities. Though urban cities aim to provide healthy environment to its population. Urban development issues like inadequate physical services, fall in economic prosperity and rise in social discontent among the urban population, making the population suffer. The paper intends to undergo comparative analysis of various measurement tools that have been developed to rank cities in accordance to the physical amenities and facilities available to its resident, at international and local levels, for identifying the need to focus on physical development in India.

Index Terms: Index, Indices, Infrastructure, Physical Development, Urbanization

I. INTRODUCTION

World's urban population has shown rise from 751 million in 1950 to 4.2 billion in 2018. Despite lower level of urbanization in Asia, it is a home to 54 per cent of the world's urban population, Europe and Africa 13 per cent each. [UNITED NATIONS. 2018] [11]

Developing countries are facing numerous challenges to meet the needs of increasing population due to urbanization , including for housing, physical infrastructure, transportation, energy and employment, as well as for basic facilities such as education and health care, all over the world. Managing urban areas has become one of the most important development challenges of the 21st century.[UNDESA. 2008] [12]

In India urbanization has resulted in rise of urban population from 26% in 1990 to 32% in 2014. It is expected to increase to about 50% by 2050. In India major population resides in urban areas, yet the ratio of urbanization is low compared to other countries like China, Mexico, Russia, Brazil etc. [UNITED NATIONS. 2018] [11].Urbanization in

India is full of contradictions; having majority of country's population residing and working in urban areas reflects development in past few decades followed by issues in social, economic, physical and environmental domains.

II. UNDERSTANDING THROUGH KEY DEFINITION

A. Physical Infrastructure or Development

Infrastructure can be labelled as the economic and social underpinnings of a community or nation. However, elements of infrastructure include systems of transportation, power generation, sewage and solid waste disposal, communications, banking, education, and health.

Creation of durable community assets based on the locally felt needs covered in the boundaries of local areas for development is referred to as physical development. Development works like drinking water, primary education, public health, sanitation recreational and public facilities, etc. are covered under it. [MOUD. 2015] [5] Submit your manuscript electronically for review.

III. PHYSICAL DEVELOPMENT AND URBAN LOCAL GOVERNMENT

A. Urban Local Government

A Municipality (ULB: Urban Local Body) is the tier of government responsible for any development in the cities and towns. The [74th Constitutional Amendment Act \(CAA\)](#) 1992, resulted in major devolution of funds, functions and functionaries to this layer of government giving functional autonomy to local governments. Constitutional status was given to the Urban Local Governments in the 74th constitutional amendment; States enabled legislation to transfer this government tier responsibilities of local infrastructure and services. [THE CONSTITUTION (74." 1992.] [9]. Urban Local Governments under this Act, have been classified as:

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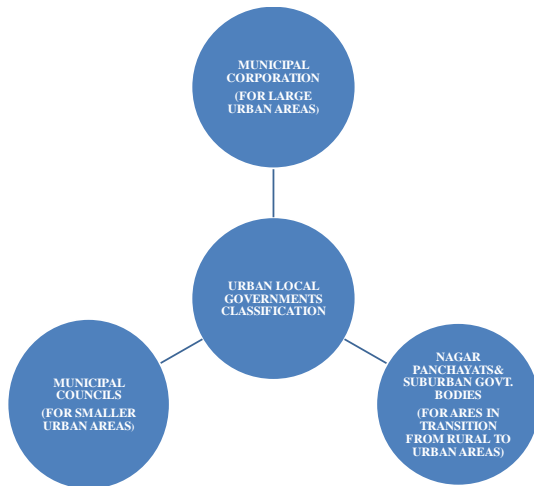


