

Revisiting the notion of urban blight in the context of Global South

A discursive approach

Barnali CHAKRABORTY, Indian Institute of Technology, Kharagpur, India

Priyanka DEY, Indian Institute of Technology, Kharagpur, India

Abstract

Cities across the world are experiencing rapid transformations driven by urbanisation and demographic shifts. The presence of urban blight impacts the functionality and sociability of urban areas, diminishing community wellbeing and quality of life. Traditional policies of urban blight often struggle to address its multifaceted impacts due to the ambiguity associated with the terminology. This research aims to explore the concept of blight and elucidate the criteria that characterise urban blight in the context of the Global South. By adopting an integrated research method, comprising systematic literature reviews, expert opinion surveys, relative to identified distribution analysis, and grey relational analysis, the research provides a contextualised understanding of the phenomenon. The research broadens the nuanced understanding of blight by incorporating subjective and objective attributes, addressing the physical, functional, environmental, economic, psychological, and social aspects. The comprehensive perspective outlined in this research will facilitate a more place-based and sustainable approach to blight remediation.

Keywords

Urban blight, Global South, Grey Relation, RIDIT, Social Decline

1. Introduction

The 21st century cities are undergoing rapid demographic, economic, and spatial transformations, triggered by rapid urbanisation and the resulting mass migration of people from the rural hinterlands (OECD and European Commission, 2020; United Nations, 2018). The natural ageing of urban infrastructures coupled with constrained resources has led to the occurrence of urban blight in many cities across the world (Darling, 1943; Breger, 1967). Urban blight profoundly affects community wellbeing and quality of life as its presence contributes to functional, social, and economic depreciation (Pinto *et al.*, 2021). The conceptual evolution of blight has been explored in various historical theories on cities and urban growth. According to the theories on classification of cities, as propounded by Lewis Mumford (1938), Griffith Taylor (1949), J.M. Houston (1953), and M.R.G. Conzen (2004), every city goes through several stages of development, reaches a point of stagnation, and subsequently begins to decline, leading to urban blight and decay. The physical manifestation of blight was first reported during the Industrial Revolution era, when neighbourhoods housing the industrial workers in congested and substandard quarters with frequent outbreaks of diseases were considered blighted (Breger, 1967; Linehan, 2000). Subsequently, the post-industrial decline and the resulting fall of economies, outflow of

people, and housing abandonment were included under the broad realm of urban blight (Schilling *et al.*, 2015). This dynamic and malleable nature of the phenomenon often hinders policy formulation to manage urban blight and effectively address the place-based demands of the affected areas. Presently, there is a lack of clarity among the urban administrations of different nations as to what exactly constitutes blight. This ambiguity complicates a united attempt to eradicate the menace of blight, where we encounter certain areas that are successfully at the forefront of this struggle, whereas other areas have been left crippled by this issue. An overarching global characterisation of blight may misrepresent the region-specific realities of blight in cities of the Global South. Urban practitioners in the Global South often adopt the ways and techniques of the Global North while dealing with urban blight. Completely undermining the stark contrast in the demands of the Global North and the Global South, due to differences in socio-economic growth trajectories, administrative structures, and governance models (Myers, 2021), often leads to disastrous outcomes. Therefore, this research aims to elucidate the criteria that characterise urban blight in the cities of Global South. Identifying the primary, secondary, and tertiary criteria that characterise urban blight will help clarify and refine the definition of the term *urban blight* in the context of the Global South, providing a more grounded approach for blight remediation in these cities. A mixed-method approach was adopted to capture the multifaceted nature of urban blight and provide a nuanced understanding by incorporating both subjective and objective attributes of the phenomenon. A systematic literature review was conducted using the PRISMA method, following which content analysis and reflexive thematic coding were employed to analyse the selected documents. The extracted indicators of blight were evaluated by a panel of 15 experts and relative to identified distribution analysis (RIDIT) and grey relational analysis (GRA) were employed for interpreting the expert opinions.

Blight evaluation studies so far have predominantly focused on the physical aspects of the phenomenon manifested in the form of degraded and dilapidated built environments (Athens *et al.*, 2020). This research provides a fresh perspective by incorporating the social, economic, and environmental aspects of urban blight in addition to the physical and spatial aspects. The findings of this research can be instrumental in highlighting the complex underpinnings of urban blight, enabling a sensitive approach to address and alleviate blight. The remainder of the study has been structured as follows: Section 2 presents a brief background of the existing literature. Section 3 explains the methodology of the research, followed by section 4, which presents the result and discusses the research outcome. Section 5 presents the final inferences and conclusion of the research.

