

SUSTAINABLE URBAN DEVELOPMENT AND INFORMAL SETTLEMENT OF YANGON: A REVIEW ON HLAINGTHARYAR TOWNSHIP

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Abstract

More than half of the world's population is living in urban areas and the global urban population is projected to grow by 2.5 billion between 2018 and 2050 according to UN reports. One of the most prominent consequences of rapid urbanisation in developing countries is the persistence and ongoing growth of informal settlements in major cities that challenge the sustainable urbanisation of the developing countries. Yangon is the largest city and main economic hub of Myanmar with a population of more than 4.7 million according to the Census 2014. About 10% of the total population of Yangon is now living in informal settlements (DUHD, 2016). Due to a lack of proper housing schemes, informal settlement largely took place in many parts of the new towns that were established in the urban fringe areas of Yangon during the last three decades. Currently, the informal settlement in new townships of Yangon had increased (World Bank, 2019). Among them, the largest informal settlement of Myanmar can be found in Hlaingtharyar Township. Against this background, the main aims of this research are to understand the controlling factors for the growing informal settlement in Yangon, to assess the housing policy regarding informal settlements and to find feasible solution. This is a primary approach mainly based on secondary data and literature. However, many interviews had done during 2012, 2015 and 2017. Intensive literature search and analysis were made. The limitation of this research is difficulties to conduct field work due to pandemic and security issues related to recent political changes. To substitute this gap, extensive media review was conducted. This study found that community participation is the best to solve the informal settlement problem of Hlaingtharyar in line with the sustainable urban development goals of Yangon.

Keywords: sustainable urban development, informal settlement, squatter, Hlaingtharyar

Introduction

Urbanisation is an inevitable process in developing countries. One of its consequences is the increasing informal settlements in major cities. Nowadays, slum and squatter have been an integral part of urban landscape especially in prime city of the developing countries like Myanmar. Upgrading of slums and squatter is now globally accepted as one of the priorities of sustainable urban development (Myint Naing and Nitivattananon, 2020). As urbanization accelerates in Myanmar, the number of people living in informal settlements within cities like Yangon is expected to rise. Addressing the housing and infrastructure needs of this growing population will be a crucial aspect of Myanmar's urban development agenda, requiring innovative policies and investments to ensure sustainable urbanization that benefits all residents. Looking ahead to 2050, Yangon is anticipated to experience significant population growth, estimating that its will exceed 10 million. This burgeoning urban landscape, however, also carries historical challenges related to informal settlements.

Research Questions

Against this background, this research aims to investigate, first of all, the urbanisation processes of Myanmar, secondly, the development of informal settlement through the history of

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Yangon and thirdly, the general principles and strategies of urban sustainability under sustainable development goals (SDG) are reviewed. Special focus will be put on informal settlements in Hlaingtharyar. Finally, it summarises the challenges and better solutions to solve the informal settlement of Yangon. Thus, the guiding research questions are:

- 1) What are the key factors that accelerate the expansion of the informal settlements in Yangon?
- 2) How is the situation of informal settlements in Hlaingtharyar Township?
- 3) What are the major challenges and how may the informal settlement problem in Hlaingtharyar be solved?

Aims

The main aims of this study are:

- To understand the spatial distribution pattern and phases of informal settlements in Yangon
- To understand the controlling factors for the growing informal settlement in Hlaingtharyar Township and its situation
- To assess the housing policy regarding informal settlements and to find feasible solution in line with SDG goals

Material and Methods

With an analysis of secondary data, from international and national sources, this study is based on intensive literature analysis as field work is limited due to Covid-19 pandemic and security reasons after the dramatic political change in February 2021, especially in the informal settlement areas of Yangon. A comprehensive review of international, national literature and planning documents of the Department of Urban and Housing Development (DUHD) and Yangon City Development Committee (YCDC) are thoroughly reviewed. Apart from it, reports on INGOs and NGOs related to surveys on squatters in Yangon City are examined.

