Improving Public Services in Low-Income Housing

Subjects: Others
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Housing is a key component of the urban system that affects practically every other sector and impacts overall development. The housing industry is a representative sample of all facets of urban and individual life. Cities and towns' housing situations reveal information about the economic, social, and political elements that influence them. Sustainable housing entails homes designed to reduce the cumulative environmental impact during and after construction so that the present needs can be met without compromising the ability of future needs to be met.

low-income housing | public services | management | sustainability | urban resilience

1. Introduction

Housing is a key component of the urban system that affects practically every other sector and impacts overall development. The housing industry is a representative sample of all facets of urban and individual life. Cities and towns' housing situations reveal information about the economic, social, and political elements that influence them [1][2]. Cities with predominant substandard housing and poorly serviced housing features tend to be characterised by informal settlements [3].

Sustainable housing entails homes designed to reduce the cumulative environmental impact during and after construction so that the present needs can be met without compromising the ability of future needs to be met [4]. Sustainable housing can be realised through three major pathways: first, the efficient use of energy, water, land, and other resources needed to operate the general systems associated with the home; second, the promotion of the health of occupants and end-users residing within the building itself; and the third important aspect of sustainable housing is its emphasis on reducing greenhouse gas emissions, pollution, wastage, and degraded land. The benefits of sustainable housing include a reduction in energy and water usage; greater occupancy rates; and improved physical (for example, reduction in cold and infections) and psychological (reduced fatigue) health [5]. It is estimated that sustainable housing improves end-users' productivity rates compared to conventional housing by more than 20 per cent [6]. According to Golubchikov and Badyina [4], if housing is built and managed within the scope of an economic, social, cultural, and environmental sustainability framework, it will be accessible to low-income households and also respond to their heterogeneous needs with diverse positive outcomes for occupants' mental and physical well-being, the economy, and the environment.

Sustainable public services should be efficient, effective, economical, and equitable [7]. These services, in their delivery, embrace sustainability in co-production and management. The government sometimes relies on management tools and co-production to deliver public services and sometimes has to provide services through enterprises [8]. Namibia's government struggles with providing services in informal settlements [9]. Moreover, the people do not trust the government regarding public service delivery. The customers must pay their bills while the government must allocate funds. Public service delivery can be improved through initiates that would raise funds, proper budgeting by using the funds for the intended purposes, constant research to assess customer satisfaction levels, identifying the customers' expectations, finding effective ways to meet customers' demands, providing appropriate training to employees to improve their skills, and community participation [10].

Sustainable community-based facilities management can assist in achieving local socio-economic development [11] for sustainable development [12]. Enterprise development can help create employment opportunities for those living in low-income housing. Enterprise development from the perspective of infrastructure development in low-income communities is the effective use of local resources, particularly human resources and readily available intermediate equipment. Optimising scarce financial resources also requires effectively mobilising the indigenous private sector (particularly small domestic construction enterprises) and applying sound management practices in contracting and employing organisations [13]. Resilience is important during the COVID-19 pandemic, affecting the society and community's well-being [14][15].

2. Public Amenities in the Context of Developing Communities

A liveable and enjoyable urban environment is facilitated by some circumstances and elements known as urban amenities. Housing constitutes a critical component of urban amenities because it has a direct relationship with liveability. It is also related to work and workplace improvements. This makes it an issue of primary interest in the built environment and any form of spatial setting [16].

The built environment, social services, and social climate are all present. The FM of public amenities is essential for the sustainable growth of the urban area in developing communities. By employing the City of Windhoek (Namibia) as an illustration, Kohima et al. [17] demonstrated how a lack of inclusivity in urban facility governance might result in "a one-city two-system (OCTS)". The OCTS idea depicts a situation in which urban FM or development promotes the development of one portion of a city but prevents the development of another section. Educational, recreational, health care, transportation, professional, cultural, and artistic services are a few amenities [18]. The availability of amenities close to the workplace might affect employee motivation and productivity. Recreational and sporting facilities, entertainment, healthcare, and childcare facilities are a few examples of workplace perks [19][20]. Facilities for physical activity are one type of amenity [21]. A courtyard, prayer room, dining area, and entertainment rooms are amenities for social interaction. Facilities for spiritual pursuits improve people's mental health [22]. According to Thornton et al. (2012), cited in Schaeffer et al. [23], environmental amenities and supermarkets are examples of amenities. According to Rickman and Rickman (2011), cited in Schaeffer et al. [23], there may also be natural amenities that are the physical and ecological characteristics of an

area: terrestrial and aquatic landscapes, topographical features, climate, air and water, and biodiversity. Consumptive and non-consumptive values of terrestrial animals, accessibility to water-related activity, and water quality are all significant amenity elements [24].

