



Review of Approaches to the Analysis of Sustainable Development of Urban Territories


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- ▶ With the rapid urbanization appearing across the globe, governments face the challenge of achieving sustainability within cities. Therefore, we need:
 - 1) To envision sustainable cities and implement strategies to accomplish this goal
 - 2) Find out what factors have an influence on sustainability in the urban context

 - ▶ In 2018 over half of the world's population lived in urban areas, and this number is expected to reach 68 percent by 2050 (UN, 2018)

 - ▶ While cities are portrayed as innovation hubs as well as centers for cross-cultural collaboration, their ecological footprint is extended far beyond their physical boundaries, leading to drawbacks in social and economic aspects within these urban centers as well as between them.

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- ▶ Sustainability is an endeavor to lift global standards of living while respecting and protecting the Earth. Following this logic, sustainable cities are urban areas the surroundings of which are planned and managed to provide livelihood and equity to the citizens, while avoiding pressuring the environment beyond a key threshold. Cities being complex systems that are nested within unique ecological systems, each one being defined by its own historical and cultural context, make it extremely challenging to adequately select some out of a wide variety of factors that have a direct or indirect influence on urban sustainability.
 - ▶ The goal of the paper was to analyze impacting factors that are mentioned the most in the literature and group them.

Urban Sustainability

- ▶ By the end of the 20th century, diverse ideas from various movements, such as social justice, internationalism, and conservationism have united in the call for “sustainable development
- ▶ In Cambridge Dictionary the term “sustainability” is defined as:
 - 1) The quality of being able to continue over sometime;
 - 2) The quality of causing little or no damage to the environment and therefore able to continue over a period of time.
- ▶ In the universally known report “Our Common Future”, The Brundtland Commission states that sustainability means meeting one’s own needs without compromising the ability of the descendants to meet their needs. Not only environmentalism but also economic development and social equity are important constituents of sustainability, as natural, social and economic resources have to be considered.

Approaches to Urban Sustainability

Planned Oriented Approaches

- New Urbanism
- Compact Cities
- Smart Growth
- Participatory Planning

Greening and Eco-Oriented City Approaches

- Ecosystem services
- Urban socio-ecological systems
- Green infrastructure
- Nature-based solutions

Ecological Economics Approaches


- Ecological/environmental system based limits
- Ecological footprint
- Energy
- Zero waste carbon pollution

Social Justice Oriented Approaches

- Access and participation in decision making
- Inequitable distribution of environmental burdens and access amenities

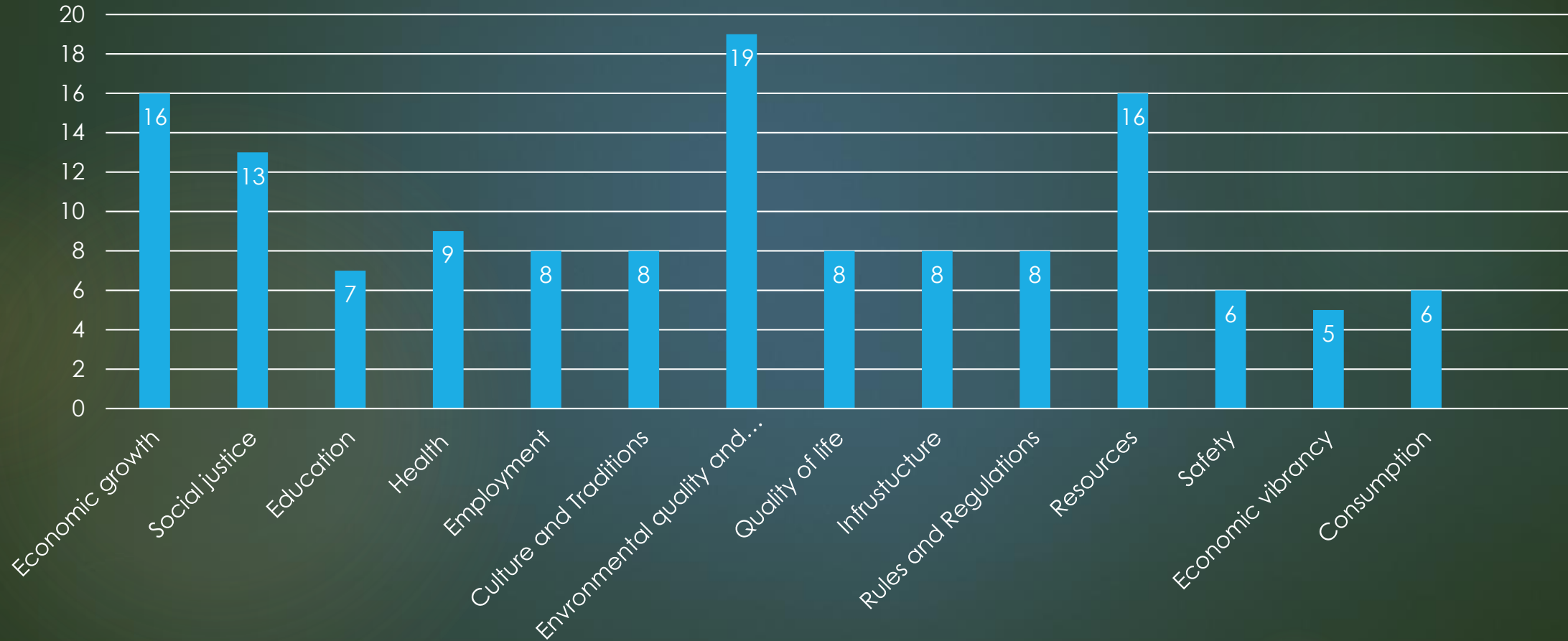
Sustainability Management Oriented Approaches

- Goal setting
- Continuous improvement
- Indicator measurement

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- ▶ Systematic literature review of the literature on urban sustainability, following Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines
 - ▶ The search terms “sustainability”, “sustain”, “urban”, “community”, “factor”, “indicator” were used in SCOPUS, Web of Science, and Science Direct
 - ▶ The timeframe applied was 2001-2020
 - ▶ only peer-reviewed articles that were published in English
 - ▶ In total, 2134 articles
 - ▶ After the close analysis 28 articles left

Results

Factors affecting the level of sustainability of urban development



Conclusion

- ▶ Factors mentioned the most are the ones related to the traditional three-pillars of the sustainability model
- ▶ 14 factors have been identified and packed into 4 groups: social factors, environmental factors, economical factors, and awareness factors
- ▶ This research paper is limited by its reliance on other scholars' self-reporting results of their studies
- ▶ Moreover, there are language inconsistencies across various literature sources, therefore current analysis is based on our interpretations of what is at times unclear work of others.



*Thank You For Your
Attention*