About 30 qualitative interviews were conducted during 2012 and 2020, allowing for a deeper understanding of the phenomena, processes and endeavor of government institutions to solve the problem of informal settlements in Yangon. Knowledge, perceptions and evaluations of different stakeholders and experts on the urbanisation processes were collected and recommendations were drawn based on the expert interviews and survey reports of NGOs and INGOs. Due to difficulties to conduct field work, media content analysis related to informal settlement in Hlaingtharyar was made.

Concept of informal settlements

Informal settlements have become one of the prominent issue around the world in the discourse of population growth. It is a noticeable phenomenon, and the concept of informal settlements includes multiple terms, such as slums, squatters, shantytowns, and many more, making it difficult to settle on one definition (Taher and Ibrahim, 2014). Informal settlements, often referred to as slums or squatter settlements, are a common feature of many urban areas in developing countries.

The UN-Habitat (2015) defines informal settlements as: 1) inhabitants have no security of tenure to land or dwellings they inhabit, ranging from squatting to informal rental housing; 2)

neighbourhoods usually lack basic services & city infrastructure; 3) the housing may not comply with planning and building regulations, often situated in environmentally hazardous areas.

Whereas, **slums** are defined as most deprived form of informal settlements characterized by poverty, large agglomerations of dilapidated housing often located in most hazardous urban areas, lacking basic infrastructure and services, public space and green areas, and constantly exposed to eviction (UN-Habitat, 2015). However, in Myanmar and in Yangon, slums are not always illegal and not squatting on other lands.

Squatters are the residential areas, which has developed without legal rights to the land or permission from the authorities concerned to build. As a result, of their illegal status, provision of infrastructure and services are usually inadequate (UN-Habitat 2015).

In this study, the term 'informal settlement' primarily refers to squatters which lack legal rights to their residential areas, and these terms will be used interchangeably.

Findings and Discussion

Urbanization in Myanmar

After the end of British colonial rule, the urban population as a percentage of the total population fluctuated considerably, falling from 12.3% (947,000 persons, 1891) to 9.3% (991,000, 1901), 9.3% (1.13 million, 1911) and 9.8% (1.3 million, 1921) and then rising to 10.4% (1.52 million, 1931). Improvements in the agricultural economy had a strong effect on migration and more efficient census data gathering in rural areas is also likely to be reflected in the statistics (Hla Tun Aung 2003: 204-205). Like other Southeast Asian states, Myanmar is facing a continuous urbanisation process since its independence in 1948 with growingly rapid urbanisation dynamics in the last decade. The urban population has risen from 13.5% (2.6 million, 1953), 23.6% (6.8 million, 1973) and 24% (8.5 million, 1983) to 28.8% (13.1 million, 1996) (Hla Tun Aung 2003: 205). Over the last decade, it rose from 28.9% (14.5 million, 2010) and 29.7% (15.4 million, 2014) to 31.4% (17.4 million, 2021) (UN-DESA 2019). Urban growth accelerated with the introduction of a market-oriented economy in the late 1980s and early 1990s which has transformed the urbanisation trend of Myanmar (Kraas, *et al*, 2010).

According to Census 2014, the total population of Myanmar was about 55 million and about 30% of this population lives in cities and towns, while the rest are rural population. Urbanization in Myanmar is primarily concentrated around Yangon, the nation's largest city and economic hub. The Yangon Region has a population of more than 7.83 million and the Yangon City proper has a population of over 5 million according to 2019 inter-censal survey (Department of Population, 2020: 45). In general, about 10% of the total population of Myanmar is concentrated in Yangon (Global New Light of Myanmar, 10-5-2020). It is expected that by the year 2050, the population of Yangon will be 10 million. Urbanisation in Myanmar is expected to increase with a faster rate. With the increase of population in Yangon, population living in informal settlements will also increase.

Phases of Informal Settlement in Yangon

Yangon has a long history of informal settlements, characterized by inadequate housing, limited access to basic services, and tenure insecurity. The development of informal settlement in Yangon can be divided into four phases.

