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Data Article

The urban features of informal settlements in Jakarta, Indonesia



Waleed Alzamil

College of Architecture and Planning, King Saud University, Saudi Arabia

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ABSTRACT

This data article contains the urban features of three informal settlements in Jakarta: A. Kampung Bandan; B. Kampung Luar Batang; And C. Kampung Muara Baru. The data describes the urban features of physical structures, infrastructures, and public services. These data include maps showing locations of these settlements, photography of urban status, and examples of urban fabric. The data are obtained from the statistical records and field surveys of three settlements cases.

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Specifications table

Subject area	Urban planning, architecture, urbanism
More specific subject	Housing, urban renewal
area	
Type of data	Maps, tables, charts, photographs
How data was	Field survey
acquired	Field investigation with residents
	Review of reports
Data format	Raw and analyzed
Experimental factors	Descriptive analysis, Comparative analysis

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E-mail address: waalzamil@ksu.edu.sa

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Experimental features	Analysis the most important features of these settlements based on respon-
	dents' views.
Data source location	Jakarta, Indonesia
Data accessibility	Data is presented with this article

Value of the data

- The data shows the urban status of informal settlements in Jakarta.
- Data show the actual needs of low-income households in the urban environment.
- The data helps to know the preferences of the residents on the urban environment.

1. Data

The data presented include population growth in Jakarta (Table 1), the urban expansion in Jakarta since 1970 (Fig. 1), and the urban features of three informal areas in Jakarta (Fig. 2).

2. Experimental design, materials and methods

Rapid urbanization and population growth is the main reason for the emergence of informal settlements in Jakarta. The massive urbanization contributed to the shortage of land supply and high land values. As a result, more than 25% of agricultural uses have been converted into industrial, commercial, or residential uses to meet the growing demand for land [1]. Analysis of the respondents' views on physical features examines housing conditions, housing spaces, structural problems, housing services, construction density, lighting and ventilation. Also, the analysis describes the respondents' views on infrastructures such as electricity connections, water supply, rainwater drainage, waste water sewage, and waste collection. Finally, the analysis describes the respondents' views on public services such as the quality and availability of shops, schools, parks, children's playgrounds, public spaces, health services, and security services (Tables 2 and 3).

Table 1					
Population	growth	in	Jakarta	[2]	

Year	Population	Growth	Growth rate
1950	1,452,000	0	0.00%
1955	1,972,000	520,000	35.80%
1960	2,679,000	707,000	35.90%
1965	3,297,000	618,000	23.10%
1970	3,915,000	618,000	18.70%
1975	4,813,000	898,000	22.90%
1980	5,984,000	1,171,000	24.30%
1985	7,009,000	1,025,000	17.10%
1990	8,175,000	1,166,000	16.60%
1995	8,322,000	147,000	1.80%
2000	8,390,000	68,000	0.80%
2005	8,988,000	598,000	7.10%
2010	9,630,000	642,000	7.10%
2015	10,323,000	693,000	7.20%
2017	10,660,000	337,000	3.30%
2020	11,298,000	638,000	6.00%
2025	12,589,000	1,291,000	11.40%
2030	13,812,000	1,223,000	9.70%





Fig. 1. The stages of urban development in Jakarta [1].

Developed Area



This is a densely populated area close to Mangga Dua area at the border of North Jakarta and Central Jakarta along railway lines. The most common building materials are wood, iron sheets, and bricks used for multiple buildings.

This settlement is located near the Ciliwung River estuary in North Jakarta, close to the Islamic shrine 'Al-Habib Husein bin Abubakar Alaydrus'. The most common building materials are wood, and bricks [2].

This area is located at Baru, adjacent to Waduk Pluit (flood mitigation reservoir) in North Jakarta. Bamboo commonly used for the houses' pillars, as well as cardboard, wood, and plastic piles.

Fig. 2. The urban features of informal settlements in Jakarta. Source: Survey by the author.

Table 2

Respondents' views on the physical features of informal settlements in Jakarta. Source: Survey by the author.