2. Background

The term *urban blight* was first put forward by Philip V.I. Darling in 1943, demarcating it as an area with inadequate and substandard living conditions, lacking sufficient open space, natural light, and ventilation (Darling, 1943; Lousada *et al.*, 2021). Due to urbanisation induced pressures and its growing impacts on quality of life and urban liveability, original inhabitants in old city cores often move to peripheral areas in search of better quality of life, leading to housing abandonment and vacancy (Ferreira *et al.*, 2018; Pinto *et al.*, 2023; Chakraborty and Dey, 2024b). Mass scale abandonment and vacancy results in the formation of urban blight, characterised by physical degradation and depreciation in the socio-functional aspects of the affected areas (Maghelal *et al.*, 2014; Sun *et al.*, 2019; Pinto *et al.*, 2021). The negative externalities of blight result in reduced property values, deterioration of public health, increased crime and anti-social activities, unemployment, etc., contributing to poor living conditions and further depreciation of real estate values (Pritchett, 2003; Donnelly, 2008; Brueckner and Helsley, 2011; Hoffman, 2012). If left unaddressed, urban blight can negatively impact a nation's economy and GDP in the long run due to its

substantial effects on the real estate market. As such, urban blight management has been gaining attention of late.

However, previous literature has noted that the differing definitions of blight pose challenges for operationalising the concept (Athens *et al.*, 2020). The subjective nature of the phenomenon often leads to disagreement over the meaning of the term, hindering evidence-based policy formulations. This contesting notion of blight has led to significant challenges in effectively defining and addressing it across different spatial and socio-economical contexts (Breger, 1967; Weaver, 2013). Eminent domains, local authorities, and redevelopment agencies enjoy the tacit and ambiguous declaration of blight, which enables them to procure areas for demolition and redevelopment solely based on visible signs of decay or subjective perceptions related to health and safety concerns (Gordon, 2008). The lack of a standard definition for objectively evaluating urban blight increases the risk of authorities capitalising on this opportunity to redevelop blighted areas merely to serve personal or corporate agendas (Weaver, 2013; Cook and Sutherland, 2015). Such ad-hoc and top-down approaches risk driving adverse outcomes like displacement and gentrification, thereby further marginalising the communities these interventions aim to support. Additionally, these challenges may also hinder the development of actionable plans for comprehensive blight management.

Studies on urban blight tend to focus on one or two aspects of the phenomenon at a time, mostly from the perspective of public health issues or socio-economic impacts, thereby often overlooking the integrated managerial approach that the phenomenon demands. Therefore, bridging this gap necessitates a more unified conceptualisation that incorporates the multifaceted aspect of blight. Thus, this research aims to refine the concept of blight, providing a more contextualised understanding of the phenomenon by focusing on the Global South. Integrating the functional, environmental, economic, psychological, and social underpinnings of blight, this research attempts to reflect the complex realities of the blighted urban areas, contributing to a more nuanced and inclusive understanding of the phenomenon. As majority of the existing studies on blight have predominantly focused on the Global North, this study will help advance the extant literature by considering the Global South as the focus of the research. The findings of this research will help pave the way for sustainable and inclusive management of blight, aligning diverse goals of different stakeholders with the ground realities of affected communities.

3. Methodology

The methodology of the research was divided into three parts: data collection, collation and analysis. In the first step, a systematic literature review was conducted following the *Preferred Reporting Items for Systematic Reviews and Meta-Analyses* (PRISMA) method. The documents considered for the review were extracted from the Scopus database, as it returned a larger bibliographic collection compared to other databases. The keywords used for the search were “urban blight”, “urban decay”, “urban degradation”, “urban deterioration”, and “urban obliteration”. These terms are regarded as synonyms and are often used interchangeably within the research community. The database search returned a result containing 594 documents. 460 documents were retained in the *level 1* screening by refining the search to include only peer-reviewed articles published in English between 1990 and 2022. Documents within the research areas of social science, environmental science, engineering, and multidisciplinary studies were retained in *level 1* screening. The titles, abstracts, keywords, and relevance of the published manuscript were manually assessed in *level 2*, based on which 242 documents were retained for the final level of screening. Finally, 60 documents that presented a detailed discourse on urban blight were selected in *level 3*. These selected documents were analysed to extract the indicators of urban blight

using reflexive thematic coding following the steps mentioned in the data collation stage (Figure 1). A total of 72 indicators were extracted following five rounds of coding iteration until redundancy. Based on inductive interpretation and shared commonality of the indicators, they were grouped under six categories, namely *physical*, *functional*, *environmental*, *economical*, *psychological*, and *social*.

