

Identifying Local Area Development Indicators for an Indian City

Richa Ankush Pathe, Anupama Sharma

Abstract: *Urbanization can be defined as increase in the number of people that are living in the urban areas or a gradual rise in the proportion of people residing in the urban areas. It is an eventual process that happens in any of the developing countries. In developing country housing, physical infrastructure, social infrastructure, environmental aspects, economy and governance are the major areas to be worked upon to ensure development. Apart from the various programs, grants and schemes implemented at national and local level to cater the urban development issues related to physical development, there are many measurement tools at international and local levels to rank cities as per the physical amenities and facilities available to its residents to identify the cities needing urgent physical development. The paper intends to compare the physical development indicators of these measurement tools that have been developed to prepare ranking of cities as per the amenities and opportunities are available to its people, at local and international tier, to identify local area physical development indicators for Indian city.*

Keywords: *City, Indicators, Infrastructure, Local Area, Physical Development*

I. INTRODUCTION

Today, 55 per cent of the world's population lives in urban areas, a proportion that is expected to increase to 68 per cent by 2050. Population projections show overall increase in world's population together with urbanization by 2050 could add another 2.5 billion people to urban populations, with increase concentrated in Asia and Africa close to 90 percent, as per new United Nations report launched. [UNITED NATIONS. 2018] [15]

The 2014 revision of the *World Urbanization Prospects* by UN DESA's Population Division notes that the largest urban growth will take place in India, China and Nigeria. These three countries will account for 35 per cent of the projected growth of the world's urban population between 2016 and 2050. By 2050, India is projected to add 404 million urban dwellers, China 255 million and Nigeria 189 million. [UNITED NATIONS. 2018] [15]

The problem of inadequate physical development in any city of developing country is universal. There is always a large gap between demand and supply in physical domain. The policies, programs, schemes and projects to address this problem at

international, national and local level are multi-dimensional. Physical domain among all the other domains: social, economic, health, housing and environmental domain, has always been a focus for any developing country.

II. UNDERSTANDING THROUGH KEY DEFINITION

A. Urban or City

A group of neighbourhoods would comprise the city. [Adams, Bassett and Whitten 1929] [1]

Neighbourhood was to be a unit of city. [PERRY, CLARENCE. 1929] [1]

City is defined as area covered within the Municipal Boundaries, for the study.

B. Local Area

Local means existing in or belonging to the area where one lives. Local area is referred as the area concerned. Local area is also sometimes referred as neighbourhood area or community area.

The neighbourhood concept is one of the major landmarks in twentieth century in urban planning. Two different ideas developed in the same year 1929. One by Clarence Stein and Henry Wright. [Adams, Bassett and Whitten 1929] and second by Clarence Perry [PERRY, CLARENCE. 1929] [12]

Clarence Stein and Henry Wright- Neighbourhood is a superblock of residential units grouped around a central green, the separation of vehicles and pedestrians, and a road hierarchy with culs-de-sac for local access roads. A self-contained neighbourhood comprise of cluster of superblocks. A city comprised of group of neighbourhoods. [Adams, Bassett and Whitten 1929] [1]

Clarence Perry- For Perry the physical arrangement of the elementary school, small parks and playgrounds, and local shops was the basis of his neighbourhood idea. Each neighbourhood was to be a unit of city. [PERRY, CLARENCE. 1929] [12]

The Local area is also defined as wards in the URDPFI GUIDELINES. The Local area is also defined as wards for the study. [URDPFI GUIDELINES.]. [17]

C. Local Area or Area Based Development

Improvement (retrofitting), city renewal (redevelopment), city extension (green field development) and pan city concept (using modern technology solutions to the existing city infrastructure) are the components adopted for area based development;

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which will change the existing deteriorating areas into better planned ones and to accommodate the expanding populations in newly developed urban areas. [MOUD. 2015] [9] The development of the Local area covered on the basis of locally felt needs is termed as local area development.[MOSPI. 2016.] [7]