Figure- A Classification of Urban Local Governments

B. Nagar Palika / Municipality/Municipal Council:

Municipal Councils or Municipalities are set up for an urban areas with 100,000 or more population. Earlier urban centers constituted nagar palikas with population 20,000 or more, so nagar palikas are reclassified as nagar palika even if their population was less than 100,000. The Nagar Palika representatives are elected for a five-year period. The town comprise of Wards, according to its population, representatives are elected from each ward. Group of Wards together is known as ward councils. Representatives are elected from each ward. A President is elected among them by its members to conduct meetings of the Municipality. A Chief Officer and officers from the State Public services are appointed by the state government for the administrative and executive services of the Municipality. Municipal Corporations enjoy the maximum fiscal autonomy and functions among all categories of Urban Local Governments, although the powers vary in different states. [THE CONSTITUTION (74.” 1992.) [10]

IV. NATIONAL AND INTERNATIONAL ORGANIZATIONS TO RANK THE CITIES

Comprehensive development of any city can be achieved from four pillars of development: Physical, Social, Economic and Institutional.[Source: MoUD. 2015. (“smart city: mission statement and guidelines.”)] [6]. To compare cities and rank them on the basis of four pillars of development. Various measurement tools have been developed at international and local levels to rank cities in accordance to the physical amenities and facilities available to their people. The most notable concepts at local and international tier include EIU Ranking Index (Economist Intelligence Unit Index) [MARIAH VANZERR AND SAMSESKIN. (2011)] [2],the Mercer Quality of Living index [Mercer, (2016)] [3]and OECD (Organisation of Economic Corporation and Development) Better Life Index (BLI)[OECD,(2011)][8], BIS (Bureau of Indian Standards Index)[BIS (2016))] [1], MoUD Index (Ministry of Urban Development India)[MoUD (2015) [5],Smart City Mission (India) and its Indices [MoUD (2015) [6], are some of city ranking indexes.

A. Mercer Quality of Living Index

Mercer Quality of Living Index has 39 indicators grouped under ten categories; Medical and Health (8 indices), Public Services and Transport (7 indices), Consumer Goods(5 indices), Economic Environment (2 indices), Political and Social, Socio-Cultural Environment (2 indices), School and Education 1index), Recreation (4 indices), Housing (3 indices), Environment (5 indices) and Natural Environment (2 indices).[Mercer, (2016)] [3].Table 01 given below describes indicators and number of its indices of Mercer Quality of Living index .

THEMES	MERCER-INDEX (INDICES)
SAFETY	4
HEALTH	8
EDUCATION	1
RECREATION	4
SOCIO-CULTURAL	2
GOVERNANCE	1
ECONOMY	2
TRANSPORTATION	3
HOUSING	3
CONSUMER & GOODS SERVICES	5
PHYSICAL INFRASTRUCTURE	4
ENERGY	-
NATURAL ENVIRONMENT	2

Table-01

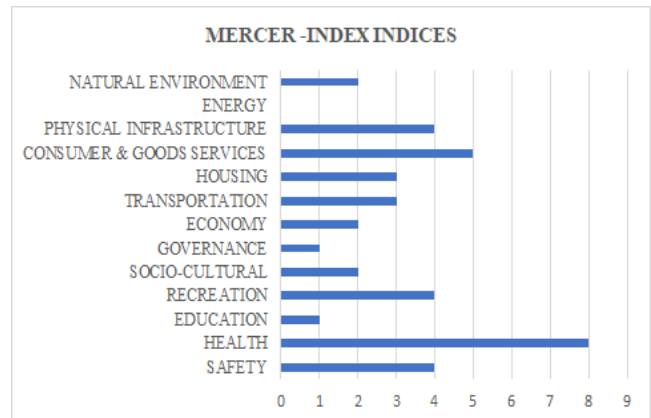


Figure-01

Figure-01 is a graph showing MERCER Index indicators and its number of indices to reflect its priority themes

B. EIU – Economist Intelligence Unit

Created in 1946, it is a research and analysis division of the Economist group, it provides forecasting and advisory services. Reports on livability and cost of living of the world’s major cities is also produced by them. A well noted report that is Quality of Life Index is produced by them. EIU has 30 livability indicators which are grouped together under five categories.