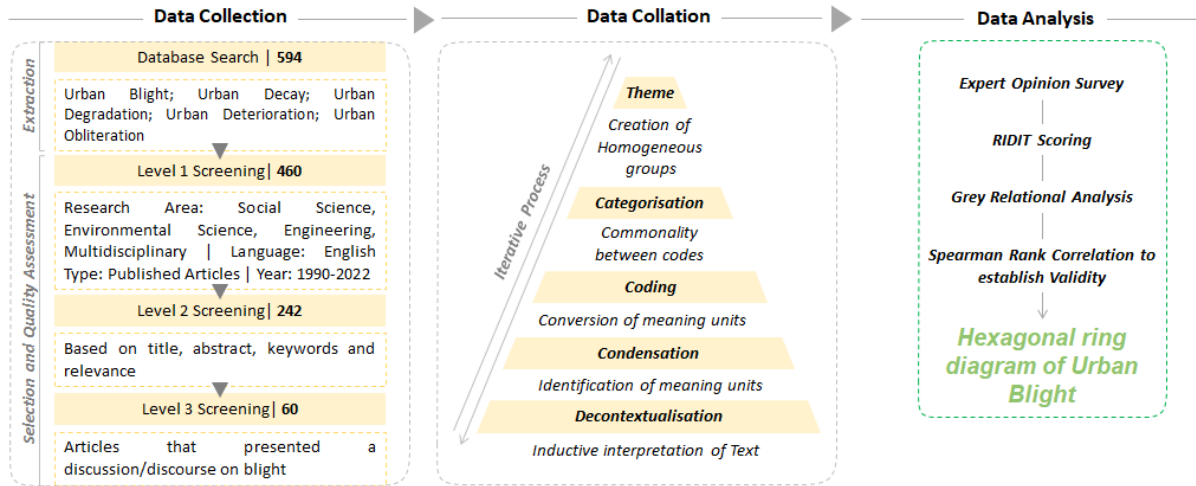


Figure 1. Research Methodology. Source: Authors

Next, online expert opinion surveys were conducted to validate the selection of indicators. A panel of 15 national and international experts working in the Global South was invited to participate in the online surveys. A five-point likert scale was used by the experts to rate their level of agreement on whether the concerned indicators are defining characteristics of urban blight in the context of the Global South. A total of 44 indicators were retained for the subsequent stages of analysis. The sole objective of conducting the systematic literature review was to ensure that diverse perspectives on urban blight could be captured, which was then refined to address the present context of this research by employing the expert opinion surveys. The collated data from the expert opinion survey was subsequently analysed and interpreted using the *relative to identified distribution analysis* (RIDIT) and *grey relational analysis* (GRA).

3.1. Relative to identified distribution analysis (RIDIT)

The RIDIT analysis is a statistical method for analysing ordinal scale likert scale data without any assumption regarding the distribution of the dataset (Mandal and Dey, 2022). RIDIT analysis can be conducted on a relatively small amount of data. This analysis is useful in determining the priority of indicators in multi-attribute or multi-criteria decision-making studies based on the assigned satisfaction or dissatisfactions against each indicator. The mean RIDIT values for each indicator were computed on the basis of the level of importance and satisfaction assigned by the experts using the following steps:

- The frequency f_j for each point on the likert scale was calculated based on the received expert responses, where $j=1, \dots, n$ represents a point on the considered rating scale.
- The midpoint F_j was calculated for all the points considered in the rating scale. For the first point, the midpoint was given by $F_1 = \frac{1}{2} f_1$ and midpoint for every subsequent point was calculated as:

$$F_j = \frac{1}{2} f_j + \sum_{k=1}^{j-1} f_k$$

where $j=2, \dots, n$

(iii) The RIDIT R_j for all the rating scale points was calculated as:

$$R_j = \frac{F_j}{N}$$

where $j=1, \dots, n$ and N was the sum of total number of responses collected for each indicator.

(iv) The RIDIT value r_{ij} for all the rating scale points for an indicator was calculated as:

$$r_{ij} = \frac{R_j \times \pi_{ij}}{\pi_i}$$

where $i=1, \dots, p$ and π_{ij} was the frequency of any defined rating scale point j for any indicator i , and π_i was the frequency aggregation for the i^{th} indicator observed across all the rating scale points as given by:

$$\pi_i = \sum_{k=1}^n \pi_{ik}$$

(v) The mean RIDIT ρ_i was calculated for all the indicators i as:

$$\rho_i = \sum_{k=1}^n r_{ik}$$

(vi) Finally, to check the validity of the results, the *Kruskal-Wallis* statistics was calculated as:

$$W = 12 \sum_{i=1}^p \pi_i (\rho_i - 0.5)^2$$

3.2. Grey Relational Analysis

Grey relational analysis is used to evaluate the correlation or similarities between indicators based on their pattern of variation (Kuo, Yang and Huang, 2008). It does not have any strict assumptions regarding the distribution of the dataset and can be used as an alternative to probabilistic and statistical methods. Like RIDIT analysis, grey relational analysis can be conducted on a small sample size. In this study, the grey relations between the indicators were computed as follows:

(i) First, a reference data series x_0 was generated as:

$$x_0 = (d_{01}, d_{02}, \dots, d_{0m})$$

where, m =number of respondents and the reference series represent the most favoured responses.

(ii) The comparison data series x_i was given by:

$$x_i = (d_{i1}, d_{i2}, \dots, d_{im})$$

where, $i=1, \dots, k$ and k was the number of scale items.