Physical status	Respondents																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
A. Kampung Bandan																									
Deteriorating housing	\checkmark	1	1	\checkmark	1	\checkmark	~	~	\checkmark	x	\checkmark	x	\checkmark	\checkmark	\checkmark	x	\checkmark	x	\checkmark	\checkmark	\checkmark	\checkmark	x	x	~
Shortage of housing spaces	\checkmark	\checkmark	\checkmark	\checkmark	1	1	\checkmark	x	X	x	\checkmark	~	x	\checkmark	X	\checkmark	X	\checkmark	1	\checkmark	1	\checkmark	x	\checkmark	x
Lack of housing services	\checkmark	\checkmark	\checkmark	X	x	1	\checkmark	\checkmark	1	x	X	~	x	x	X	\checkmark	\checkmark	\checkmark	1	\checkmark	1	\checkmark	~	\checkmark	x
Temporary construction materials	x	x	x	x	x	x	x	x	\checkmark	x	x	x	x	\checkmark	x	\checkmark	x	x	x	x	x	x	x	x	x
Lighting and ventilation	x	x	x	\checkmark	1	x	x	~	x	x	x	x	\checkmark	x	x	x	x	\checkmark	x	x	x	x	x	x	x
Structural problems	x	x	x	x	x	x	x	x	x	x	\checkmark	x	x	x	x	\checkmark	x	x	x	x	x	x	x	x	x
Abandoned buildings	x	x	x	x	x	x	x	x	x	1	x	x	x	x	x	x	1	x	x	x	x	x	x	x	x
High-density construction	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	X	x	x	x	x	x	x	1	1
Others	x	x	x	x	x	x	x	x	x	x	x	1	~	x	x	x	x	x	x	x	x	x	x	x	x
B. Kampung Luar Batang																									
Deteriorating housing	1	1	x	x	1	x	1	1	1	1	x	1	x	x	1										
Shortage of housing spaces	``	1	5	Ĵ	x	Ĵ	x	x		x	Ŷ	x	ſ	Ĵ											
Lack of housing services	``	1	x		, ,	x	Ĵ	x	x	x	Ĵ	x	1		x										
Temporary construction materials	x	x	5	x	1	Ŷ	1	x	Ŷ	x	x	, J	x	x	x										
Lighting and ventilation	x	x	x	x	1	Ĵ	x	x	x	x	Ŷ	x	x	x	x										
Structural problems	x	x	, ,	x	1		x	x	x	x	Ŷ	x	x	x	x										
Abandoned buildings	ŷ	Ŷ	x	ŷ	x	x	ŷ	ŷ	ŷ	ŷ	Ĵ	Ŷ	Ĵ	ŷ	ŷ										
High-density construction	x	x	x	x	x	Ŷ	x	x	Ŷ	x	x	x	x	x	x										
Others	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x										
Deteriorating housing	Y	Y	Y	./	./	./	Y	./	Y	Y	Y	./	Y	./	Y	./	./	./	./	./					
Shortage of housing spaces	Ŷ	î,	Ŷ	· /	v	· /	Ŷ	· /	Ŷ	Ŷ	Ŷ,	~	î,	v	Ŷ,	,	· /	· /	· /	· /					
Lack of housing services	Ŷ	Ŷ	2		Ŷ	Ŷ	î.		î.	Â	Ŷ	Ŷ		Ŷ		Ŷ	Ŷ	v							
Temporary construction materials	Ŷ	Ŷ	v	· /	Ŷ	Ŷ	· /	v	v	· /	Ŷ	î,	· /	Ŷ	· /		Ŷ		ž	ž					
Lighting and ventilation	î,	ĵ,	ĵ,	v	Ŷ	Ŷ	v	Ŷ	ĵ,	· /	Ŷ	ž	ž	Ŷ	ž	ž	Ŷ	ž	÷.	÷.					
Structural problems	v		v v	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	v	v	Â	Ŷ	Ŷ	Î.	Ŷ	Ŷ	î.	Î.	Ŷ	Ŷ					
Abandoned buildings	Ŷ	v	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ,	Ŷ	v	Ŷ	Ŷ	<i>'</i>	Ŷ	Ŷ	v	v	Ŷ	Ŷ					
High_density_construction	Ŷ	Ŷ	Ŷ,	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	v	Ŷ	Ŷ,	Ŷ	Ŷ	v	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ					
Others	Ŷ	Ŷ	v	Ŷ,	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	× v	v	×,	Ŷ	× v	, v	, v	Ŷ	× v	Ŷ	× v					

✓: Responder agrees with this feature.✗: Responder disagrees with this feature.

