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Improving the Livelihoods of Informal Communities as an Approach for Sustainable Solutions to Informal Settlements in Developing Countries

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Abstract

The phenomenon of informal settlement is one of the societal trends to deal with the housing crisis by building housing units on lands that are not suitable for human settlement and in violation of urban planning regulations. Residents of informal settlements settle in areas far from government control, such as mountains, plains, or public lands, and construction is carried out gradually until self-sufficient residential settlements are reached. In development countries, informal settlements are increasing on marginal lands or those close to vital areas in the city. Housing policy makers' approach to informal settlements should not focus solely on the urban dimension or improving the physical environment; rather, these policies can come from the logic of improving the livelihoods of informal communities and providing the minimum requirements for a decent life for their residents as a means of urban advancement. These solutions are based on understanding the economic resources that informal communities live on and improving them to integrate them into the city's economy and enable them to gradually transition to the formal housing market.

Keywords: informal settlements, livelihoods, built environment, informal communities, sustainability

1. Introduction

Informal settlements are defined as residential environments developed by residents according to their needs and living requirements, and in isolation from official planning authorities. As described by UN-Habitat, they are residential communities that lack a tenure system that prevents forced eviction, as these residents build their homes on public lands without legal title. These informal settlements are often characterized by a deteriorating urban environment, a lack of water supplies, sanitation, and waste disposal systems, as they are established informally and do not comply with urban legislation. The housing challenges facing the poor are the inevitable result of the growing demand for housing stock and the weakness of regional policies in the distribution of population and resources. More than a billion people live in slums that lack the minimum environmental components. Nearly a quarter of the world's population lives in informal settlements (Friesen, Rausch, Pelz, & Fürnkranz, 2018).

The housing crisis is accompanied by an imbalance in regional development policies, where urban development is concentrated in large cities at the expense of small and rural towns. Informal settlements arise as a result of poor land management and housing policies to meet the needs of vulnerable groups. These socio-economic groups do not have access to the housing market. The growth of informal settlements are influenced by housing market dynamics, urban governance and housing policies. In addition, spatial, economic and demographic factors influence the spread of informal settlements in large cities (Mahabir, Crooks, Croitoru, & Agouris, 2016). In developing countries, affordable housing remains below actual demand due to limited housing alternatives for the urban poor (Alzamil, 2024). Informal settlements are growing on land within cities or on the outskirts of cities as a result of the lack of housing supply that matches the economies of the urban poor and new migrants. Providing adequate housing for the urban poor has become a major dilemma facing many developing country governments due to the high cost of construction and land and the lack of housing alternatives that are adapted to the needs of poor communities (Alzamil, 2018).

Target 11.1 of SDG 11 calls for "ensuring access for all by 2030 to adequate, safe and affordable housing and basic services." However, UN-Habitat notes that around two million people, mostly informal dwellers, are forcibly evicted every year. Forced evictions of informal dwellers have disastrous consequences, with the poor not having access to adequate housing (UN-Habitat, 2016, p. 13). In fact, informal settlements provide a lifestyle based on an informal economy, and their growth is largely influenced by variables in the housing market, urban governance, and housing policies. In other words, informal settlements are not just dilapidated housing environments that have no choice but to be disposed of; they are a source and cover for the informal economy. Many developing countries lack the financial capacity to address the challenges of expanding informal settlements due to the lack of infrastructure, facilities, and housing to provide for the increasing influx of people into cities. Moreover, the solutions provided to address informal settlements often lack a comprehensive understanding of the needs of the population and the economic resources. Hence, it is necessary to consider practical solutions that take into account factors that improve livelihoods of informal communities in order to empower the population and integrate them into the urban context.

