

Evaluation of development strategies and community needs in developing countries: A comparative case study of informal settlements in Asia and Africa.

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Abstract

From the Millennium Development Goals (MDGs) to the Sustainable Development Goals (SDGs), social inclusion has been highlighted as an aspect to consider while developing urban areas. Progress has been witnessed to various degrees in developing countries. However, low-income communities have generally experienced a set of operational setbacks (Cobbinah et al., 2015). For instance, official development proposals have not met community needs, and assistance promised had not been provided (Sachs, 2012). Basic needs are fundamental to sustainable development schemes and Governments should develop strategies to ensure that basic needs are met. As stated in Brundtland report, "*Sustainable development requires meeting the basic needs of all and extending to all the opportunity to satisfy their aspirations for a better life*" (World Commission on Environment and Development, 1987, p.16). This includes the provision of adequate food, energy, housing, sanitation, employment, water supply and health care. Satisfying these needs at community level will ultimately provide a better life for individuals (Holden et al., 2014).

Informal settlements—or slum areas—are a common occurrence in developing countries. This phenomenon results from the migration of people from rural to urban areas looking for better opportunities to overcome poverty. Informal settlements play a significant role in the housing market as affordable housing schemes are often not attainable within the budget of a large section of the population. Furthermore, affordable accommodation rarely meets the requirements of the community (Hassan, 2012; Naceur, 2013). This leads to the potential conflict between informal settlement communities, land government authorities, and bordering societies (Lombard & Rakodi, 2016). Moore's Strategic Triangle model of the public policy states that a balanced strategy for an appropriate governance framework should comprise democratic legitimacy and government support, with community endorsement. In addition, adequate operational capacity is required to deliver development schemes that satisfy informal settlement resident's needs (Moore, 2000; Kavanagh, 2014).

This paper compares informal settlements in Africa and Asia to identify what factors influence community satisfaction and, based on this makes, recommendations to inform future proposals for the redevelopment of informal settlements.

Keywords

Informal settlements; Basic needs; Development strategies; Sustainable development; Developing countries; Sustainable Development Goals (SDGs).

1. Introduction

Rapid population increase is a significant factor contributing to the informal settlement phenomena in large urban areas. These are also known in the literature as shantytowns, slums, squatter camps, bidonvilles, katchi abadis, ghettos and capamentos (Smit et al., 2017; Davis, 2006) and become the only viable alternative for individuals with limited financial capabilities to meet their housing needs. Urban policies and strategies often exclude informal settlements, although arguably these should be considered alongside formal settlements when formulating long-term city development plans and generating solutions for people's needs (UN-Habitat, 2008). Abbott (2001) reported that over time, informal settlements develop their own infrastructures, local economy, and local rules; once this has occurred, particular strategies are needed to address the situation.

Following Dovey (2013, p. 86) "*slum is a symptom of poverty; informality is a transgressive practice through which residents manage the conditions of poverty*". As a definition, this underlines the fact that these urban areas are the consequence of communities trying to satisfy their basic needs and overcome poverty (Khalifa, 2015). To highlight the scale of this emergency, the United Nations Human Settlements Programme reported that: "*By 2030 the majority of Africans will be urban residents, and the majority of them are predicted to live in slums and informal settlements*

unless radical correctives are taken" (UN-Habitat, 2008, p.ii). The paper will use case studies to compare different informal settlements to identify how the situation can be addressed and contribute to achieving Sustainable Development Goal (SDG)11, "*Make cities and human settlements inclusive, safe, resilient and sustainable*" (UN-Habitat, 2015, p.6).

2. Informal Settlements

Informal settlements typologies are mostly based on the topography, city transportation infrastructure and morphology. Researchers identify informal settlements through common elements. These include primitive materials for dwellings, which the literature lists alternately as institutions' discrimination, the absence of land ownership, and lack of basic services. They are recognised as mainly illegal, self-constructed accommodation not complying with planning/building regulations and codes. Such areas usually display various social difficulties, including crime and poverty and are high density with walkable car-free streets. These include squatter camps, transit camps, housing-turned slum, site and services settlements, hybrid multi-structured settlements, and townships (Srinivas, 2015; Smit et al., 2017). In some cases, fragments of old rural or urban fringe settlements turn into slums over time (UN-Habitat, 2008, 2012).