(iii) The difference between the reference and comparison series was calculated as:

$$\Delta_i = (|d_{01} - d_{i1}|, |d_{02} - d_{i2}|, \dots, |d_{0m} - d_{im}|)$$

(iv) The global maximum and minimum values of the difference data series were calculated as:

$$\Delta_{max} = \max_{\forall i} (\max \Delta_i)$$

$$\Delta_{min} = \min_{\forall i} (\min \Delta_i)$$

(v) The grey relation coefficient was given by:

$$\theta_i(j) = \frac{\Delta_{min} + \omega\Delta_{max}}{\Delta_i(j) + \omega\Delta_{max}}$$

where, $\Delta_i(j)$ was the j^{th} value in the difference data series and ω was the coefficient value, which was considered as 0.5 for this study.

(vi) Finally, the grey relation grade for the i^{th} scale item was given by:

$$\Gamma_i = \frac{1}{m} \sum_{n=1}^m \theta_i(n)$$

4. Results and Discussions

The responses collected from the expert opinion surveys were analysed using the RIDIT and GRA methods. The findings of the analysis have been presented in Figure 2. The priority ranks of the indicators were determined based on the RIDIT values, which were then compared with the values obtained from the grey relational analysis to check for differences in the ranking of the indicators. A low value of mean RIDIT score is preferred over a higher one, as it indicates a reduced likelihood of being associated with negative propensity. The findings from the RIDIT analysis revealed that the experts assigned greater importance to *abandoned buildings*, followed by *violence and crime*, *decline in public health*, *degraded building conditions*, *improper waste disposal*, *litter and garbage on streets*, *drug trafficking and substance abuse*, *social unrest*, *structural construction left incomplete for years*, *substandard and unsanitary living conditions*, and *newly constructed buildings left unoccupied for years*. The Kruskal-Wallis Test (W) returned a value of 120.598, which is significantly higher than the *chi sq.* value of 59.304 for a degree of freedom of 43 at 95% confidence level, indicating that the expert views on the indicators were dissimilar in one way or another.

The results from the grey relational analysis gave similar priority ranks for the indicators, as shown in Figure 2. According to the GRA results, the top ten relevant indicators were found to be *decline in public health*, *abandoned buildings*, *violence and crime*, *social unrest*, *drug trafficking and substance abuse*, *improper waste disposal*, *litter and garbage on the streets*, *degraded building conditions*, *substandard and unsanitary living conditions*, *structural construction left incomplete for years*, and *newly constructed buildings left unoccupied for years*. This indicates that physical and social factors take precedence as the most important indicators of blight in the Global South. These indicators under the *physical*, *social*, *functional*, and *environmental* categories received the highest priority from the experts regarding their relevance as characteristics of urban blight in the context of the Global South cities. To test the statistical validity of the analysed results, *Spearman's rank correlation* test was carried out. The correlation between the ranking of the indicators using RIDIT analysis and grey relational analysis was found to be 0.985 at 95% confidence level. This proved the statistical validity of the indicators' ranks, signifying that the ranks derived from the RIDIT analysis and grey relational analysis were statistically similar, thus establishing the reliability of the research findings. Figure 3 presents a spider graph illustrating the correlation between the RIDIT ranks and grey relational ranks of the indicators.

Characteristics of Urban Blight		Scoring		Ranking	
		RIDIT	GRA	RIDIT	GRA
Physical	Abandoned buildings	0.3059	0.7949	1	2
	Vacant plots/land parcels	0.6746	0.4854	40	40
	Degraded building conditions	0.3260	0.7786	4	7
	Presence of demolished buildings	0.5003	0.6231	23	27
	Structural construction left incomplete for years	0.3665	0.7595	8	9
	Newly constructed buildings left unoccupied for years	0.3793	0.7500	10	10
	Substandard and unsanitary living conditions	0.3707	0.7684	9	8
	Structures made of makeshift materials	0.6928	0.4823	42	41
	Graffiti	0.7803	0.4156	44	44
	Overgrown vegetation and weeds	0.5867	0.5660	32	33
	High building density marked by overcrowding and congestion	0.6669	0.4997	38	38
	Abandoned vehicles on the streets or automobile junkyards	0.3870	0.7119	11	12
	Poor visual appearance	0.4599	0.6687	19	19
Functional	Decline in public health	0.3249	0.8119	3	1
	Nonconformity with building codes/byelaws/land use	0.6857	0.4901	41	39
	Poor road infrastructure, narrow streets and footpaths in despair	0.5067	0.6143	26	30
	Parking problems	0.6745	0.4779	39	42
	Inadequate and poor infrastructural services	0.4398	0.6976	17	14.5
Environmental	Environmental contamination or presence of pollutants	0.4186	0.7143	12	11
	Degraded outdoor/open public areas	0.4392	0.6976	16	16
	Improper waste disposal, litter and garbage on the streets	0.3383	0.7806	5	6
	Air pollution and poor air quality	0.5989	0.5707	34	32
	Proliferation of pests and animals in the streets	0.5390	0.6065	31	31
Economical	High rate of mortgage foreclosure	0.5004	0.6330	24	24
	High number of rented properties	0.7784	0.4357	43	43
	Low per capita income	0.5202	0.6378	28.5	22
	Low property values	0.4668	0.6803	20	18
	Tax delinquency	0.4938	0.6211	22	28
	High rate of unemployment	0.4933	0.6500	21	20
Psychological	Feeling of exclusion or marginalization	0.4192	0.7048	13	13
	Less sense of community	0.5936	0.5612	33	34
	Contested notion of safety and security	0.4479	0.6476	18	21
	Poor reputation or social stigmatization of neighborhood	0.4198	0.6976	14	14.5
Social	Antisocial behavior and immoral activities	0.5260	0.6310	30	25
	Conflicting land ownership	0.6401	0.5231	36	36
	Socio-economic segregation	0.5132	0.6262	27	26
	Lack of civism	0.5202	0.6163	28.5	29
	Lack of public participation	0.6665	0.5180	37	37
	Lack of social cohesion	0.6207	0.5446	35	35
	Vandalism	0.4204	0.6925	15	17
	Drug trafficking and substance abuse	0.3388	0.7810	6.5	5
	Violence and crime	0.3188	0.7929	2	3
	Social unrest	0.3388	0.7810	6.5	4
	Population exodus	0.5008	0.6333	25	23