III. GRANTS, PROGRAMMES, FUNDS AND SCHEMES FOR PHYSICAL DEVELOPMENT

The Ministry of Urban Development is responsible for formulating policies for supporting and monitoring of programmes and also coordinating the different activities of Central Ministries, State Governments and other authorities they work on urban development issues prevailing in the country. Municipal Corporation also gives certain grants for urban development other than its regular funding. Some of the Grants, Programmes and Schemes for urban development are: Grants for services of Water Supply, Sewerage & Drainage, Grants for Development, Fixed Grant, Riverfront Beautification Grant, etc. [Municipal Corporation Budgets, 1992.] [18]

Special fund for Development : Urban Poor Housing, Shelter to shelter less, Special Development Programme, Sarba Shiksha Mission, Rajiv Abas Yojana, Installation of Water Meters, 11th Finance Commission, M.P. LAD Scheme, MLA LAD, Municipal Building Scheme, Rashtriya Swasthya Bima Yojana, Urban Primary Health Care Services, Development of Municipal Area, Short/Medium Term Loan, Projects for Riverfront Development, State Finance Commission, Miscellaneous Agencies, Redevelopment of Municipal Market, Jawaharlal Nehru National Urban Renewal Mission(J.N.N.U.R.M.), __Urban Infrastructure Development Scheme For Small & Medium Towns (UIDSSMT), ADB Funded North Eastern Region Urban Development Programme, The North Eastern Region Urban Development Programme (NERUDP), Smart City Mission, The Performance Challenge Fund for Local Government Units (PC Fund), 12th Finance Commission, 13th Finance Commission / Finance Commission, [Municipal Corporation Budgets, 1992.] [18]

IV. MEASUREMENT TOOLS TO RANK CITIES

Urbanization as a phenomenon is unavoidable in any developing country, but it has negatively affected urban environment and has resulted in many urban development issues. These urban development issues cover all domains of development; physical, social, economic and environmental. India is facing a challenge to meet the need of physical amenities in existing communities. The need to restructure Indian cities in order to meet the urban development issues of physical development is the demand of time now. Apart from the grants, funds, programs and schemes launched by government to solve this urban issue of the physical development numerous measurement tools to rank cities according to the physical amenities and opportunities available to their inhabitants have been developed. The most prominent concepts at local and international tier include the Mercer Quality of Living Index, the Economist Intelligence

Unit's (EIU5) livability index and OECD6 Better Life Index (BLI). Summary of each is given below.

A. Mercer Quality of Living Index

Livability indicators of Mercer Quality of Living Index grouped under ten categories. 39 livability indicators include , Political and Social Environment has 5 indices, Medical and Health has 8 indices, Public Services and Transport has 7 indices, Consumer Goods has 5 indices, Economic Environment has 2 indices, Socio-Cultural Environment has 2 indices, School and Education has 1 index, Recreation has 4 indices, Housing has 3 indices and Natural Environment has 2 indices. [5]

Table 01 given below describes indicators of Mercer Quality of Living index.

MERCER INDEX-INDICATORS (QUALITY LIVING INDEX)
Political & Social Environment, Medical & Health, Public Services & Transport, Consumer Goods, Economic Environment, Socio-Cultural Environment, School & Education, Recreation, Housing, Natural Environment
SOURCE: MERCER. (2016).

Table-01

B. EIU – Economist Intelligence Unit

It is a research and analysis division of the Economist Group created in 1946, for forecasting and advisory services. Regular reports are produced on cost of living and livability of major cities of world by this division. Quality of Life Index is one of the well noted report produced by this division. [4] Table 02 given below describes indicators of EIU Ranking Index.

MERCER INDEX-INDICATORS (QUALITY LIVING INDEX)
Political & Social Environment, Medical & Health, Public Services & Transport, Consumer Goods, Economic Environment, Socio-Cultural Environment, School & Education, Recreation, Housing, Natural Environment
SOURCE: MERCER. (2016).