The residences are incrementally constructed, room by room, or can be multi-functional spaces with poor light, sanitation, and ventilation. Usually, one or more of the following conditions are found: inadequate and overcrowded living spaces; lack of clean water and access to sanitation facilities; insecure tenure; insufficient quality and durability of houses. Most are located at the borders of cities, near railways, roads or waterfronts, sometimes built along escarpments or against industrial or institutional walls that provide enclosure (Abdelhalim, 2010; Dovey, 2013; Marutlulle, 2017; UN-Habitat, 2008).

Over the years, informal settlements in developing countries have been considered a problem as they comprise clusters of the most impoverished and vulnerable people, potentially posing a threat to human development and generating conflict with government authorities and bordering communities. These can include disputes around resources, land and power, goods and materials that help individuals to generate income and maintain their livelihoods under challenging conditions. One of the reasons is informal settlements often forgotten in political plans, without proper infrastructure systems or planning strategies and policies applied by authorities (UN-Habitat, 2003; Marx et al., 2013; PSUP, 2016). Occupants are usually day labourers who deliver facilities for the formal sector or are unemployed or underemployed. In some cases, labourers work in the city for half the year and spend the second half in the countryside. Some may run micro-businesses providing services such as carpenter, markets, small animal production and mechanical workshops (Davis, 2006; Kohli et al., 2012). Sub-groups of residents form and dissolve, changing power dynamics, and outsiders categorise residents as not always following the rules and regulations to achieve their aims (Barry, 2000; Wekesa et al., 2011; Kovacic and Giampietro, 2017).

3. Sustainable Development

In the Brundtland Report, sustainable development is defined as meeting the basic needs of all and extending to all the opportunity to satisfy their aspirations for a better life (World Commission on Environment and Development, 1987). So, while 'basic needs' may vary geographically, this essentially means food, energy, housing, sanitation, employment, water supply and health care are needed to provide an adequate standard of living for individuals (Holden et al., 2014; Blewitt, 2018). For local and national governments to evidence that they are working towards achieving SDG 11, the situation of those living in informal settlements must be addressed to ensure that their basic needs are met. According to Jabareen (2006) and UN-Habitat (2015), an effective, sustainable, urban system requires sufficient diversity, high density, greening, sustainable transportation, mixed land use and passive solar energy so aiming towards reducing automobile use, pollution, waste, have adequate infrastructure and open spaces to create and maintain a livable community orientation. Since the adoption of the UN Sustainable Development Goals, there has been increasing interest in this issues as Goal 11 is to "*Make cities and human settlements inclusive, safe, resilient and sustainable*" (UN-Habitat, 2015, p.6). This research was undertaken to investigate the current situation in selected informal settlements strategies in order to determine what is needed to meet the basic needs of the residents.

4. Research Method

Moore's Strategy Triangle model and Alderfer's Existence, Relatedness, Growth (ERG) theory principles were used to understand the phenomena of informal settlements, and guide the comparative case study analysis. Specifically, a set of criteria adopted to evaluate the operational capabilities (legal power, stakeholders, institutions

Health										
Education										

4.2. Strategies and Policies

4.2.1. The Asian Context

In the fifties and sixties, the Indian government policy was to demolish informal settlements and slums, but this was unsuccessful as people simply returned and rebuilt their homes or shifted to any unoccupied land nearby. During the seventies, these began to be seen as a housing solution with residents issued with photo passes as part of a programme to deliver electricity, sanitation and water facilities. However, these improvements were carried out by government institutions with no community participation or consultation (Burra, 2005). In 1991 a 'Slum Redevelopment' plan introduced to transform Mumbai, under the responsibility of the Congress government's Chief Minister, Sharad Pawar. Based on changing the land use zones for economic reasons this resulted in existing slums either being moved onto open land of no commercial use or further out, to the city edge (Björkman, 2014; Shatkin, 2013).