Figure 2. Results of the RIDIT and GRA analysis. Source: Authors

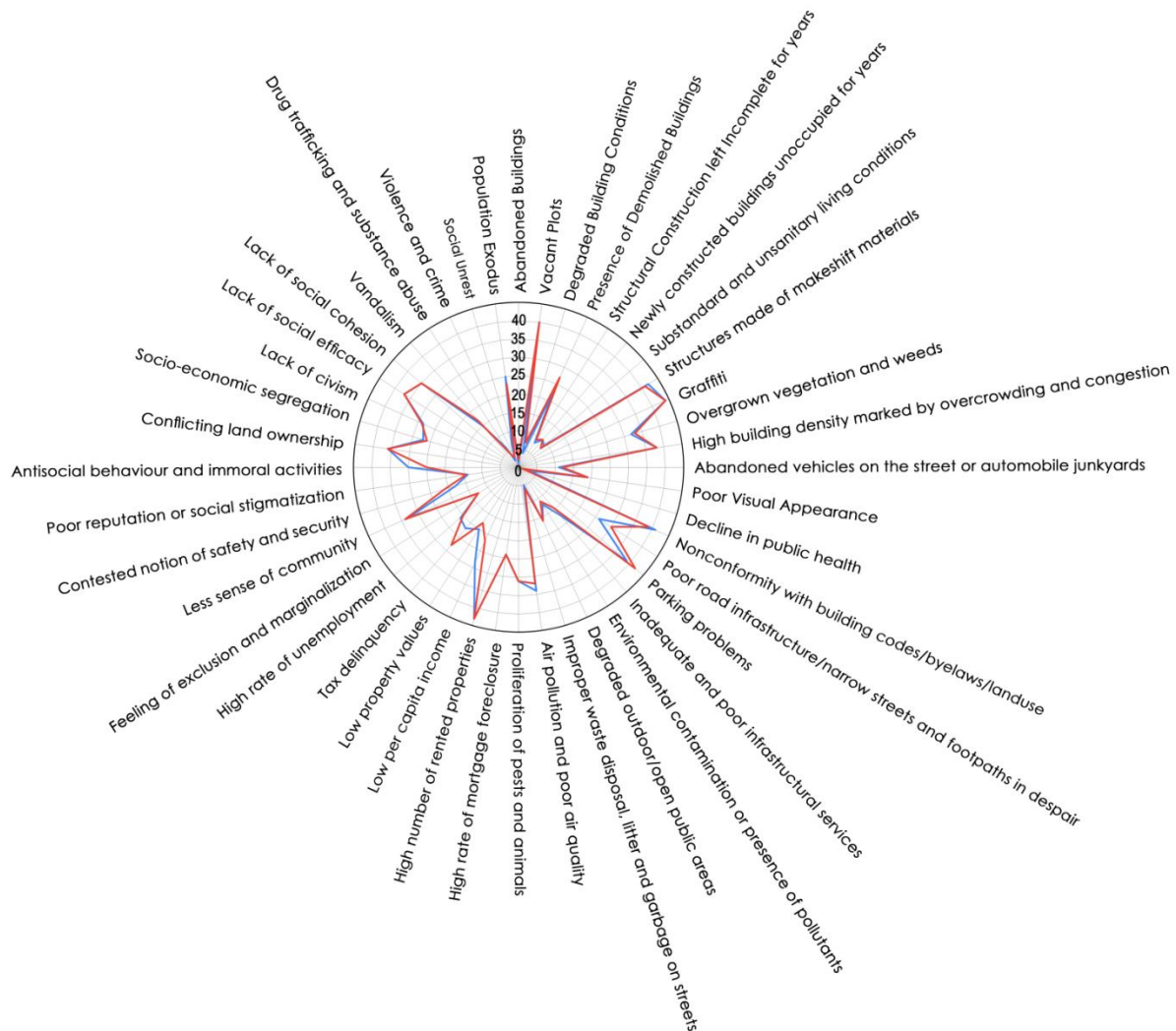


Figure 3. Correlation between the RIDIT and GRA ranks. Source: Authors

Contrary to the commonly held notion of blight as a synonym for physical degradation, the results from the expert opinion surveys, RIDIT and grey relational analysis underscored the crucial role of social factors, like *violence and crime*, *social unrest*, and *drug trafficking and substance abuse*, in developing a comprehensive understanding of urban blight. Indicators like *vacant plots*, *graffiti*, etc. did not gain enough consensus regarding their relevance as characteristics of blight in the Global South. This difference in the broad notion of blight in the Global North and the Global South cities can be attributed to the fact that cities in the Global North experienced blight as an effect of rapid industrialisation and the post-industrial decline. As previously mentioned, cities in the Global North encountered significant migration during the Industrial Revolution, with migrants living in overcrowded housing and workers' apartments. Subsequently, the congested living quarters, coupled with their unsanitary and substandard living conditions with limited or negligible lighting and ventilation, were termed as *urban blight*. Similarly, the post-industrial economic stagnation, declining population due to loss of job opportunities, and the resulting housing abandonment and vacancy also started getting associated with the concepts of urban blight (Chakraborty and Dey, 2024a). Majority of the current literature on blight emerging from the Global North still adheres to this conceptualisation of blight. However, in the Global South, urban blight often results from rapid and unplanned urbanisation and physical dilapidation due to natural ageing of building structures. Many of the cities in the Global South are still operating with physical infrastructures

that date back to the colonial era, resulting in inadequacies in meeting the needs of the growing population. In the absence of adequate infrastructure, the neighbourhoods often encounter improper garbage disposal, poor street conditions, pest infestation, poor hygiene, etc., contributing to decline in public health and overall quality of life. Figure 4 illustrates the relevance of the indicators in three different tiers that best define the notion of urban blight in the context of the Global South. Finally, the following statement was proposed to better elucidate urban blight in the context of the Global South:

Urban blight is characterised by the presence of abandoned buildings and structures in deplorable conditions. These areas experience improper waste disposal and litter and garbage on the streets, leading to substandard and unsanitary living conditions and a decline in public health. Blighted areas are additionally prone to incidences of violence, crime, drug trafficking, and substance abuse, thereby contributing to social unrest.

