

# Evaluating the efficiency of urban service distribution in existing cities to support strategic plans through statistical analysis of Central Agency for Public Mobilization and Statistics data and sustainable development indicators

**Nevine Ismail Mahmoud**

Horus University, Faculty of Engineering, nismail@horus.edu.eg

## Abstract:

Urban planning authorities prepare successive strategic plans intending to achieve development in targeted areas and improve the quality of life there. In existing cities, numerous issues persist related to poor services, despite the Central Organization for Public Mobilization's continuous efforts, which are not fully utilized. This requires analyzing the data in a different way to make the best use of the results. to develop and propose solutions based on feasibility studies that can be implemented. We find that rapid urbanization has led to inequality in access to urban services that achieve the necessary efficiency for citizens. This results from the lack of coverage of education, healthcare, and many other services for all levels of the population, leading to service gaps at the city level. better served than others. This is a result of the unplanned and random expansion of existing old cities, which has allowed increasing service gaps. At the same time, there is an increase in population density. This has led to duality, as the same population density has made a difference between the levels of services from one region to another, with some areas benefiting exceptionally, while others do not benefit at all due to various factors, such as spatial distance or difficulty in access.

## Paper History:

Paper received July 2, 2025, Accepted August 25, 2025, Published online November 1, 2025

## Keywords:

Urban Services, Sustainable Development, Quality of Life, Service Distribution, Strategic Urban Planning

## References:

- 1- Fouad Bin Ghadhban, Sustainable Cities and the Urban Project Towards Sustainable Strategic Planning, 2014, Dar Safa for Printing, Publishing and Distribution, Jordan.
- 2- peter P, Rogers, Kazi F, Jalal, John A. Boyd, An Introduction to Sustainable Development, 2008, London <https://doi.org/10.4324/9781849770477>
- 3- Shabbir Cheema, Johan Lilja, Governance for Urban Services, 2020, <http://www.springer.com/series/13196>
- 4- Ardeshiri, Ali, Evaluating urban services using economic valuation techniques: towards better urban environmental quality and promotion of sustainable development, 2014, Newcastle University, <http://hdl.handle.net/10443/2750>
- 5- Ian Copper, Martin Symes, Sustainable Urban Development changing professional practice, 2009, Routledge, London, New York.
- 6- Deepak Bajaj, Sanjay Patil, Thayaparan Gajendran Sustainable Built Environment, 2024, Springer Nature Singapore Pte Ltd
- 7- Ihab Mahmoud Oqba, Mahga Imam Imbaby, Rasha Mukhlis Abdel Moneim, Guiding Urban Management Through the Application and Activation of Sustainable Development Indicators, 2016, Journal of the Egyptian Society of Engineers, Issue 1.
- 8- Soha Attia Abdel Fattah, Basant Hisham Ahmed Youssef, Mohamed Mahmoud, Mohamed Magdy Qarad, Applying Sustainable Development Indicators in Egyptian Cities to Maximize the Role of Investment and International Partnerships, 2019, Journal of the Egyptian Society of Engineers, Volume 58, Issue 2.
- 9- Stanislav E. Shmelev, Sustainable Cities Reimagined, 2020, Routledge, London, New York.
- 10- Shabbir Cheema, Governance and Urban Service, 2020, Cambridge, Harvard University, MA, USA
- 11- Diego Fernández Fernández, Serving Africa's Citizens: Governance and Urban Service, 2020, Cambridge, Harvard University, MA, USA
- 12- Global Report on Human Settlements 2009: Planning Sustainable Cities, <https://unhabitat.org/global-report-on-human-settlements-2009-planning-sustainable-cities>
- 13- National Statistical Report on Monitoring Indicators of the 2030 Sustainable Development Goals in Egypt, December 2019, Central Agency for Public Mobilization and Statistics.

- 
- 14- Egypt in Numbers 2022, March 2022 Issue Central Agency for Public Mobilization and Statistics
  - 15- Guide to Planning Rates and Standards for Services in the Arab Republic of Egypt – Volume 1, Educational Services, 2014, Ministry of Housing, Utilities and Urban Communities, General Organization for Urban Planning, Central Administration for Research, Studies and Regional Planning
  - 16- Guide to Planning Rates and Standards for Services in the Arab Republic of Egypt, Volume 2, Health Services, 2014, Ministry of Housing, Utilities and Urban Communities, General Organization for Urban Planning, Central Administration for Research, Studies and Regional Planning
  - 17- Guide to Planning Rates and Standards for Services in the Arab Republic of Egypt, Volume 6, Sports Services, 2014, Ministry of Housing, Utilities and Urban Communities, General Organization for Urban Planning, Central Administration for Research, Studies and Regional Planning
  - 18- Statistical Yearbook 2022, Issue 113, December 2022, Central Agency for Public Mobilization and Statistics
  - 19- <https://www.capmas.gov.eg/Pages/StatisticsOracle.aspx>
- 

**CITATION**

Nevine Mahmoud (2025), Evaluating the efficiency of urban service distribution in existing cities to support strategic plans through statistical analysis of Central Agency for Public Mobilization and Statistics data and sustainable development indicators, International Design Journal, Vol. 15 No. 6, (November 2025) pp 91-106

---