URBAN SLUMS IN SUB-SAHARAN AFRICA: UNDERSTANDING THEIR ORIGINS/EVOLUTIONS AND METHODS FOR IMPROVEMENT

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ABSTRACT: Currently, it is estimated that one billion people live in urban slums and the expectation is that the number will double in the next twenty-five years (Tibaijuka 2005). Of all the geographical areas in the world, sub-Saharan Africa has the worst record of meeting the Millennium Development Goals and has the highest percentage of slums dwellers as a percentage of the urban population (Hugo Ahlenius (UNEP/GRID-Arendal) 2005; UN-HABITAT 2003b). Many of the UN Millennium Development Goals could achieve maximum effects if urban slums were targeted for improvements due to the large populations they constitute. While some attention is being given to improving the conditions of urban slums, the progress is slow and there appears to be a scarcity of information about what is being done and if it is working. Slums have evolved from their origins in Britain's industrialization in the 18th century through the social reformers of the 19th century to today's slums, which are deemed unsafe because of a lack of basic infrastructure and services. Additionally, three cases studies of improvement projects in sub-Saharan Africa give some insight into potential successful improvement methods, however, much of these plans are yet to be implemented.
KEYWORDS: urban slums, sub-Saharan Africa, informal settlements

INTRODUCTION:

Shockingly, it is currently estimated that one billion people in the world live in urban slums and within the next twenty-five years their population will double as the growth rate is now reaching 25 million a year (Tibaijuka 2005 & BBC 2009). Currently many organizations throughout the world, such as the World Health Organization, World Bank, and U.S. Agency for International Development, are striving to upgrade existing slum conditions while also attempting to stop the urbanization of poverty from increasing. The biggest group who is investing in defining and upgrading slums though is the United Nations (UN, specifically the United Nations Human Settlement Programme (UN-HABITAT)). In fact, the UN has even created a set of Millennium Development Goals (MDG), which set a worldwide standard for "combating poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women" (UN-HABITAT 2003b, 7). For many countries, meeting these goals is not easily within their grasp if progress continues at the current rate. Furthermore, it will take the continued cooperation and hard work of many including international organizations, local governments, stakeholders, volunteers, researchers, and more (UN-HABITAT 2003b).

In response to this overwhelming need in urban slums, the objective of this research project is to combine existing knowledge about the origins and evolution of urban slums with knowledge about current methods for improving and preventing urban slums in order to learn from the past and to project that comprehension into the future. If organizations working to improve slum conditions knew which methods worked best and collaborated more, they could more effectively direct their time, money, and efforts to make a larger difference. Additionally, due to the projected increase in the urban slum population, identifying methodologies to improve and prevent urban slums could be a step in the right direction to help the urban poor and reduce their numbers. Moreover, finding ways to prevent urban slums is vital because it is the key to

stopping the problem at the source rather than only addressing the symptoms as they arise. This research is specifically focused in sub-Saharan Africa due to the large need that exists there, an issue that will be addressed in more detail later.

The word 'problem' carries with it a quite strong negative connotation. While most people take the stance that slums are a 'problem' that should drastically be changed, there are some who position themselves on the other side of the fence. For instance, Brand (2010, 1) proposes that slums can "save the planet." His main tenets deal with slums being greener than other settlement types because they are high density, use recycled materials, are improved gradually by residents, are walk-able, and protect the countryside. He also pushes for the idea of urban agriculture as a means for food production. Additionally, Neuwirth (2007, 71) asserts that squatters are the "largest builder of housing in the world" and that their settlements continue to improve over time. Another author, Onyango-Obbo (2009, 1), supports the view that slums exist because "cities in poor third world countries can't survive without them." The basis for his argument is that slums are transitional, forming a shelter for new immigrants while they get on their feet, and have a large role in boosting the informal economy which allows the upper classes to live more comfortably. As these three so aptly describe, there are a few positive aspects that some urban slums possess; this research, however, is being pursued with the objective of improving the lives of slum dwellers based on the more overwhelming negative aspects that urban slums possess, which generally cause their residents to live in squalor.