The Indian government identified two types of informal settlements/ slums in 2001, 'notified slums', areas in cities or towns notified by the local government or state under the Slum Act and non-notified slums, recognised by the government but not notified under the Act. Both typically have around 300 residents distributed between sixty to seventy homes in building, with poor services and inadequate facilities. The main difference is that notified slums have access to use government facilities with some households having a legal title and so are protected from eviction (Lucci et al., 2018; Nakamura, 2014).

In Bangladesh, the World Bank and other experts have highlighted the major reason for city slums is the absence of proper planning. The slums here have high populations, so rooms are crowded with inadequate water and sanitation services. Occupants have very low economic status, with about 50% of households below the poverty level and lacking tenure rights so are vulnerable to eviction (Siddique, 2017; UN-Habitat, 2006). Despite this renting out slum units, particularly those near waterways in Dhaka, can be a profitable business. Most of the slum communities are domestic workers, hawkers, rickshaw pullers or work for low pay in factories and offices (The Daily Star, 2009).

Since 1975 government and local authorities have trialed several approaches to address informal settlements in Bangladesh (Mohit, 2012). The Grameen Bank and Bangladesh Rural Advancement Corporation has supported various campaigns to ease slum poverty (UN-Habitat, 2006) and in 2006 the Committee for Urban Local Government developed an inclusive development policy to solve everyday issues in Dhaka city. Other approaches have been adopted by NGOs to enhance living standards, for example, the Bangladesh Rural Advancement Committee (BRAC) and Nari Udyog Kendra (NUK) project offer shelter for female clothing workers (Rashid, 2009). Water and sanitation initiatives providing access to clean water for Dhaka slum communities have been developed by Dustha Sastha Kendra (DSK), Assistance for Slum Development (ASD) and Water Aid Bangladesh in partnership with various Community-Based Organisations (CBOs) (Mohit, 2012). More recently a partnership between the United Nations Development Programme (UNDP), UN-Habitat and the Government's Urban Partnerships in Poverty Reduction (UPPR) has been offering resources, skills and knowledge to increase slum dwellers incomes to improve the living conditions (UNDP, 2019). The African Context

Africa has a high and rapidly increasing population projected to rise by sixty per cent by 2050, which will transform the profile of the region (UN-Habitat, 2015). This is reflected in the formal housing market and construction prices (Housing Finance), where a gap between supply and demand has led to a housing crisis, exacerbated by migration. Dispossession of the urban poor and demolition of urban areas without replacing housing is considered a crime towards the informal settlement communities (Dovey, 2015) so long-term strategies for removal and replacement with formal housing were the dominant strategy in the 1950s and 1960s. Despite the delivery of permanent public housing units, informal settlements have been increasing due to social, economic, aesthetic, and environmental reasons (Abbott, 2002; Dovey, 2013).

Unplanned housing in Africa usually takes the form of informal settlements occupied by low-income communities. Generally, the houses do not conform to regulations and standards set by authorities because, for example, of unlicensed land subdivision, illegal urbanisation, unauthorised building, and construction of units with incorrect

building standards (see Figure 1). In some cases, families may own the land, and houses may be built of durable materials and have access to electricity and water. In other properties may be transferred legally, but not registered (see Figure 2). However, even these may violate building regulations and often have inadequate sanitation (Barry, 2000). Informal settlement dwellers often struggle to access education and health systems and addressing these issues effectively has failed, with sections of society not provided with suitable housing (Marutlulle, 2017).



Figure 1 Building materials in Mansheya Nasir, Egypt.



Figure 2 Illegal extensions in Abagaya, Khalifa, Egypt.

5. Discussion

5.1. General Characteristics

Informal settlement conditions and characteristics might differ based on location, community conditions and governmental positions but there are common elements (Nolan, 2015). This research took specific features which are location, set up, formation and selection drivers, community, household condition and infrastructure condition, to build a general profile for informal settlements. Infrastructure included sanitation, sewage, water, electricity and waste disposal, as well as the urban fabric and roads.