1.1 The Problem

Since the end of the nineteenth century, urban planners have sought to improve living conditions and enhance social values through optimal planning of the residential environment (Gillette, 2012). Most housing policies to address informal settlements have focused on upgrading existing urban structures and replacing them with new urban fabrics or resettling informal communities in new settlement areas. However, these solutions remain far from understanding the economic context of informal communities, including livelihood opportunities and sources of income. Resettlement projects for informal settlements often fail because they do not take into account the economic opportunities

and living conditions of the residents. Moreover, the costs of expropriation and compensation provided will not provide families with the actual value of affordable housing within the city limits; which contributes to the emergence of new informal settlements in the future. Comprehensive development policies for informal housing areas drain the economic resources of developing countries and do not provide any returns that could attract the private sector to develop them. Therefore, the research problem lies in the need to adopt practical solutions that take into account improving livelihoods as a sustainable approach to address the of informal settlements in developing countries.

2. Theoretical framework

The growth of informal settlements has led to a lot of research to address them and integrate them into the urban context. However, despite the abundance of literature in the field of research on informal settlements, there is a scarcity of research on the extent to which informal settlement residents contribute to the economic development of the urban economy, and understanding the multiple roles of informal areas in the economies of cities and populations (Agyabeng, Pephrah, Mensah, & Mensah, 2022). The growth of informal settlements creates an urban environment that is incompatible with urban sustainability due to increased poverty and social marginalization (Torres Parra, et al., 2024). Urban expansion in developing countries has increased dramatically in recent decades, leading to a significant increase in informal urban settlements. Cities have gradually become a center of attraction for economic development, with industries, investments, and business centers (Torres Parra, et al., 2024). These factors have contributed to population migration and increased demand for affordable housing. As a result of weak housing policies, support programs, and the lack of housing stock that matches the economic capacity of low-income people, slums have spread widely on the outskirts of cities or in areas not subject to control. Therefore, the phenomenon of slums comes as a reaction to the inability of cities to accommodate the social and economic diversity of the population, which widens the gap between society and is not in line with the principles of social justice (Alzamil, 2011). Many developing countries lack a comprehensive strategy to deal with the expansion of informal settlements. Most housing policies address the physical framework of informal settlements, including the condition of buildings, facilities, and public services. Some strategies provide housing projects to settle informal residents, but they do not fully respond to the social and economic characteristics of the population. Moreover, new settlement projects do not provide a sustainable economic base that helps residents develop and improve their lifestyles. Overall, many housing projects aim to meet housing needs without improving the economies of the community.

Charles Correa (2000) in his book *"Housing and Urbanization: Building Solutions for People and Cities"* argues that policies based on removing informal settlements and providing compensation will not provide residents with affordable housing outside the informal market. In fact, residents of informal settlements do not have higher education or the skills that qualify them to work in the formal market, so they prefer to settle in informal settlements and refuse to live in public housing projects or developed housing environments because they do not match their social and economic characteristics. Moreover, most settlement projects for the urban poor are located far from the city centers, jobs and services, which increases social marginalization. John Turner (2000) in his book *"Housing By People: Towards Autonomy in Building Environments"* points out that housing policies should provide a framework for improving the housing environment of informal settlements, including developing the economies of the residents and enhancing community participation. Turner emphasizes that informal settlements are not just a physical environment; they are a whole system, a way of life and social values. Therefore, developing informal settlements involves devising the best methods and resources available to improve the ways of living and developing communities, leading to their integration into the urban context.

As a result of the above, there is a problem in the strategic perspective of decision makers in many developing countries about what informal settlements offer in the economic and social context of the city. The short-sighted view of informal settlements as a physical problem will lead to the generation of urban environments that are unable to adapt to the needs of society and improve livelihood (Alzamil, 2020). Some governments in developing countries try to remove informal settlements because they are illegal and do not comply with the urban planning system, which leads to the destruction of the social system and the dismantling of informal economic livelihood patterns. In return, these policies do not provide integrated settlement projects and economic opportunities that are compatible with the needs of the residents of these settlements. Therefore, the removal of informal areas must be integrated with economic and social programs to ensure their integration into the urban context of the city (Alzamil, 2011).

3. Methodology

This paper draws on theoretical approach and field studies that describe informal settlements in developing countries. As shown in Figure 1. the first phase began with readings of developing countries' experiences in dealing with informal settlements and the lessons learned from them. The paper focused on analyzing the economic factors and livelihood systems of the population in the case of Kampung in Jakarta and Dharavi in Mumbai, India. In the second phase, the study attempted to understand the common economic factors in informal areas including economic opportunities, spatial location, and available resources. In the third phase, the study developed a sustainable approach for livelihood improvement to addressing informal settlements.