3. Sustainable Low-Income Housing

Few studies employing a multi-faceted strategy to focus on public services in low-income housing can be found when looking at current studies on sustainable housing.

In their study on applying Public Private Projects (PPP) in Ghana's pursuit of sustainable development goals, Akomea-Frimpong et al. [25] concentrated on housing. Patel [26] looked at the connection between housing and housing delivery in South Africa. It was discovered that there are additional localised eligibility requirements that, in addition to the national ones, demand that citizens submit proof of their eligibility using their identities and social connections. Tariq's [27] research in Pakistan offers a critical assessment of the policies currently or previously used in Pakistan to provide housing for the urban poor. Ezennia et al. [28] created a comprehensive set of criterion systems in Nigeria that can measure housing affordability comprehensively and sustainably. Smith et al. [29] used data from construction workers and beneficiaries of the low-income housing developments supported by CLIFF (the Community-Led Infrastructure Finance Facility) in Nairobi to develop a four-way classification to understand the livelihoods impact of housing interventions and how to measure it. To create a new, sustainable, and inexpensive housing model for Jordan's hot, dry environment, Ali et al. [30] evaluated the state of several affordable housing projects. In a 2017 study conducted in Brazil, Crosby [31] analysed the socio-economic effects of low-income housing on the local economic structure, highlighting public housing policies created by the state and federal governments. A "state-of-the-art" overview of renewable energy in social housing projects was provided by McCabe et al. [32]. Bredenoord [33] concentrated on issues of sustainable urban housing in the developing world, emphasising affordable housing for low-income households. Based on the physical attributes and traditional social components of the dwelling unit, urban planning, and the social environment in the residential area, Ibrahim [34] evaluated the degree of satisfaction with public accommodation amenities provided by the UAE government to inhabitants.

4. Housing Entrepreneurship Role in Low-Income Housing

Housing entrepreneurship seeks to make money while resolving housing issues, such as property rights and living conditions in slums. The upgrade promotes entrepreneurship. Additionally, rising housing costs impact people's behaviour, including entrepreneurship [35][36].

There have not been many studies on the co-production and management of housing for entrepreneurship in low-income communities. The scope of earlier research was restricted to places like the UK, Angola, Nigeria, Ghana, and South Africa. Home-based businesses may vary depending on the environment in other nations. While many of these studies focused on the value of home-based businesses for urban rehabilitation, there are few studies on

how businesses assist in slum rehabilitation and managing such communities. Investigating the producers' and customers' readiness to participate in such social enterprises in the context of housing may also be helpful.

According to Tipple's [37] UK study on how housing might be used as a workplace, housing should be made for social enterprises. Ibem et al. [38] suggested an integrated analytical and evaluation methodology based on housing as a social programme and sustainable development in Nigeria [39]. The social aspect of sustainability promotes inclusion, while the economic aspect may result in the development of jobs in home-based businesses. Nevertheless, Nigerians frequently place jobs in the public sector and other forms of employment above entrepreneurial endeavours. Residents in slums have low levels of faith in the state, which affects the dependability of urban governance structures [40]. The lack of security of tenure makes it difficult for businesses to grow since landlords are hesitant to let tenants run frequently ignored home-based businesses [40].

Mekawy [41] evaluated stakeholders' perspectives on the potential contribution of slum tourism and its related goods to improving living conditions in Egyptian slums. When looking at how home-based businesses (HBEs) in squatter settlements in Kenya benefit from rehabilitation, Kigochie [42] demonstrated that restoring squatter settlements and assisting HBEs creates jobs, income, and housing. The location of financial companies and several characteristics of building typology were investigated by Samburu et al. [43] in Kenya, and they discovered a strong correlation between the two.