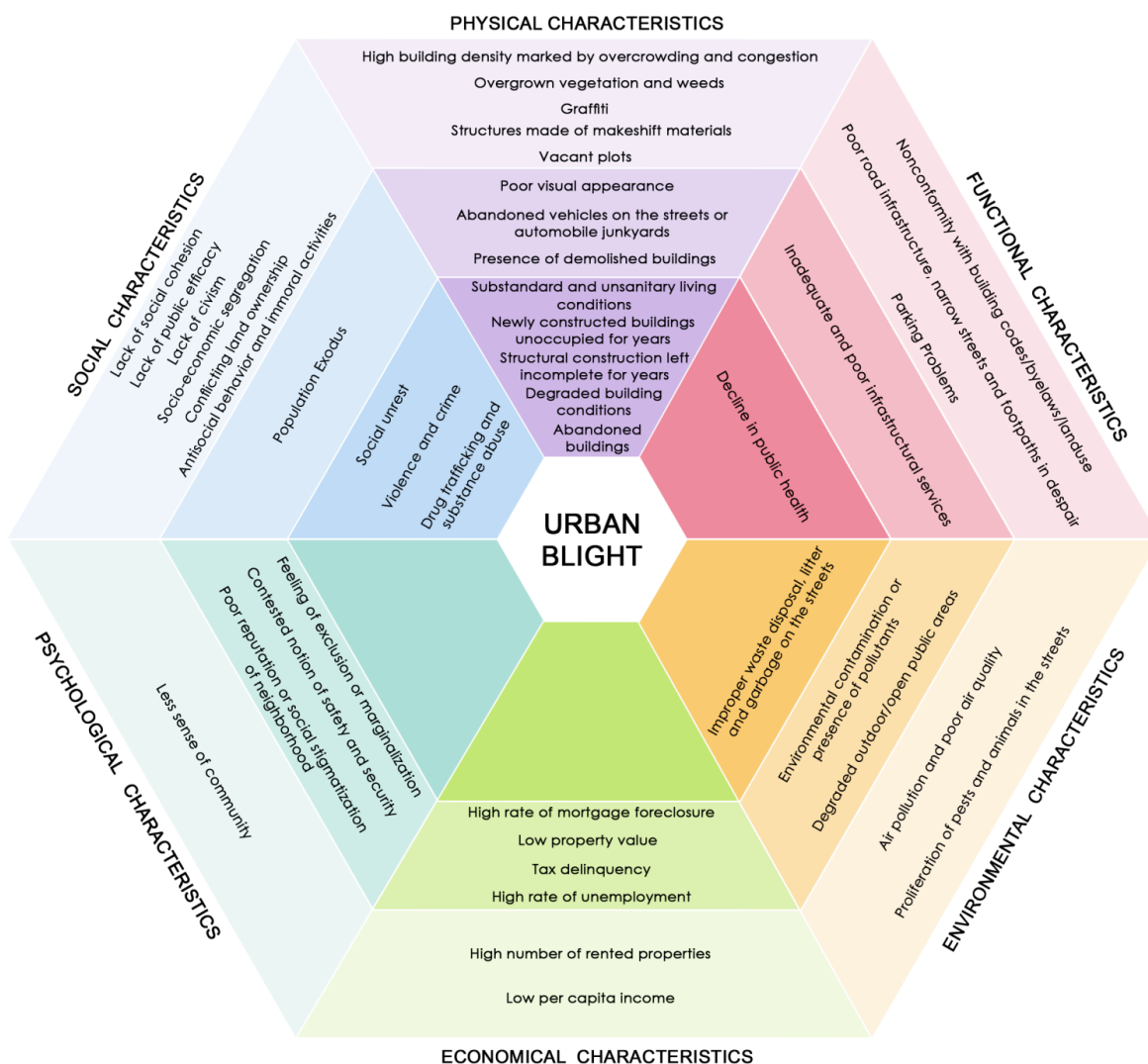


Figure 4. Hexagonal ring diagram demarcating the blight characteristics. Source: Authors

5. Conclusions

Urban blight has become a pressing global concern, intensified by rapid urbanisation and overexploitation of ageing infrastructure and depleting resources. There is a distinct gap in defining blight effectively. This ambiguity associated with blight has resulted in poorly conceived policies and initiatives that fail to address the place-based needs of the affected areas and their inhabitants. An overarching global characterisation of blight may undermine the region-specific aspects of blight in cities of the Global South. At present, most of the blight remediation initiatives are initiated solely based on the presence of properties with visual signs of blight, while completely ignoring the social, cultural, economic, and environmental underpinnings of the phenomenon. Consequently, such top-down approaches tend to address the issue in a fragmented manner, often inducing cascading negative effects like gentrification, economic restructuring, high real estate prices in the redeveloped areas, affordability issues, etc. Contemporary blight identification and analysis is tacit in nature. Therefore, by recognising the pressing need for a regionally sensitive understanding of urban blight, this research attempted to explore the notion of blight in the context of the Global South. By re-evaluating the conventional definitions of blight, mostly emerging from the Global North, this research puts forward a nuanced conceptualisation of urban blight that integrates the unique characteristics of the phenomenon in the Global South. Employing PRISMA analysis and expert opinion surveys, this research incorporated the functional, environmental, economic, psychological, and social attributes of blight in addition to the traditionally considered physical attributes.