HISTORY OF SLUMS:

Tracing the origin of urban slums is a difficult matter. It seems that the Industrial Revolution was a significant contributor to the earliest origins of urban slums because it largely drew many poor rural families into the city and thus resulted in tight, unsanitary living conditions. This would seem to then place the origins of slum-like urban environments in Britain, the industrial giant, around the 18th and 19th centuries. In fact, Gascoigne, a historian for History World, said that with early industrialization came "preliminary evils of exploitation, pollution and urban squalor." The UN seems to support this claim because they say that the word 'slum' found its origins in London in the early 19th century and referenced areas of the city that were disreputable and avoided. Later, the term became more frequently used in reference to a particular type of crowded area within the city made up of mainly poor, lower class people whose living conditions were "of a squalid and wretched character" (UN-HABITAT 2003a, 7).

One reason for the adoption of the word slum at this time was the influence of social reformers like Robert Owen and later Ebenezer Howard who fought against the urban poor being forced into horrid living situations. Owen is credited as being one of the first pioneers in regard to pursuing social reform in the industrial world by showing concern about the living conditions for his employees. In the early eighteen hundreds, he made great strides toward creating a safe, healthy environment for factory workers at both New Lanark and New Harmony. Paramount in his ideology was his conviction that the environment in which people lived directly affected their character and, thus, their ability to perform well at work. While his attempts sometimes failed financially, his radical ideas soon spread to others such as George Cadbury, the Lever brothers, and Ebenezer Howard (Newton 1971).

Howard followed these three forerunners and developed his own theories[1] on how municipalities should be structured and developed. His proposition, called garden cities, suggested that cities have limited populations, have residential areas separated from industrial areas, have a completely walk-able layout with plenty of green space, have a surrounding area of extensive agriculture, and, thus, have a self-sustaining nature (Howard and Osborn 1946). His reform was directly related to helping the urban poor out of their plight. He even drew up a diagram that he titled "Group of slumless, smokeless cities," which connected multiple garden cities into what he called a social city, exhibiting his desire to be rid of slums.

It was in this environment of the Housing Reform that the word 'slum' became began to

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[1] Howard's book *Garden Cities of To-morrow* (1902) includes many diagrams as well as his own extensive financial calculations, which demonstrate his social, economic, and land use reforms.

designate "a house materially unfit for human habitation" in a more legal and practical way. This resulted in the eventual usage of this term to delineate slum areas within the planning discipline. Along with these delineations quickly came laws that called for the demolition of slums, resulting in the word carrying with it a stigma. For these reasons, more specific titles were created for use within the cities such as "tenement-house," "tenement district," and "deteriorated neighborhood;" however, today the word slum generally refers to a wide range of settlement types such as shanties, dilapidated buildings, and other informal settlements (UN-HABITAT 2003a, 7). This broad usage of the term is in some ways problematic, yet breaking it down further requires difficult detail and scrutiny that is challenging to replicate across the globe.

In general, the slums of yesterday are similar to the ones of today, especially in regard to their negative characteristics. For instance, slums still suffer from a lack of basic services such as clean water, sanitation, education, and emergency and medical facilities. For the most part, they receive low governmental support that can lead to a higher risk of eviction as well as social and political disadvantages. And of course, they often still display a lack of formal planning because of their use of 'found' materials for construction, their tightly-packed homes, and their dangerous site locations. Now more than ever though, slums seem to have some positive characteristics as well. Tight-knit communities that form over time in many slums serve as an example (Ross 2005). Additionally, an enormous, entrepreneurial informal economy is closely tied with most slums, often performing jobs and services for the more wealthy (Brand 2010). Lastly, many people living in slums today have a strong determination to win the fight against poverty (Brand 2006).

SLUMS DEFINED:

The word 'slum' has various connotations. Merriam-Webster[2] gives a common definition of a slum as "a densely populated usually urban area marked by crowding, dirty run-down housing, poverty, and social disorganization." Although this is a popular definition in the minds of many people, it is yet a vague definition that does not produce measurable standards. One good thing about this definition is that it realizes both the physical and social characteristics of slums, both of which must be included in the definition.