Stability (5 indices), Healthcare (6 indices), Culture and Environment (9 indices), Education (3 indices), and Infrastructure (7 indices) [MARIAH VANZERR AND SAMSESKIN. (2011)] [2].Table 02 given below describes indicators and number of its indices of EIU Ranking Index.

THEMES	EIU-INDEX (INDICES)
SAFETY	5
HEALTH	6
EDUCATION	3
RECREATION	1
SOCIO-CULTURAL	4
GOVERNANCE	1
ECONOMY	-
TRANSPORTATION	3
HOUSING	1
CONSUMER & GOODS SERVICES	2
PHYSICAL INFRASTRUCTURE	2
ENERGY	1
NATURAL ENVIRONMENT	1

Table-02

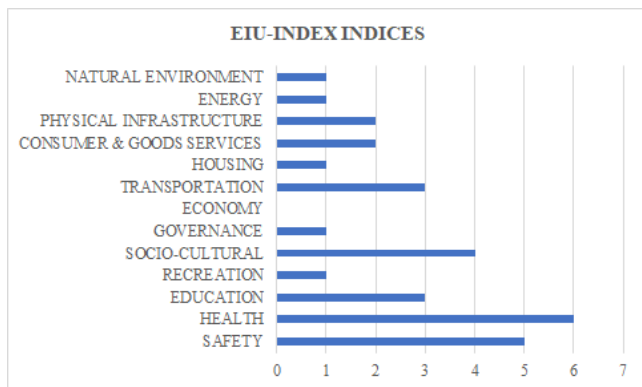


Figure-02

Figure-02 is a graph showing EIU Index indicators and its number of indices to reflect its priority themes

C. OECD – Organization of Economic Corporation and Development:

In 1948 the Organization for European Economic Cooperation (OECC) was established to run the US-financed Marshall Plan. It was for reconstruction of a continent ravaged by war. Canada and the US joined in signing the new OECD Convention, encouraged by its success and the prospect. On 30 September 1961 OECD was officially born, when the Convention entered into force. OECD’s mission is to promote policies that will improve the economic and social well-being of people across the world. It has 24 livability indicators put under eleven different categories; Housing (3 indices), Income (2 indices), Jobs (4 indices), Community (1 index), Education (3 indices), Environment (2 indices), Civil Engagement (2 index), Health (2 indices), Life (1 index), Safety (2 indices) and Work-Life and Balance (2 indices)[OECD,(2011)] [8]. Table 03 given below describes

indicators and number of its indices of OECD Better Life Index (BLI).

THEMES	OCED-INDEX INDICES
SAFETY	2
HEALTH	2
EDUCATION	3
RECREATION	-
SOCIO-CULTURAL	4
GOVERNANCE	2
ECONOMY	6
TRANSPORTATION	-
HOUSING	3
CONSUMER & GOODS SERVICES	-
PHYSICAL INFRASTRUCTURE	-
ENERGY	-
NATURAL ENVIRONMENT	2

Table-03

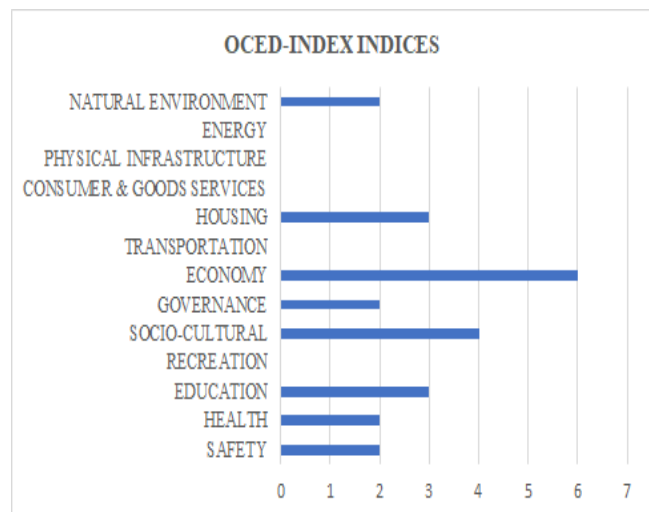


Figure-03

Figure-03 is a graph showing OCED Index indicators and its number of indices to reflect its priority themes