The earliest and the first phase of informal settlements in Yangon began in the colonial era until the close of the 19th century. A noteworthy trends emerged due to foreign immigrants, particularly Indians, played a pivotal role as a vital labor force. This influx of immigrants was a key driver behind the rapid growth of squatters during this period. The population increased from 92,000 in 1872 to a staggering 400,000 in 1931. The initial signs of informal settlements began to take shape in the eastern part of Yangon, particularly in the vicinity near east Theinbyu, alongside the railway tracks. There was no discernible or specific policy in place to address the issues associated with slums and squatter settlements during British colonial rule (Nyi Linn Maung et al, 2020).

The second phase of the development of informal settlements in Yangon began shortly after Myanmar gained Independence. It was the impact of World War II and civil war between the government and rebel groups. Thousands of people from other towns and insurgency-prone areas migrated to Yangon. The annual population growth between 1953 and 1955 was nearly 8% (Yin May, 1963). The city was severely destroyed during the war and housing stock in Yangon was unable to support the increasing population. As such, slums and squatters grew across the city. In 1958, the Care Taker Government and municipality has its activities for squatter clearance by establishing three new towns, Thakata, North Okkalapa and South Okkalapa, where 70,000 land plots were provided (Myint Naing and Nitivattananon, 2020).

The third phase of informal settlement in Yangon occurred during the period between 1960s and 1980s. The natural growth of population in rural areas and construction of factories especially in Yangon were the main causes. This third phase of informal settlement in Yangon was different from that of the previous phase and the Housing Corporation had tried to relocate the people in new towns and upgrade the squatter wards as land readjustment. However, it was not successful, as only 9290 households were relocated and four wards of Yangon was upgraded. There were 66162 households and 259237 squatter populations in 26 townships of Yangon in 1988 (Myint Naing and Nitivattananon, 2020).

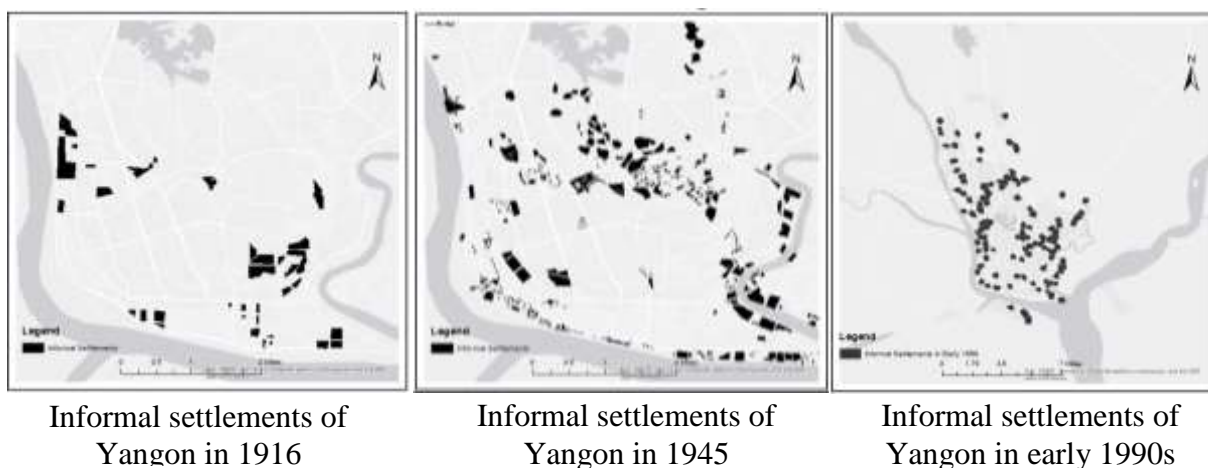


Figure 1. Distribution of informal settlements in Yangon during the period from 1916 to early 1990s. (Source: Nyi Linn Maung et al, 2020)

With the change of government after 1988, large scale extension took place by establishing 6 new towns around Yangon. The majority of the squatters were moved to these new towns by force under resettlement programme. Another squatter clearance programme was “Hut to Apartment” programme. This was an implication of China model from 1993 to 1998. Under these schemes, the government implemented many relocations and resettlement as 34 projects of hut to apartment which could provide 6654 apartments for slum dwellers. However, this programme no longer continued at late 1990s due to the impact of 1997 economic crisis.