In October 2002, the UN organized a meeting to address the issue of a much-needed consensus about what a slum truly is. This meeting was referred to as the Expert Group Meeting on Urban Indicators (EGM), and two of its main purposes were to better define both slums and secure tenure as well as to create measurable indicators for these entities (UN-HABITAT 2002). This meeting centered on Target 11 of Millennium Development Goal 7 which states, "By 2020, to have achieved a significant improvement in the lives of 100 million slum dwellers" (UN-HABITAT 2003b, 8); however, it seems that a majority of the MDGs[3] are in some way related to the improvement of urban slums. For instance, Fotso et al. (2007) found that the lack of improvements in the urban slums may also result in not meeting Millennium Development Goal 4 regarding the reduction in child mortality. In addition, slums provide an optimal setting for addressing the objectives of the goals that relate to education, health care, poverty, and hunger because of the enormous and ever-growing populations they house. As a result of the EGM meeting, the UN put forth a new proposition of how to define a slum that they encouraged international organizations to adopt as their own standard. This definition includes five main components, or Meta-Indicators, which Table 1 displays along with the specific descriptors for each one.

The indicators and descriptors are a step forward from the general definition of slums. Many of them, however, involve percentages of the population that seem difficult to measure because of the nature of the data and the conditions within slums as well as the ambiguity in some

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[2]   Merriam-Webster Online Dictionary, s.v. "slum," http://www.merriam-webster.com/ dictionary/slum (accessed March 3, 2010).

[3]   See UN-HABITAT's *The Challenge of Slums* (2003, 8) for a list of the Millennium Development Goals and their associated targets.

of the defining criteria. Some examples of this include: the percentage of households *that perceive* they have secure tenure; the percentage of households that are able to attain at least 20 liters of water per person *within a satisfactory period of time*; the percentage of households that are in a hazardous location; and the percentage of households that are permanent, based on materials and local building codes (UN-HABITAT 2002). These examples will most likely prove to be tricky and time-consuming for demographers trying to decipher these standards over a large population where social and physical lines are blurred and fluid. This presents a larger challenge within every indicator that is determined via a percentage of households because the process of establishing of whom a so-called household should be made, then finding, interviewing, and observing those people, and, lastly, assessing how at least 50% of the identified households rank within a community appears to be almost impossible. In fact, the first half of the population might not even be enough data from which to draw a conclusive decision about the status of the community.

Table 1: EGM's Indicators for Defining Slums (modified from: UN-HABITAT 2002, 12, 14, 22-23)

Meta-Indicator	Indicator	"Descriptor"
Secure Tenure	Inadequate security of tenure	Secure Tenure is the right of all individuals and groups to effective protection by the State against unlawful evictions.
Access to water	Inadequate drinking supply	A settlement has inadequate drinking supply if less than 50% of households have improved water supply with at least available 20 liters/person *within an acceptable span time*. It is also recommended that affordability also be considered as an additional criterion to be defined in local contexts.
Access to sanitation	Inadequate sanitation	A settlement has inadequate sanitation if less than 50% of households have improved sanitation. The excreta disposal system is considered adequate if it is private or shared b y a *maximum of two households* (not public). (not improved: service or bucket latrines, public latrines, latrine with an open pit).
Structural quality of housing	a. Location	Proportion of households residing near a hazardous site.
	b. Permanency of structure	Proportion of households living in temporary and/or dilapidated structures (subject to local variations).
Overcrowding	Overcrowding	Proportion of households with more than two persons per room.

Additionally, it seems that some indicators are aimed at a Eurocentric standard of living. For instance, to assess overcrowding, the EGM recommends no more than two people share a room in any given household, and for sanitation access, the EGM suggests that public[4] sanitation systems are inadequate (*ibid.*). Though these standards do seem to be promoting a comfortable

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[4]Within the EGM document, 'public' is considered to be more than two households sharing a sanitation system.

standard of living, they also seem to be based on a certain standard that may not be universally shared. For instance, in the case of assessing overcrowding, the UN-HABITAT's standards are failing to account for some cultural norms of living in a home without walls where every activity is done in the same space. This indicator might be more fitting if it called for a certain amount of space for each person, even though agreement on the size of that space would still be difficult.