All the ten case studies showed lack of tenure rights irrespective of whether the households owned or rented their dwelling as all were occupying government lands. Choice of location was based on job opportunities, vacant lands near the city and transportation services, as well as affordable price or rent. 6 of the 10 case studies indicated that part of the reason the informal settlements took shape was settlement on vacant land, in 5 cases this was due to nearby transportation services; in 8 cases, because it was near the city centre. Occupants look for a place near to their workplace and city to minimize transportation cost and reach their daily needs within walking distance; most residents do not own a car.

Crime and gang activities are associated with many informal areas due to the lack of police or government presence. Informal settlements may exhibit ethnic problems as there are people with diverse backgrounds, the education level is generally a low as the need for money means that people work rather than completing their schooling; in only one case study (7) had education facilities in the area. The communities suffer from health issues and disease due to poor living conditions and lack of nearby health facilities (see Figure 3). Infrastructure is in poor condition and facilities are generally public or shared (see Figure 4). 5 out of the 10 case studies have inadequate waste disposal facilities. The communities need to have access to water either as private water taps or shared standpipes near their households. The data shows that in almost all case studies water taps require long travelling distance; only in case studies 8 and 9 do some households have water storage tanks.

Most of the interventions implemented in informal settlements are creation of affordable housing and mostly carried out by the government. In four out of the ten cases studies, government agencies delivered the redevelopment schemes. However, non-governmental organisations (NGOs) may play a significant role, although mostly in small-scale projects. For instance, in case studies 1, 2, 3, 4 and 7 development schemes were carried out or funded by NGOs.

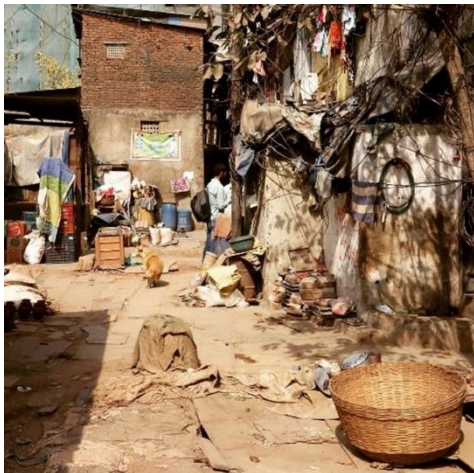


Figure 3 Dharavi, Mumbai, India.

(Source: McLeod, 2016)



Figure 4 Bhopal, India.

(Source: Dalbéra, 2015)

5.2. Sustainable Measures in Development Strategies

This research was undertaken as the first step in considering how developing countries can work towards achieving sustainable development with respect to providing adequate housing for the vulnerable, with least financial resources, currently living in informal settlements or slums. Sustainable urban development and planning is a composite of many factors such as social life, energy, transport, land use, urban design ecology and economics (Dempsey et al., 2009). After that, the social sustainable development which can only be achieved with communication and collaboration between civil societies and community participation (UN-Habitat, 2015; Ukko et al., 2018) and within social and cultural frameworks that incorporate a stable economy and social support. According to Turkoglu, (2015, p. 10) "A well-informed framework equipped with the data including quality of life assessment is essential in enhancing the sustainability process". In 2015, SDGs were formulated with 169 targets and 304 actions (Blewitt, 2018). These were

adopted as the framework for the sustainable development agenda to be achieved by 2030 (United Nations, 2019) and are now being used by governments across the globe to development strategies, including those for slums and informal settlements. Here we would like to review two development strategies – proposed respectively by the Egyptian and Bangladeshi governments – in light of the conditions characterising informal settlements determined by our case study.