This research advocates for the contextualisation of this complex phenomenon of urban blight, moving away from the *one size fits all* approach of blight management. This integrated approach of the research provides comprehensive insights into the phenomenon. By broadening the discourse on blight, this research offers valuable guidance for urban practitioners to develop sustainable and inclusive urban blight interventions that respect the spatial and socio-cultural fabrics of the affected areas. This refined understanding of urban blight in the context of the Global South, comprising both subjective and objective attributes, encourages a participatory approach of blight management, fostering a path towards sustainability and inclusivity.

6. Acknowledgement

We thank the Indian Institute of Technology, Kharagpur, and the Ministry of Education, Government of India, for providing assistance for this research under the Prime Minister's Research Fellowship Scheme.

7. Reference

- Athens, J. *et al.* (2020) 'Using 311 data to develop an algorithm to identify urban blight for public health improvement', *PLoS ONE*, 15(7 July), pp. 1–11. doi: 10.1371/journal.pone.0235227.
- Breger, G. E. (1967) 'The Concept and Causes of Urban Blight', *Land Economics*, 43(4), pp. 369–376. doi: <https://doi.org/10.2307/3145542>.
- Brueckner, J. K. and Helsley, R. W. (2011) 'Sprawl and blight', *Journal of Urban Economics*, 69(2), pp. 205–213. doi: 10.1016/j.jue.2010.09.003.
- Chakraborty, B. and Dey, P. (2024a) 'A Composite Urban Blight Identification and Evaluation Index (CUBIE): A Systems-Driven Approach Based on Empirical Evidence from Kolkata, India', *Social Indicators Research*. doi: 10.1007/s11205-024-03494-6.
- Chakraborty, B. and Dey, P. (2024b) 'Spatial characterisation of blighted urban areas using space syntax analysis: the case of historic city centre of Kolkata, India', *GeoJournal*, 89(5), p. 231. doi: 10.1007/s10708-024-

11221-4.

Conzen, M. R. G. (2004) *Thinking about urban form*. Edited by M. R. G. Conzen and P. Lang. New York: Oxford.