D. BIS – Bureau of Indian Standards:

In India under the BIS Act 1986 National Standard Body was established, for the harmonious development of the activities of standardization, quality certification and marking of goods and for matters connected there with or incidental thereto.[BIS (2016))] [1]. Table 04 given below describes indicators and number of its indices of BIS Index.

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THEMES	BIS-INDEX INDICES
SAFETY	5
HEALTH	7
EDUCATION	5
RECREATION	2
SOCIO-CULTURAL	-
GOVERNANCE	6
ECONOMY	10
TRANSPORTATION	7
HOUSING	3
CONSUMER & GOODS SERVICES	-
PHYSICAL INFRASTRUCTURE	29
ENERGY	5
NATURAL ENVIRONMENT	9

Table-04

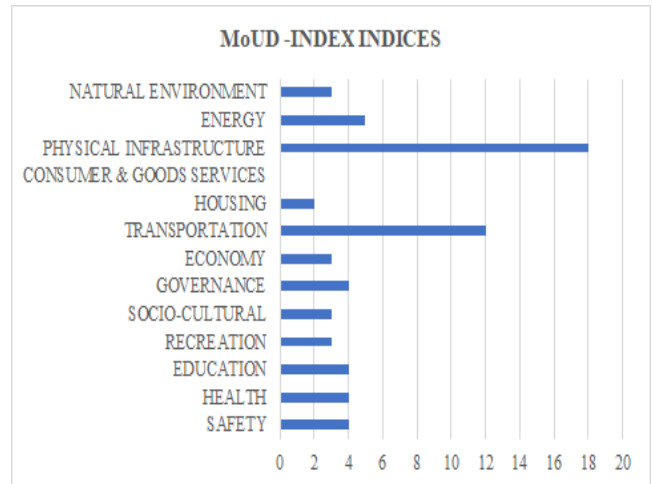


Figure-05

Figure-05 is a graph showing MoUD Index indicators and its number of indices to reflect its priority themes

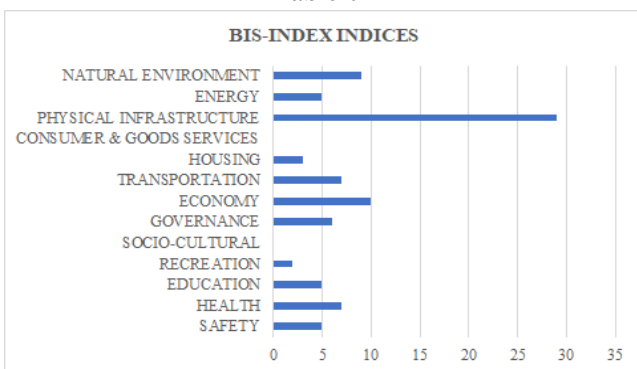


Figure-04

Figure-04 is a graph showing BIS Index indicators and its number of indices to reflect its priority themes

E. MoUD – Ministry of Urban Development, India

It is the apex authority of Government of India to formulate policies, sponsor and support programme at the national level and to coordinate various activities of Central Ministries, State Governments and other nodal authorities and monitor all the issues concerning to urban development programs in the country[MoUD (2015) [5].Table 05 given below describes indicators and number of its indices of MoUD Index.