In Africa, for example, the Egyptian 2030 Vision has been developed to overcome the challenges identified to achieving Egypt's Sustainable Development Strategy, for example, the National Urban Policy (NUP) which will contribute to achieving Sustainable Development Goal (SDG) 11, which deals with Sustainable Cities and Communities (MIIC, 2016). The rationale for the vision is the need to address the persistent spread of urbanisation, and social inequalities and to take a multidimensional approach maximising the benefits of growth while integrating local views on progress towards implementing the SDGs (Cabinet of Ministers, 2016). Official Development Assistance (ODA) funded projects set up specifically to contribute to SDG 11, such as the World Bank Inclusive Housing Finance Programs for Results, which aims to increase affordable formal housing for low-income households in Egypt and Social Housing Fund (SHF) capability to coordinate policies in the social housing division (MIIC, 2016). However, some countries are struggling in their strategies for instance, in Kenya, the challenge of carrying out sustainable measures are not solely about poverty, but about the lack of practical ideas from organisations and government in terms of recognising the settlements and investing in improving the living situation. Stakeholders involved in the strategies and schemes need to deal with informal settlements, international organisations, NGOs, CBOs, FBOs movements and financial institutions (Schouten & Mathenge, 2010; Panek & Sobotová, 2015). The involvement was in establishing schools, health care centres, water kiosks and toilets in different parts of Kibera. However, they were not adequate because of the high number of residents in the villages Inadequate financing schemes and managerial skills to manage large-scale solid waste are also a problem.

Turning to an example from Asia the Sustainable Development Goals (SDGs) were integrated into with the Bangladesh government's 7th Five Year Plan (7FYP), covering the period 2016 to 2020. Despite significant progress, a quarter of the Bangladeshi population still lives below the poverty line (Ahmed, 2014; Munir, 2019). The 7FYP tackles SDGs 1, 2, 3, 4, 11, 13, 14, 16 and 17 through various strategies, policies and initiatives, with an action plan for SDG 12. In 2015 the Cabinet Division & General Economic Division-GED developed the National Social Security Strategy (NSSS) to work towards SDG1 (EquityBD, 2018) and the National Health Policy-2011, Population Policy-2012 and Ministry of Social Welfare are working together towards SDG3 (Munir, 2019). There are still significant areas to address before sustainable development can be claimed to be fully achieved, such as reducing inequality in terms of development and income distribution (Rashid, 2009). The income gap is a key contributor to poverty, which leads to slums formation (EquityBD, 2018). Youth unemployment is a particular challenge that Bangladesh is facing with more than 95% working in the informal sector (Munir, 2019; Rashid, 2009).

So then how are developing countries applying the principles of sustainable development in their plans, policies and strategies to address living conditions in informal settlements and slums? In reality, few governments in developing countries have the resources, power and qualified experts to provide their fast-growing communities with the services, land and facilities to meet the urban sustainable development requirements, for example, schemes that provide adequate schools, transport, proper sanitation and clean water. This would require governments to develop clear development strategies aiming to release the pressure on rapidly expanding cities to enable building smaller settlements integrated with rural lands. This would enable site and service planning in informally developed areas and slums with more appropriate and sustainable housing, providing the basic needs for communities (World Commission on Environment and Development, 1987). Fundamental to this process is the consideration of sustainable development principles. The literature describes these in different ways, but there are seven basic requirements, i.e. long term perception, distribution of resources, secure ecosystem and resources, polluters pay, settlements the precautionary principle, participation and taking an integrated approach (Hedelin, 2008).

The current framework, the SDGs, provide a different perspective on urban development issues particularly if they are considered as interlinked, rather than the linear way in which they are usually displayed (Rockström & Sukhdev, 2016). To achieve sustainable cities and communities a set of needs have to be fulfilled and SDG 11: Sustainable Cities and Communities requires delivery of safe, sustainable, resilience and inclusive human settlements and cities (Roorda, 2017). There are ten targets including sustainable and safe transportation systems, integrated urban participatory planning, affordable and safe essential services and housing, disaster resilience, public and green spaces,

integrated plans and policies, urban-rural relationships, minimise the environmental impact of the cities, natural and cultural heritage and technical and financial support for resilient and sustainable buildings (The Global Goals, 2019).

However, SDG11 cannot be considered in isolation. To achieve sustainable cities and communities, which includes dealing with informal settlements in developing countries, other SDGs will also be needed to be addressed, specifically

- SDG 1 to create an action plan to end poverty.
- SDG 2 to achieve secure food resources, promote sustainable agriculture and improve nutrition.
- SDG 3 to ensure and promote healthy lives and wellbeing.
- SDG 4 inclusive good quality of education.
- SDG5 to achieve gender equality.
- SDG 6, 7 and 9 are needed to provide clean water and sanitation, access affordable energy sources and build resilience infrastructure.
- SDG 8 to provide opportunities for productive employment for everyone.
- SDG 10 create effective and accountable institution at all levels to reduce inequality.
- SDG 16 to develop partnerships between all involved stakeholders.