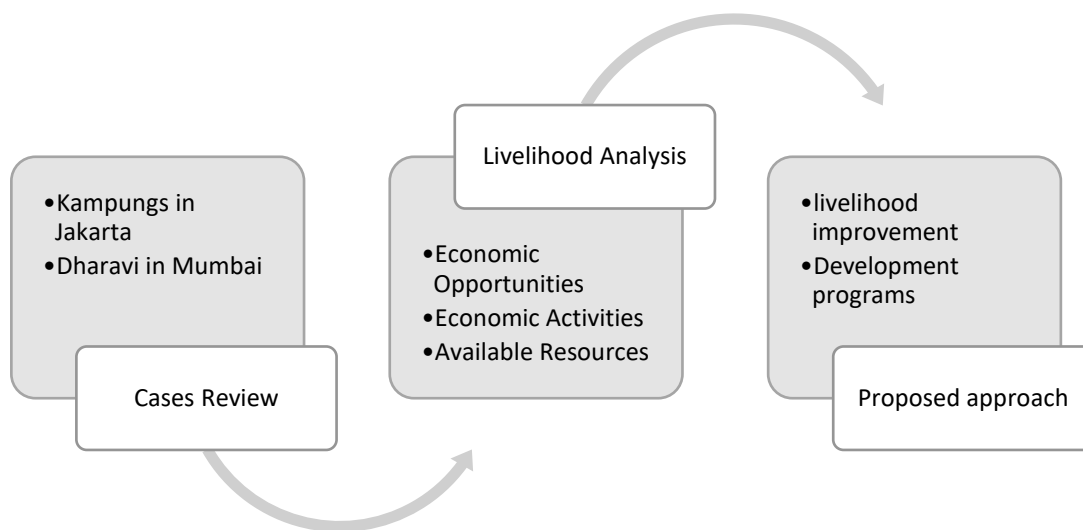


Fig 1. Scheme of the research methodology

4. Livelihoods of informal settlements

Developing countries with a steady growth in informal settlements face many problems related to urban poverty, high unemployment rates, and social conflicts. Informal settlement residents are often poor and deprived, and face problems in accessing proper roads, clean water, public transportation, and secure tenure. Informal settlement areas are often unsanitary and environmentally hazardous due to the spread of waste and the lack of sewage drainage channels. They are an environment conducive to the spread of social risks, crime, diseases, and epidemics. Due to the lack of security of tenure, informal settlements are always under threat of eviction, especially due to environmental hazards, or during floods (Alzamil, 2011). Governments in developing countries have made many efforts to deal with informal settlements including improving the urban environment, resettlement, and comprehensive development. However, many solutions have failed to address the economic aspect of

the population including improving livelihoods, which has exacerbated the problem of informal settlements (Supriatna, 2017).

In Mumbai, Dharavi is a highly religiously and ethnically diverse settlement with an estimated population of around one million and a population density of 277,136 persons per square kilometer, the highest in the world. Dharavi has about 15,000 one-room factories employing a quarter of a million people living in multi-functional one-room dwellings. The population relies on an informal economy where the ground floor is used for small businesses and shops during the day. At night, some workers use the upper floors of the shops to sleep with family members. The average floor area is 10 square meters, with each unit accommodating an average of five to six people. Some residents use the kitchen as a shower area, and most rooms have a gas stove for cooking and access to electricity. Most of the population has no sanitation infrastructure or clean water, as people have to buy water for their use from water vendors. There is only one public toilet for about 1,500 people (Dey & Lulo, 2021). Waste water from leather tanning and fabric dyeing flows into the streets, exposing residents to health risks such as diarrhea, cholera, malaria and parasitic infections (No Footprints, 2024). The residents of the district live on a vibrant informal economy with several home-based businesses employing many residents in the leather, textile and pottery industries. The total annual turnover is estimated to be over US\$1 billion (Samuel & Venkat, 2018). Dharavi has an industrial and recycling economy and is estimated to recycle about 80 percent of Mumbai's dry waste that the city disposes. Waste recycling contributes to the employment of more than 250,000 people (McDougall, 2007). As shown in Figure 2. There are many economic activities practiced by the population including food sales, light industries and household products. Solid waste such as car batteries, computer parts, fluorescent bulbs, plastic bags, paper, cardboard boxes and wires are collected and sorted. Dharavi also has factories and workshops that recycle used beverage cans and soap (Dey & Lulo, 2021).