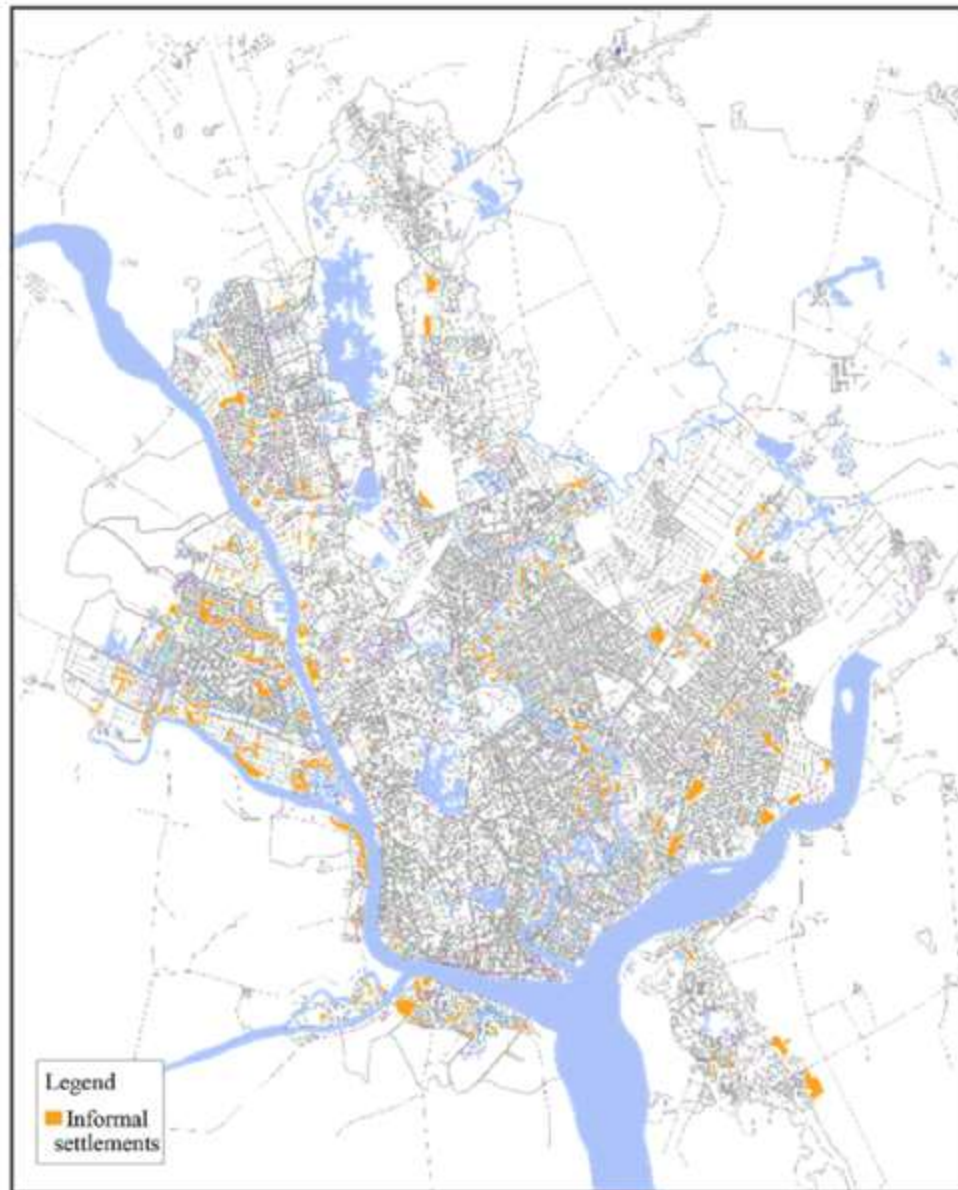


Figure 2. The distribution of informal settlements in Yangon (2020)

(Source: Myint Naing and Nitivattananon, 2020: 403)

The current phase can be assumed since 2011 as the migration to Yangon has rapidly increased due to socio-economic reasons, such as job opportunities and better quality of life. It was also related to government policy changes and consequences of establishing industrial zones in new towns early 1990s, which had given higher incentive for migrating to Yangon. However, other prominent reason was the natural disaster and insurgency at the remote areas. Cyclone

Nargis of 2008, flooding in 2015 and insurgency in remote rural and border areas were also driving forces to migrate to urban areas especially to Yangon. It was estimated that total squatter population can be over half a million in Yangon. of these, Hlaingtharyar is the biggest squatter area with a population of over 120,000.