Table-02

C. OECD – Organization of Economic Corporation and Development:

In 1948 the Organization for European Economic Cooperation (OEEC) was established to run the US-financed Marshall Plan. It was meant for reconstruction of a continent ravaged by war. Canada and the US joined in signing the new OECD Convention. On 30 September 1961 OECD was officially born, when the Convention entered into force. The OECD aims is to promote policies that will improve the social and economic well-being of the people all over the world. 24 livability indicators of **OECD Better Life Index (BLI)** are grouped under eleven categories. Housing has 3 indices, Income has 2 indices, Jobs has 4 indices, Community has 1 index, Education has 3 indices, Environment has 2 indices,



Civil Engagement has 2 index, Health has 2 indices, Life has 1 index, Safety has 2 indices and Work-Life Balance has 2 indices. Table 03 given below describes indicators of OECD Better Life Index (BLI). [11]

MERCER INDEX-INDICATORS (QUALITY LIVING INDEX)
Political & Social Environment, Medical & Health, Public Services & Transport, Consumer Goods, Economic Environment, Socio-Cultural Environment, School & Education, Recreation, Housing, Natural Environment
SOURCE: MERCER. (2016).

Table-03

D. BIS – Bureau of Indian Standards:

Under the BIS Act 1986 National Standard Body of India was established, for the overall development of the activities of standardization and quality certification of goods and for all matters connected therewith or incidental thereto. [2] Table 04 given below describes indicators of BIS Index.

BIS INDEX-INDICATORS (BUREAU OF INDIAN STANDARDS)
Energy, Atmosphere, Water, Local Economy, Finance, Housing/Shelter, Governance, Health, Education, Safety, Recreation, Demographics, Transportation, Water Supply, Solid Waste, Sewerage & Sanitation, Urban Planning Implementation, Fire & Emergency, Tele-communication & Innovations
SOURCE: BIS – BUREAU OF INDIAN STANDARDS. (2016). SMART CITY -INDICATORS. SMART CITIES SECTIONAL COMMITTEE.

Table-04

E. MoUD – Ministry of Urban Development, India

MoUD is an apex authority of Government of India to formulate policies at the national level. It also sponsors and support program, coordinate various activities of Central Ministries, State Governments and other nodal authorities. It monitors the programs concerning the urban development issues in the country. [8] Table 05 given below describes indicators of MoUD Index.

MOUD INDEX (MINISTRY OF URBAN DEVELOPMENT INDIA)
Energy, atmosphere, water, local Economy, Housing/ Inclusiveness, Governance, Health, Education, Safety, Recreation, Transportation, Water Supply, Solid Waste, Sewerage & Sanitation, Identity & Culture, Compactness, Power Supply
SOURCE: MOUD – MINISTRY OF URBAN DEVELOPMENT, INDIA. (2015). STANDARDS FOR SMART CITY - A MEASUREMENT TOOL FOR CITIES IN THE SMART CITY MISSION.

Table-05

F. LAD scheme Indicators

In 1993-94 the Members of Parliament Local Area Development Scheme (MPLADS) was launched. It is an ongoing Central Sector Scheme. The Members of Parliament can recommend works based on locally felt needs in their constituencies. The works in the areas namely water facility, education facility, public health, and sanitation, etc. [GOVERNMENT OF INDIA: MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION. 2005 (MPLADS)] (18).The Ministry of Statistics and Programme Implementation has formulated the policy, and also has prescribed terms for release of funds and monitoring mechanism for the Scheme implementation. [MOSPI, 2005.] (18).The MPLADS is a

Plan Scheme fully funded by Government of India. The MPLADS annual fund entitlement is Rs. 5 crore per MP constituency. The District Collector is responsible for execution of works and release of payments. MP has a choice to suggest works to the District Collector to be undertaken in his/her constituency under this scheme up to Rs.5 Crores per annum. [MOSPI, 2005.] [3] Table 06 given below describes of LAD Scheme for physical development in local areas of an Indian city.