This is represented graphically in Figure 5.

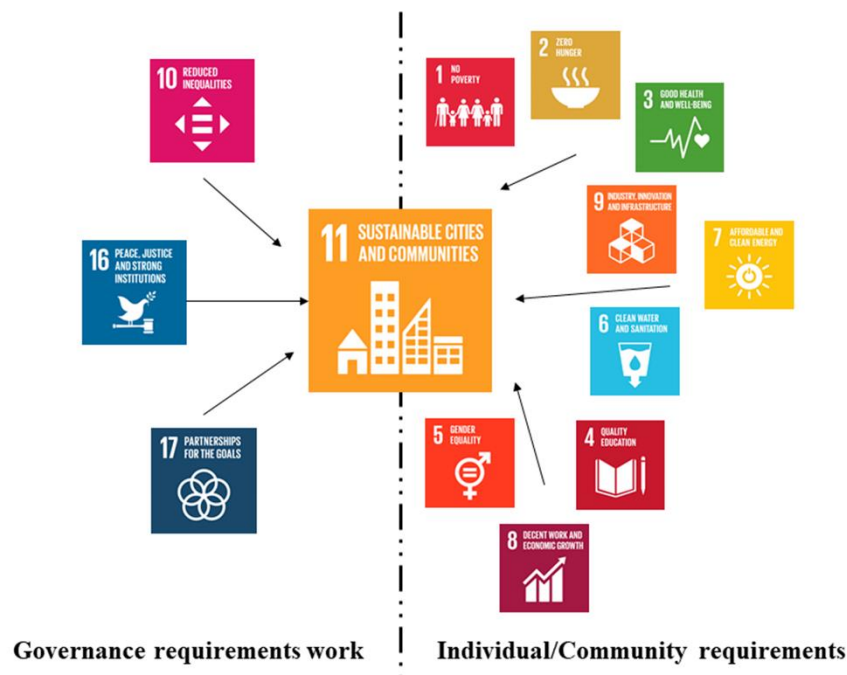


Figure 5 Sustainable Development Goals arrangement.

6. Conclusion

Informal settlements result due to the high rate of people immigration from rural areas to the city to overcome poverty. The reasons for people choosing to live in informal areas is usually one or more of the following; looking for a location near work, for job opportunities and to have a better life. Also, it is the result of the unrestrained housing market, pushing a substantial number of people to move to informal housing, as the market is continuously rising with costs which exceed individual income capability (Shawkat, 2015; PDP, 2017). The comparative case studies showed informal settlements typically lack tenure rights (as they are illegally developed on land that residents do not own) and inadequate essential facilities. Although most case studies had access to water and electricity, but this was either

public, shared, and suffered from regular cuts was accessed/extended illegally by occupants (Huchzermeyer, 2004; Space Syntax, 2010).

In developing countries, governments have shown signs of efforts in setting sustainable strategies for upcoming future development. Research has shown that the sustainable development agenda has been evolving since the concept was first defined in the Brundtland report as "*Sustainable development requires meeting the basic needs of all and extending to all the opportunity to satisfy their aspirations for a better life*" (World Commission on Environment and Development, 1987, p.16). This includes the provision of adequate food, energy, housing, sanitation, employment, water supply and health care. The same basic principles were reframed, in the Millennium Development Goals (MDGs) in the early 2000s (Holden et al., 2014) and, most recently, in the Sustainable Development Goals (SDGs). Progress has been witnessed to varying degrees in developing countries; however, low-income communities experience particular challenges (Cobbinah et al., 2015) in improving life for individuals and in meeting community needs; assistance promised had not been provided.

This is the first stage of a more in-depth research project which is continuing with interviews with both residents of informal settlements and those involved in developing strategies and policies aimed to move towards achieving SDG 11 and in improving the welfare of residents.

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