Another troubling part of these standards is the one dealing with the physical shelter and location of structures within slums. The first issue deals with what the UN-HABITAT considers to be a 'permanent structure.' According to the descriptors under this indicator, structures that are temporary or dilapidated can be measured in two ways: the quality of construction and the compliance with the local building standards, codes, and by-laws (UN-HABITAT 2002). These standards are written in such a way to discriminate against slum dwellers who have utilized recycled material (often found and/or free) to build their homes. In addition, the legal aspect of considering building codes makes it possible for municipalities to create high expectations and then even more possible to justify bull-dozing entire communities that do not comply with their high standards, instead of working toward transforming the existing slum communities so that the residents may have a better quality of life. These two issues seem to be setting the bar so high that slums may never be able to achieve that level. It might be better to target issues like ability to escape the elements, safety of structure, etc. Moreover, some of the locations that the UN-HABITAT considers hazardous include: garbage mountains, high-industrial polluted areas, high-risk zones such as railroads, airports, energy transmission lines, and geologically hazardous zones such as flood plains and areas prone to landslides or earthquakes. This indicator establishes another issue for most slums because they usually exist in areas that richer people do not want to inhabit, although this is not always the case. These standards do seem to have safety in mind; however, they raise the question: can a slum community situated at a so-called hazardous location ever be anything but a slum even if all other indicators improve?

Not everyone, however, simply follows this definition of a slum. One organization in Nepal, LUMANTI, has created its own guidelines about what constitutes a slum. While its basic tenets include similarities to the UN definition, such as insufficient living conditions and access to infrastructure, LUMANTI's definition differs in a few ways. First, it includes a socioeconomic aspect that suggests that the residents will likely be socially disadvantaged and low-income. In addition, it assumes that the slum dwellers will have legal secure tenure and makes a distinction between those who do and those who do not. Those areas without legal ownership of their land are considered squatter settlements, which are a type of slum; however, slums in their definition are generally not defined by this characteristic. Another interesting note about slums in Nepal is that there is no Nepali word to define them, suggesting that slums in Nepal are either not discriminated against, are an accepted part of everyday life or are a very new phenomenon (NGO Forum for Water & Urban Sanitation, n.d.).

Huchzermeyer (2006) also views the term 'slum' to be too vague when addressing and attempting to aid the urban poor. She warns that this approach can produce an oversimplified picture of such a diverse set of communities and settlement patterns. Instead, her approach is to select a type of slum settlement and study it. For example, much of her research focuses on informal settlements. Although her argument has good logic behind it, it nonetheless proves difficult to carry out since slums are fluid, complex, spatially variable, and relative (United Nations Human Settlement Programme 2003b). It is especially hard to attempt to divide slums into smaller segments with a powerhouse like the UN supporting the generic term "slum" as a catchall. In addition, there is a plethora of other words that are almost synonymous to a slum such as: informal settlements (typically illegal settlements with no secure tenure), peri-urban slums (typically located on the periphery of cities), squatter settlements (typically illegal settlements with no secure tenure), shanty towns (typically have poor housing infrastructure, some are illegal), and many others. These contrasting views of what should and should not be called a 'slum' prove that there really is no overall consensus about how to define, locate, or even reference the many forms of urban poverty across the globe. For the purpose of this paper, it is to be noted that informal settlements that lack planning are of particular interest since they beckon forth the need for spatially oriented designers and planners; however, the term 'slum,' as defined by the UN, will remain the word of choice mainly because of its relationship with the MDGs and thus its connection to the UN. Nonetheless, informal settlements will be considered as the greater focus in

this paper because the lack of planning and infrastructure cause major development issues and leave the residents in more dire conditions than those living in dilapidated buildings which also fall under the category of 'slum' according to the UN's definition.