Table 3

Respondents' views on the utility features of informal settlements in Jakarta. Source: Survey by the author.

Utility status	Respondents																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
D. Kampung Bandan																									
Forms of water supply	\checkmark	X	X	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	x	\checkmark	X	\checkmark	x	x	x	x	x	x	~						
Waste water sewage	\checkmark	x	X	x	X	x	x	\checkmark	\checkmark	X	\checkmark	\checkmark	X	X	x	\checkmark	X	\checkmark	X	X	X	X	x	X	x
Problems with waste collection	x	x	X	\checkmark	X	\checkmark	x	\checkmark	\checkmark	X	\checkmark	x	X	X	\checkmark	\checkmark	X	x	X	X	X	X	x	\checkmark	x
Forms of electricity connection	\checkmark	X	X	X	\checkmark	X	x	X	X	X	X	x	\checkmark	\checkmark	X	\checkmark	X	\checkmark	X	x	X	X	x	\checkmark	x
Cable, internet, telephone, TV	X	X	\checkmark	X	X	\checkmark	\checkmark	\checkmark	\checkmark	X	X	x	X	x	X	\checkmark	\checkmark	\checkmark	X	\checkmark	\checkmark	X	x	x	x
Gas systems	\checkmark	\checkmark	\checkmark	X	X	X	\checkmark	X	X	X	X	X	\checkmark	\checkmark	X	X	X	X	X	X	X	X	\checkmark	X	x
Rainwater drainage	X	X	X	\checkmark	\checkmark	x	x	X	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	\checkmark	x
E. Kampung Luar Batang																									
Forms of water supply	1	1	1	x	1	x	x	1	1	x	1	~	1	x	1										
Waste water sewage	1	1	1	x	1	x	x	x	1	x	1	x	x	x	x										
Problems with waste collection	x	x	1	~	1	x	~	x		x	x	1	x	x	x										
Forms of electricity connection	x	x	1	~	1	1	x	x	1	x	x	x	\checkmark	x	x										
Cable, internet, telephone, TV	X	X	\checkmark	\checkmark	X	x	\checkmark	X	X	X	x	x	1	x	\checkmark										
Gas systems	X	X	\checkmark	\checkmark	X	1	x	\checkmark	X	X	x	~	x	x	x										
Rainwater drainage	x	x	x	X	\checkmark	1	\checkmark	X	x	\checkmark	x	x	x	\checkmark	x										
F. Kampung Muara Baru																									
Forms of water supply	1	x	x	1	1	x	x	x	1	x	x	x	x	~	x	1	1	x	x	x					
Waste water sewage	1	1	1	x	X	1	1	x	1	1	1	1	x	x	x	1	X	x	1	1					
Problems with waste collection	~	~	1	x	x	1	~	x	x	\checkmark	x	\checkmark	x	1	\checkmark	1	x	\checkmark	x	1					
Forms of electricity connection	x	\checkmark	1	x	1	x	~	x	x	x	\checkmark	1	x	~	\checkmark	x	x	x	\checkmark	x					
Cable, internet, telephone, TV	x	~	1	x	x	x	x	\checkmark	x	x	1	x	\checkmark	x	\checkmark	x	x	x	x	x					
Gas systems	x	x	x	\checkmark	x	x	\checkmark	x	x	x	1	1	x	x	x	x	x	x	x	x					
Rainwater drainage	x	X	\checkmark	X	x	x	x	X	x	x	\checkmark	\checkmark	x	x	x	\checkmark	x	x	x	x					

✓: Responder agrees with this feature.✗: Responder disagrees with this feature.

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Transparency document. Supplementary material

Transparency data associated with this article can be found in the online version at http://dx.doi. org/10.1016/j.dib.2017.10.049.

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