During 2016 and 2020 Yangon Region Government started to manage the squatter problem as an important urban agenda and set up three phases for relocation, registration, screening and classification, and counter measures of slum formulation. Screening had already started on September 2016 to July 2017. All data are stored and maintain by digitization with finger print for further steps. Within Yangon Region, there were 8 townships had no squatter, 37 township have many squatter settlements (Myint Naing and Nitivattananon, 2020). Figure 2 shows the current distribution of informal settlements in Yangon City.

Informal Settlements in Hlaingtharyar Township of Yangon

Hlaingtharyar Township was established on the western bank of Hlaing River as a new town of Yangon in 1985 by relocating the fire-victims. It has an area of 76.4 sq. km. the total population was 163,493 in 1994 and it increased up to 687869 in 2014 (Zin Nwe Myint, 1998, Department of Population, 2015). Figure 3 shows the location of Hlaingtharyar. Industrial Zones were established in Hlaingtharyar in 1995 in order to support job opportunities at that time. Nowadays, there are 13 industrial zones which are attracting a significant influx of rural migrants in search of job opportunities. This has led to the development of the largest informal settlement of Myanmar in Hlaingtharyar.

The number of squatter households in Hlaingtharyar was 24508, having 97568 people and this account for 14.21% of the total township's population in 2015 (Htay Htay Naing, 2018). The rate of squatting in Hlaingtharyar Township had increased rapidly and there are 181 informal settlements of various sizes within Hlaingtharyar Township. The total households of informal settlement become 24865 with an estimated population of 124325 in 2016 (UN-Habitat, 2020). The population of informal settlement in Hlaingtharyar increased up to nearly 200,000 in 2019 (Frontier Myanmar, 6-11-2019).

A study shows that the main reason to live in slum and squatter areas of Yangon are childhood home (4.9%), cheap rental (19%), affordable to buy (24.4%), closer to work (14.6%), relatives and friends (22.8%) and able to squat (14.4%) (Nyi Linn Maung et al, 2023). However, the main reasons of increasing squatter in Hlaingtharyar Township are: natural disaster (Cyclone Nargis in 2008, people from Ayeyarwady Region mainly migrated to Hlaingtharyar after the cyclone due to nearness and job opportunities), government policy (relocation from other areas), marriage, family migration, limited income and lack of employment at origins (former workers in agricultural sector at rural areas changed their occupation) and job transfer. These are the push factors and the main pull factors to Hlaingtharyar are, better job opportunities (68%), to live with their parents and for better education opportunities (Htay Htay Naing, 2018).