In a participatory model incorporating social, economic, and environmental variables, Amado et al. [44] in Angola suggested a new integrated strategy for urban regeneration based on a partnership comprising the public and private sectors and the populace. The report recommended employing an approach in which various stakeholders have clear roles, and the government supports and encourages private investment by establishing favourable conditions for land development. These requirements are created by the public sector, which is also in charge of their valuation, by establishing land banks [45].

Gough et al. [46] compared and contrasted home-based enterprises (HBEs) in low-income neighbourhoods in Accra and Pretoria in a study on Ghana and South Africa. It examined the different sorts of businesses, how they affect household income, and the growth constraints. The authors of [47] investigated how a sharp value uplift has replaced informalities shared between local governments and peasants in China's state-dominated property formalisation and regularisation process. The study discovered social disparities in which low-wage tenants are no longer available and must search for cheap housing in low-income neighbourhoods [35]. In Pakistan, squatters showed socio-economic restrictions and a lack of basic infrastructure, according to Malik et al. [48], who studied the situation of informal housing in Pakistan.

Particularly in developing nations, there have not been any formal, coordinated initiatives to organise these home-based businesses to offer services to their neighbourhood or city. For instance, the Canadian government made an effort to offer financial support to Quebec home-based businesses to aid in the co-production of housekeeping services [49][50][51][52].

5. Sustainable Community Facilities Management and Public Services in Low-Income Housing

CbFM involves managing facilities and providing services that mirror the community and setting in which they operate. It is the processes by which all the stakeholders in a community collaborate to plan, implement, and maintain an enabling environment within which the local economy can flourish, quality services can be provided, and natural resources can be protected, allowing for the enjoyment of a high quality of life by the population [12]. Sustainable facilities management is integrating sociotechnical systems at the building level, consisting of buildings and building operation, use, maintenance and management processes, and how these systems can be managed to contribute to sustainable development in society [53].

Social enterprises in the UK with an environmental focus were considered by Alexander and Brown [12] as organisations that utilise natural resources. Roncolato et al. [40] discovered that sustainability neglected the strategic planning perspective and concentrated on environmental challenges. The social enterprise component was concerned with the delivery of services that were reasonably priced and could support business development and employment creation. From a service delivery and community management viewpoint, Hutchings et al. [54] concentrated on critical success criteria of the sustainable community management of water. Social sustainability was the main topic of Grum et al.'s [55] 2020 study, which combined the idea with quality of life. Tammo et al. [56] concentrated on how management, utilising the SymbioCity method driven by environmental and economic variables, may create sustainability in informal settlements in South Africa. There are few studies on other facets of sustainability, such as financial sustainability. According to Elmualim et al. [57], environmental factors impact sustainable management practices more than a balanced strategy that considers social and economic sustainability factors. Research is needed on the environment other than that concerning water, energy, trash, and landscape.

6. Urban Resilience and Public Services in Low-Income Housing

Community resilience is a term that primarily refers to the development of a community's capacity and is the consequence of effective adaptation; it is also a set of competencies that may be attained through building a community's capacity and preparing for disasters, as per Norris et al. [58]. According to Adger [59], community resilience is the capacity of communities to withstand external pressures and perturbations caused by social, political, and environmental change, as well as the capacity to draw resource concentrations and manage difficulties and changes, as per Paton et al. [60]. It reflects the capabilities of community systems to withstand and absorb adverse effects, according to Cutter et al. [61].

Much research on urban resilience has not focused on public services in low-income dwellings. In a conceptual work, Zuniga-Teran et al. [62] investigated the connections between green infrastructure and urban resilience. Shen et al. [63] looked into how resilient government platforms in China encouraged resilience during the epidemic. By comparing the significant components of attention for increasing urban resilience in Singapore, Hong Kong, and

Hangzhou, [64] concentrated on experts and left out residents' perspectives. Using case studies from the Philippines, Sweden, South Africa, and India, how resilience might be applied to urban water services was examined by Johannessen et al. [65]. Moreover, it was discovered that the resilience idea does enhance the value of urban water services.

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