Fig 2. Economic activities in Dharavi, India.

Source: Author (field visit, 2018).

In Jakarta, home ownership has become a major problem for low-income earners, especially as property developers take control and focus on catering to the upper class. Jakarta has experienced urban expansion due to population migration and the concentration of services and jobs, which has led to the proliferation of informal settlements (kampungs). Urban problems are often associated with kampungs, informal settlements that grow and tend to become poorer over time (Nurdiansyah, 2018). Kampungs, have expanded due to land monopolization and control of the property market. 40% of Indonesian families live below or near the poverty line and cannot afford formal housing within their economic means. More than 25% of Jakarta's population now resides in 450 kampungs (UN-Habitat, 2003). Kampungs can be described as slums or informal settlements, depending on land ownership and

legality of construction. Some kampungs are located outside the urban development boundaries of Jakarta, and ongoing urban sprawl has brought them within the urban boundaries of Jakarta (Alzamil, 2020). Other kampungs are built on agricultural land or in public spaces and are informal. These areas do not have secure tenure and their residents are trying to resist forced eviction policies. Some research and government reports estimate that only 20% of the total kampungs in Jakarta can be classified as formal housing (Widoyoko, 2007). Kampungs lack basic urban requirements such as clean water supply, power, sanitation, and waste disposal systems. As shown in Figure 3. The residents of Kampungs are engaged in various economic activities depending on the nature of the place, including fishing, trade, and food industries. The local government implemented the Kampung Improvement Programme (KIP) to alleviate the problems but it was not accompanied by comprehensive social and economic programs to uplift the informal communities (Alzamil, 2018). The informal settlements upgrading programme is an effective policy that can reduce resistance, maximize population participation and improve their livelihoods (Nurdiansyah, 2018).



Fig 2. Economic activities In Kampung, Jakarta

Source: Author (field visit, 2016).

5. Discussion

The spread of informal settlements in developing countries is accompanied by the availability of informal economic infrastructure. Most informal settlements provide employment opportunities and jobs for residents or are located close to business centers in the city. Residents of informal settlements work in informal occupations and jobs such as food selling, waste sorting, poultry farming, handicrafts, and light industries. Housing policies dealing with informal settlements that exclude the economic activity of residents will not be sustainable because the stability of the population depends on the availability of an economic base for them. Many resettlement projects in developing countries are far removed from understanding the needs of the poor, the resources available and the economic opportunities. Therefore, developing countries can achieve little when they rely on imported housing policies that are not consistent with the local urban context. Informal settlement residents need community programmes that improve their livelihoods alongside physical infrastructure development. Effective policies emphasize improving living standards, developing services and infrastructure and stimulating local housing provision (Turner, 2000). Therefore, sustainable solutions to deal with informal settlements should take into account the economic, environmental, and social aspects. This requires the importance of analyzing the economic structure of the population and improving livelihoods as a sustainable approach to dealing with informal settlements. Figure 4 illustrates the stages of developing effective policies for informal settlements in developing countries. The proposed approach begins with analyzing informal settlements at the city level and understanding their spatial location, settlement potential, and available economic resources. This analysis helps to identify priorities for dealing with

informal settlements and propose appropriate policies. The success of this policy depends on analyzing informal settlements including the economics of the population, livelihoods, and social characteristics within the framework of sustainability dimensions.