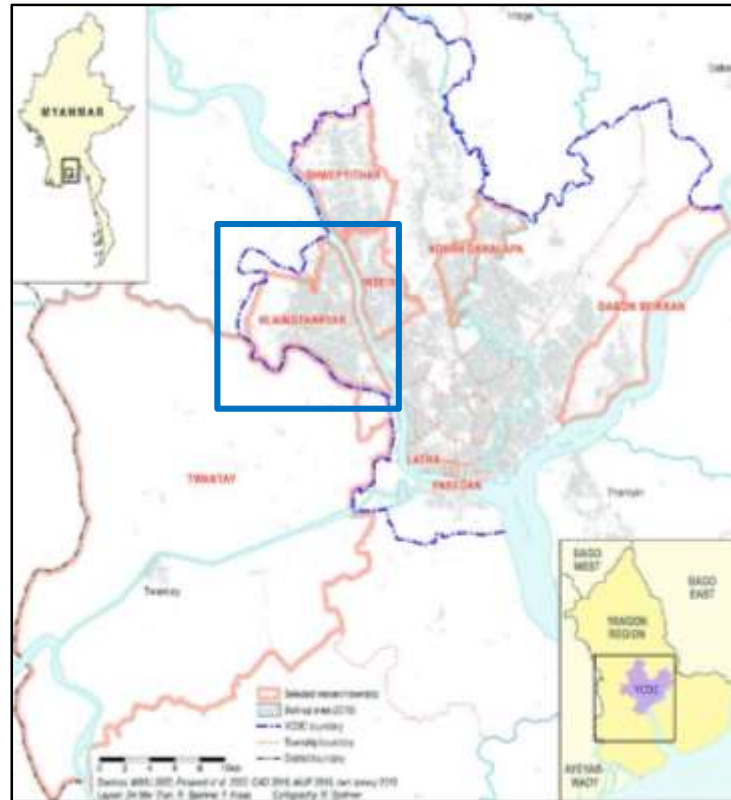


Figure 3. Location of Hlaingtharyar Township in Yangon City (Zin Mar Than *et al*, 2023)

As a consequence of such large informal settlement, Hlaingtharyar is facing many economic, social, environmental and political problems. Obviously Hlaingtharyar is known as a “vice city” due to its high rate of crime and insecurity (Kyed, 2019: 65, Frontier Myanmar, 6-11-2019). It is believed that poverty is the main cause for high crime rate and according to a study, the 54.3% of the informal households are below the poverty line (1.9 US\$ per person per day as a new global standard) (Thet Htwe, *et al.* 2017: 2499). Further, informal settlers are most affected by limited infrastructure and services and are often highly prone to natural hazards (World Bank Group, 2019: 21). During Covid-19 pandemic in 2020-2021, these people are unable to follow public health directives to reduce the spread of coronavirus as they are living in crowded slums, where several families might share a house, making social distancing impossible (Frontier Myanmar, 24-6-2020).

The rate of squatting in Hlaingtharyar Township had increased due to recent changes in land legislation, professional and opportunistic squatters since the election of democratic government in 2015 and chronic shortage of affordable housing in Yangon. Although recognizing the importance to solve the growing problem of informal settlement, the Government currently has no proper policy for informal settlement (World Bank Group, 2019: 39, Forbes, 2019: 96). The authorities perceived them as threats to urban development planning and worried of larger influx of migrants. Thus, practice of eviction continues until now and conflicts always occurred due to the protest of squatters (Forbes, 2019: 109). This is forcing to move one illegal settlement to another perpetuating the cycle rather than solving or reducing the squatter problem. Forbes (2019) suggested that authorities need to be aware that squatters usually have rational choice for squatting.

Sustainable urban development and informal settlement

Substantial effort had made for sustainable urban development of Myanmar especially focus on large cities. Special guideline and plans have been drawn from international discussions. The 'Myanmar Agenda 21' (1997) already addressed key principles of sustainability which were later included in the 'National Sustainable Development Strategy for Myanmar' (2009) and the 'Myanmar Sustainable Development Plan' (2018), these were applied in urban strategies in Myanmar inspired by the Millennium Development Goals (MDGs) and especially the Sustainable Development Goals (in particular: SDG 11) and the New Urban Agenda (2016). Government already accepted that the informal settlement problem is one of the key priorities for solution.

Among many resettlement programme, participatory slum upgrading programme are most successful and practiced in many developing countries, as well as in Southeast Asia. Participatory slum upgrading is a methodological approach that aims to improve slum dwellers' living by letting them engage with all key urban stakeholders – all levels of government, community representatives, civil society, non-government organizations, academia and private sector. This multi-stakeholder platform is considered to be more likely to promote the necessary partnerships, governance arrangements, institutional structures and financing options which result in inclusive planning and sustainable outcomes. Informal settlers, in particular, have important knowledge, skills and capacity to contribute, direct and own the upgrading process, and an inclusive approach towards the improvement of their living conditions (UN-Habitat, 2018).