Cook, M. E. and Sutherland, M. K. (2015) 'A shared information resource to fight urban blight: Challenges and opportunities in New York state', *ACM International Conference Proceeding Series*, 27-30-May-, pp. 283–288. doi: 10.1145/2757401.2757432.

Darling, P. V. I. (1943) 'Some Notes on Blighted Areas', *Journal of the American Planning Association*, 9(1), pp. 9–18. doi: 10.1080/01944364308979041.

Dey, P. and Mandal, K. (2024) 'Socio-economic vulnerability assessment of culturally unique ethnic communities using RIDIT scoring: a case of Rann of Kutch, India', *GeoJournal*, 89(5), p. 232. doi: 10.1007/s10708-024-11233-0.

Donnelly, P. G. (2008) 'Urban Decline', *Sociology, Anthropology and Social Work Faculty Publications*, 27. doi: 10.4324/9780203796542.

Ferreira, F. A. F. et al. (2018) 'A prioritisation index for blight intervention strategies in residential real estate', *Journal of the Operational Research Society*, 69(8), pp. 1269–1285. doi: 10.1080/01605682.2017.1390535.

Gordon, C. (2008) *Mapping Decline*. University of Pennsylvania Press. doi: 10.9783/9780812291506.

Hoffman, J. (2012) 'Raze the dead: Urban blight, private universities, and the path towards revitalization', *University of Pittsburgh Law Review*, 74(1), pp. 85–105. doi: 10.5195/lawreview.2012.192.

Houston, J. M. (1953) *A Social Geography of Europe - James Macintosh Houston - Google Books*. Duckworth.

Kuo, Y., Yang, T. and Huang, G.-W. (2008) 'The use of grey relational analysis in solving multiple attribute decision-making problems', *Computers & Industrial Engineering*, 55(1), pp. 80–93. doi: 10.1016/j.cie.2007.12.002.

Linehan, D. (2000) 'An archaeology of dereliction: poetics and policy in the governing of depressed industrial districts in interwar England and Wales', *Journal of Historical Geography*, 26(1), pp. 99–113. doi: 10.1006/jhge.1999.0166.

Lousada, A. L. D. et al. (2021) 'A sociotechnical approach to causes of urban blight using fuzzy cognitive mapping and system dynamics', *Cities*, 108. doi: 10.1016/j.cities.2020.102963.

Maghelal, P. et al. (2014) 'Assessing blight and its economic impacts: A case study of Dallas, TX', *WIT Transactions on Ecology and the Environment*, 181(May), pp. 187–200. doi: 10.2495/EID140161.

Mandal, K. and Dey, P. (2022) 'Coastal vulnerability analysis and RIDIT scoring of socio-economic vulnerability indicators – A case of Jagatsinghpur, Odisha', *International Journal of Disaster Risk Reduction*, 79, p. 103143. doi: 10.1016/j.ijdrr.2022.103143.

Mumford, L. (1938) *The Culture of Cities*. Harcourt Brace Jovanovich.

Myers, G. (2021) 'Urbanisation in the Global South', in *Urban Ecology in the Global South*, pp. 27–49. doi: 10.1007/978-3-030-67650-6_2.

OECD and European Commission (2020) *Cities in the World*. OECD (OECD Urban Studies). doi: 10.1787/d0efcbda-en.

Pinto, A. M. F. et al. (2021) 'Analyzing blight impacts on urban areas: A multi-criteria approach', *Land Use Policy*, 108. doi: 10.1016/j.landusepol.2021.105661.

Pinto, B. M. B. et al. (2023) 'Analyzing causes of urban blight using cognitive mapping and DEMATEL', *Annals of Operations Research*, 325(2), pp. 1083–1110. doi: 10.1007/s10479-022-04614-6.

Pritchett, W. (2003) 'The "Public Menace" of Blight: Urban Renewal and the Private Uses of Eminent Domain', *Yale Law & Policy Review*, 21(1), p. 2.

Schilling, J. et al. (2015) *Charting the multiple meaning of blight: A national literature review on addressing the community impacts of blighted properties*. Available at: <https://doi.org/10.13140/rg.2.1.2417.8960>.

Sun, W. *et al.* (2019) 'Neighborhood blight indices, impacts on property values and blight resolution alternatives', *Journal of Real Estate Research*, 41(4), pp. 555–603. doi: 10.22300/0896-5803.41.4.555.

Taylor, G. (1949) *Urban Geography: A Study of Site, Evolution, Pattern and Classification in Villages, Towns and Cities*. Routledge. doi: 10.4324/9780203716250.

UNO (2018) *World Urbanization Prospects, Demographic Research*. Available at: <https://population.un.org/wup/Publications/Files/WUP2018-Report.pdf>.

Weaver, R. C. (2013) 'Re-framing the urban blight problem with trans-disciplinary insights from ecological economics', *Ecological Economics*, 90, pp. 168–176. doi: 10.1016/j.ecolecon.2013.03.009.