THEMES	MOUD-INDEX INDICES
SAFETY	4
HEALTH	4
EDUCATION	4
RECREATION	3
SOCIO-CULTURAL	3
GOVERNANCE	4
ECONOMY	3
TRANSPORTATION	12
HOUSING	2
CONSUMER & GOODS SERVICES	-
PHYSICAL INFRASTRUCTURE	18
ENERGY	5
NATURAL ENVIRONMENT	3

Table-05

V. COMPARATIVE ANALYSIS OF INTERNATIONAL AND NATIONAL THEMES

Comparing three international themes: EIU Ranking Index (Economist Intelligence Unit Index) [MARIAH VANZERR AND SAMSESKIN. (2011)],the Mercer Quality of Living index [Mercer, (2016)]and OECD (Organisation of Economic Corporation and Development) Better Life Index (BLI)[OECD,(2011)], with two local themes: BIS (Bureau of Indian Standards Index)[BIS (2016)], MoUD Index (Ministry of Urban Development India)[MoUD (2015)], suggests that international ranking organizations EIU, MERCER, OCED are focusing on their prime dimensions like health, safety etc., whereas in Indian standards BIS Index and MoUD Index prime concern is on physical infrastructure theme. 29 indices of Physical infrastructure theme of BIS Index and 18 Indices of physical infrastructure theme of MoUD Index reflect the absence of optimum physical infrastructure to cater the increasing urban population in India. Therefore the urgent need for physical development in India can be identified by comparing various international and local ranking themes and its indices. Providing basic physical infrastructure or amenities like water supply, sewerage and drainage, solid waste management, to the residing urban population is the prime focus of Indian themes. The study further reflects the need to focus on transportation, health and education facilities also. Table 06 given below is the comparative analysis of three international ranking themes: EIU, MERCER, OCED and its number of indices with two national ranking themes: BIS and MoUD and its number of indices.



INDEXES	EIU-INDEX INDICES	MERCER-INDEX INDICES	OCED-INDEX INDICES	BIS-INDEX INDICES	MOUD-INDEX INDICES
SAFETY	5	4	2	5	4
HEALTH	6	8	2	7	4
EDUCATION	3	1	3	5	4
RECREATION	1	4	-	2	3
SOCIO-CULTURAL	4	2	4	-	3
GOVERNANCE	1	1	2	6	4
ECONOMY	-	2	6	10	3
TRANSPORTATION	3	3	-	7	12
HOUSING	1	3	3	3	2
CONSUMER & GOODS SERVICES	2	5	-	-	-
PHYSICAL INFRASTRUCTURE	2	4	-	29	18
ENERGY	1	-	-	5	5
NATURAL ENVIRONMENT	1	2	2	9	3

Table-06

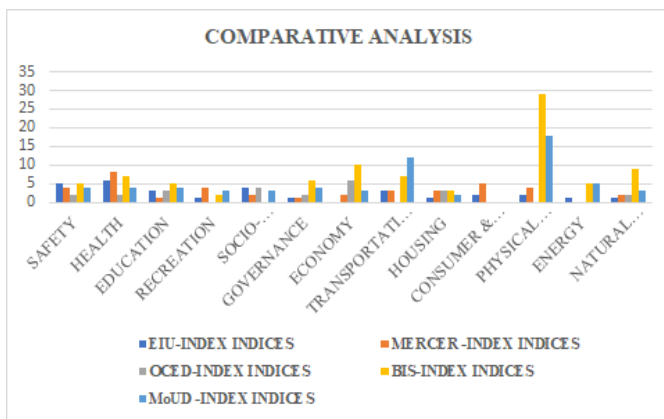


Figure-06

Figure-06 is a graph showing all five Indexes and their indicators with its number of indices to compare and identify the priority themes

VI. CONCLUSION

In India with fast growing population, the issue of increasing urban population and providing basic amenities like water supply, sanitation, sewage, waste disposal and transport remains a huge challenge in urban areas. The analysis conducted in this research paper was to identify the need for physical development in India by comparing various international and local ranking themes, has been concluded. It is evident from the analysis that by comparing different themes of International and local ranking organizations the need to focus on physical development was identified, though the need for development in health and education sector was also felt. Study also enabled to identify the urgent need to develop some methodology or framework to enhance performance of physical development in India, in near future.

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