The Baan Mankong (Secure Housing) Program through the Community Organisations Development Institute (CODI) in Thailand since 2003 is a good example. It is a program that the government encourages the community of informal settlers to be involved in construction of housing projects, forming their cooperatives and take the community loan to pay for the land they had purchased or granted for long-time lease. Such strategies solved the housing problems of the poor without fully depending on the government (Kuek, *et al*, 2016: 4-5). It had already recognized that there are abundant innovative solutions developed by the poor to improve their own living environment (Taher and Ibrahim, 2014: 70) and policy makers were more than ready to accept such practices (Fox and Goodfellow, 2016: 141).

Challenges and Future Directions

Sustainable urban development and addressing informal settlements are critical challenges for many rapidly growing cities around the world, including Yangon, Myanmar. The more migration to Yangon means more informal settlements in Yangon, and the majority of these migrants will reside in Hlaingtharyar which offers high job opportunities in industrial zones. Thus, a balanced national urban policy that is interconnected with local plans and law enforcement at local levels is a necessity.

To solve the informal settlement problem in Hlaingtharyar Township in line with sustainable urban development goals, the challenges can be concluded as follows:

- **Rapid urbanization:** The township has experienced rapid population growth due to rural-to-urban migration, which has outpaced the capacity of the local government to provide formal housing and infrastructure.

- **Lack of land use planning:** The absence of effective urban planning and land use regulations has allowed informal settlements to develop haphazardly, often in hazard-prone areas.
- **Limited access to basic services:** Informal settlements in Hlaingtharyar often lack access to clean water, sanitation facilities, healthcare, and education, leading to poor living conditions.
- **Vulnerable communities:** Many residents in these settlements are vulnerable and marginalized, facing economic and social challenges.
- **Urban Planning:** Developing a comprehensive urban plan that integrates informal settlements into the formal urban fabric and promotes mixed-use zoning.
- **Infrastructure Development:** Investing in infrastructure projects to provide basic services, such as water supply, sanitation, and electricity, to informal settlements.
- **Affordable Housing:** Promoting affordable housing initiatives and upgrading existing housing in informal settlements to improve living conditions.
- **Community Engagement:** Engaging with the local community to understand their needs and involve them in the planning and development processes.
- **Resilience and Disaster Preparedness:** Addressing the vulnerability of informal settlements to natural disasters and implementing measures to enhance resilience.
- **Economic Opportunities:** Creating job opportunities and income-generating activities for residents to reduce poverty and improve livelihoods.
- **Land Tenure Issues:** Many residents in informal settlements lack formal land titles, leading to tenure insecurity and hindering development initiatives.
- **Resource Constraints:** Limited financial resources and capacity constraints of local authorities can impede the implementation of sustainable development projects.
- **Political Stability:** The political situation in Myanmar can impact the stability of urban development initiatives.
- **Environmental Sustainability:** Ensuring that development is environmentally sustainable is crucial to avoid further degradation of the township.

To solve the informal settlement problem of Yangon City, it is necessary to develop an alternative solution. Participatory slum and squatter upgrading method will be the best to apply as national and local government institutions cannot fully support to solve the problem. Besides, there are many evidences of successful program in neighbouring countries applying this method to solve their informal settlement problems. The most feasible solution is to build community groups for self-help upgrading of informal settlers in Hlaingtharyar, like *Baan Mankong* programme of Thailand. For this, policy provisions for participatory informal settlement upgrading and operational guidelines are urgently needed. Actors of this mechanism are municipalities, land developers and informal settlers. To be able to encourage the self-help low-cost houses, further detail and in-depth analysis on housing and land use policies is needed. Without proper policy and guidelines, informal settlement problems cannot be solved in line with SDGs goals.

Conclusion

Addressing informal settlements and promoting sustainable urban development in Hlaingtharyar Township is a complex and ongoing process. It requires a holistic and multi-pronged approach that combines urban planning, infrastructure development, community engagement, and poverty reduction efforts. Collaboration between government agencies, NGOs, and the community is essential to make progress in this endeavor. Additionally, politically willingness and long-term commitment to sustainable development are crucial to solve or reduce the informal settlement problems of Hlaingtharyar Township and the future of Yangon.

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