LAD SCHEME-INDICATORS
Drinking water Facility, Education , Electricity Facility, Health Facility, Health and Family Welfare, Irrigation Facilities , Non-conventional Energy sources, Other Public Facilities , Railways, Roads, Pathways and Bridges , Sanitation and Public Health, Sports , works relating to Animal Husbandry, Dairy and Fisheries, Works relating to Agriculture, Works relating to Cluster Development for Handloom Weavers, Works relating to urban development
SOURCE: MOSPI (“GUIDELINES OF MPLADS,ANNEXURE – IV E”).

Table-06

V. COMPARATIVE ANALYSIS OF THEMES

EIU INDEX (ECONOMIST INTELLIGENCE UNIT)	MERCER INDEX (QUALITY LIVING INDEX)	OECD BLI INDEX (BETTER LIFE INDEX)	BIS INDEX (BUREAU OF INDIAN STANDARDS)	MOUD INDEX (MINISTRY OF URBAN DEVELOPMENT INDIA)	LAD SCHEME ONLY (URBAN DEVELOPMENT INDICATORS)
Stability, Healthcare, Culture & Environment, Education, Infrastructure	Political & Social Environment, Medical & Health, Public Services & Transport, Consumer Goods, Economic Environment, Socio-Cultural Environment, School & Education, Recreation, Housing, Natural Environment	Housing, Income, Jobs, Community, Education, Environment, Civil Engagement, Health, Life, Safety, Work-Life benefits	Energy, Atmosphere, Water, Local Economy, Finance, Housing/Shelter, Governance, Health, Education, Safety, Recreation, Demographics, Transportation, Water Supply, Solid Waste, Sewerage & Sanitation, Urban Planning Implementation, Fire & Emergency, Tele-communication & Innovations	Energy, atmosphere, water, local Economy, Housing/ Inclusiveness, Governance, Health, Education, Safety, Recreation, Transportation, Water Supply, Solid Waste, Sewerage & Sanitation, Identity & Culture, Compactness, Power Supply	Water Facility, Education, Lighting Facility, Health Facility, Other Public Facilities, Sanitation and Public Health, Sports, Works relating to urban development
THE ECONOMIST (2016) A SUMMARY OF THE LIVEABILITY RANKING AND OVERVIEW, THE ECONOMIST INTELLIGENCE UNIT	MERCER. (2016).	OECD. (2011).	BS – BUREAU OF INDIAN STANDARDS (2016). SMART CITY -INDICATORS. SMART CITIES SECTIONAL COMMITTEE.	MOUD – MINISTRY OF URBAN DEVELOPMENT, INDIA. (2015). STANDARDS FOR SMART CITY - A MEASUREMENT TOOL FOR CITIES IN THE SMART CITY MISSION.	Source: MOSPI (“GUIDELINES OF MPLADS,ANNEXURE – IV E”)

Comparing the development indicators of both International & Local ranking organizations (EIU, MERCER, OCED, BIS, MOUD & LAD’s), it is evident that Indian themes emphasis on physical development reflecting the urgent need to strengthen the physical domain. Maximum number of indices are covered under physical domain in all Indian themes. And it aims to provide basic physical amenities to the majority of urban population in near future. Comparative analysis of the indicators of international and local ranking themes of urban development, indicators of LADs were found directly in context of local area needs and thus list of urban physical development indicators of LAD can be identified as Local Area Physical Development Indicators of a city in India. Indicators may vary in priority from one city to another, as per its availability and need in the local areas of that case city.

VI. CONCLUSION

Fast growing population of India with increasing urban population has brought with it urban issue of providing basic physical amenities like water supply, sanitation, sewage, waste disposal and transport. The analysis conducted in this research paper was to identify local area physical development indicators for an India city, which could be achieved by comparative analysis of international and local ranking themes of urban development.



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Indicators of LADs were found directly in context of local area needs and thus list of urban physical development indicators of LAD can be identified as Local Area Physical Development Indicators of a city in India. The study also identified the need to develop some methodology or framework to enhance performance of physical development in local areas of a city with identified indicators in near future to create balance between demand supplies of physical amenities in Indian cities, which could help resolve urbanisation issues prevailing in physical domain.

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