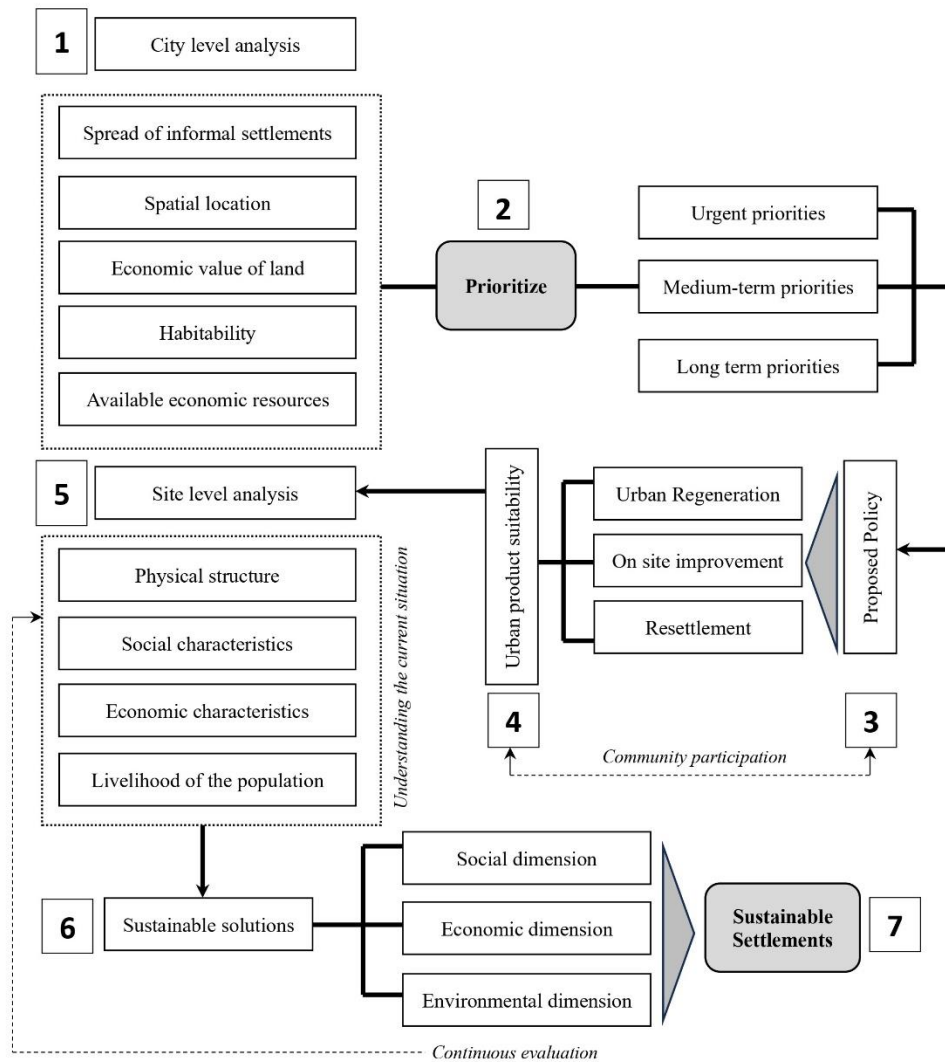


Fig 3. A proposed approach to sustainable solutions for informal settlements in developing countries

Source: Author

6. Conclusion

This paper examines improving livelihoods in informal communities as an approach to sustainable solutions for informal settlements in developing countries. The physical upgrading of informal settlements is often accompanied by the destruction of the social and economic structures of informal communities. Urban development projects drain the resources of developing countries and involve the construction of new infrastructure and housing stock. Moreover, private sector participation in the development process requires incentives related to land value and investment feasibility. Therefore, the comprehensive physical upgrading approach of informal settlements will not be effective in the absence of financial resources and private sector support. Yet, modern policies in dealing with informal areas have tended to support social and economic stability with the aim of integrating these communities into the urban context. This approach emphasizes understanding the economic and social conditions that have contributed to the formation of urban patterns. In other words, improving the livelihoods of

residents in informal areas inevitably leads to upgrading the physical conditions. This approach emphasizes empowering local residents to participate in managing and improving their built environment gradually according to available capabilities and improving their livelihoods through development programs and job opportunities that are adapted to their social and economic characteristics.

7. References

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