CAUSES OF SLUMS:

So what are the causes of urban slums today? The most rudimentary answer is that cities have not planned ahead for their urban poor, but this does not portray all of the intricacies of slum formation. The UN-HABITAT would contribute a more in-depth answer with factors tied so closely together that it is hard to distinguish between the independent variables. One such variable would be rapid rural to urban migration. This phenomenon is occurring due to a decline in agriculture as well as political conflicts in the developing world (UN-HABITAT 2007b). As a result, cities are unable to meet the needs of these rural 'refugees' who are jobless and often penniless, hungry, and homeless. Another cause of slums is the increase in poverty and inequality within the urban sector. While there are many economic forces at play here, a major one can be structural adjustment programs to which some developing countries are bound (*ibid.*). Additionally, the lack of formal jobs for untrained laborers adds to the problem. As a result, the informal economy is integrally tied to slums and vice versa. In fact, in sub-Saharan Africa, the informal sector makes up 78% of non-agricultural employment and a total of 42% of the GDP (Ibid, 2). This factor directly relates to globalization, or global economic trends, in that economic booms and busts can really inflame the inequality of the urban poor (*ibid.*).

Another foundation of why slums exist is the difficulty that the urban poor have with finding affordable and secure housing (*ibid.*). This problem results in different forms depending on locations. For some areas, there simply is not enough housing for all of the people, and in others it is a problem of exorbitant rent prices that keep urban dwellers homeless. In both cases, many poverty-stricken people end up setting up tents and creating shelter out of materials they can scrape together, usually on a lot that they have no legal rights to be on (*ibid.*). As a result, they end up living without any security of tenure, and they often have no access to economic and social opportunities that come with secure tenure. The UN-HABITAT (*ibid.*) also claims that secure tenure is more likely to lead to community-initiated slum improvements. In addition, at the EGM it was recognized that slums are often formed outside of the town planning process (UN-HABITAT 2002). As a result, the amenities that urban areas benefit from are absent in slums. In fact, some cities do not even include slum areas in their municipal maps, excluding them altogether and showing the divide that urban poverty creates (UN-HABITAT 2003b).

One thing seems to be apparent when it comes to the creation of slums: if all of these causes were put into a tapestry, urban poverty would be interwoven throughout almost every strand. For this reason, the UN-HABITAT (2007a) recommends that major efforts be spent on eradicating urban poverty rather than fixing the physical problems of urban slums. With this approach, they are hoping to address the bigger problems facing all slum dwellers–those of employment, political opportunities, education, and economic cycles.

While these problems do need to be addressed, and the UN is certainly powerful enough to make a difference, the cart cannot move unless the horse is in good physical condition. Slum dwellers cannot fully reap the benefits of these improved services while they are still living in squalor and their most basic needs are not being met. For this reason, it is vital to view the grassroots efforts to improve the physical conditions within slums as equally important for bettering the lives of urban slum dwellers, and thus it seems that eradicating urban poverty and fixing slums must both happen, in some way, simultaneously.

With this in mind, a plan for upgrading urban slums that is suggested in this paper contains four parts: team effort and leadership; organization and planning; funding and resources; as well as, implementation and evaluation. While this is certainly not a conclusive list nor are any of these parts simple, addressing each one and its underlying components are important for the success of upgrading. Moreover, continually reviewing, adapting, and accounting for each part in a cyclical and dynamic method is vital to using these suggestions well. In addition, it is critical that in each of these four parts, both institutions and the community be involved to ensure maximum outcomes.

CASE STUDIES:

It is once again important to note why special interest has been placed on sub-Saharan Africa. First of all, as Figure 1 demonstrates, sub-Saharan Africa is not expected to meet any of the MDGs based on a progress report completed in 2005. As the red and yellow boxes show, it is the worst region of the world in regard to progress on the MDGs, with more than half of the indicators (or boxes) having progress that has been either non-existent or backwards. Moreover, Figure 2 shows that 72% of sub-Saharan Africa's urban population is made up of slum dwellers. Shockingly, that number stands in contrast to 59% in South-Central Asia and less than 40% in all other regions listed. Because a majority of the MDGs are closely related to slum dwellers, as stated previously, progress in meeting the MDGs should be focused toward slums in sub-Saharan Africa.
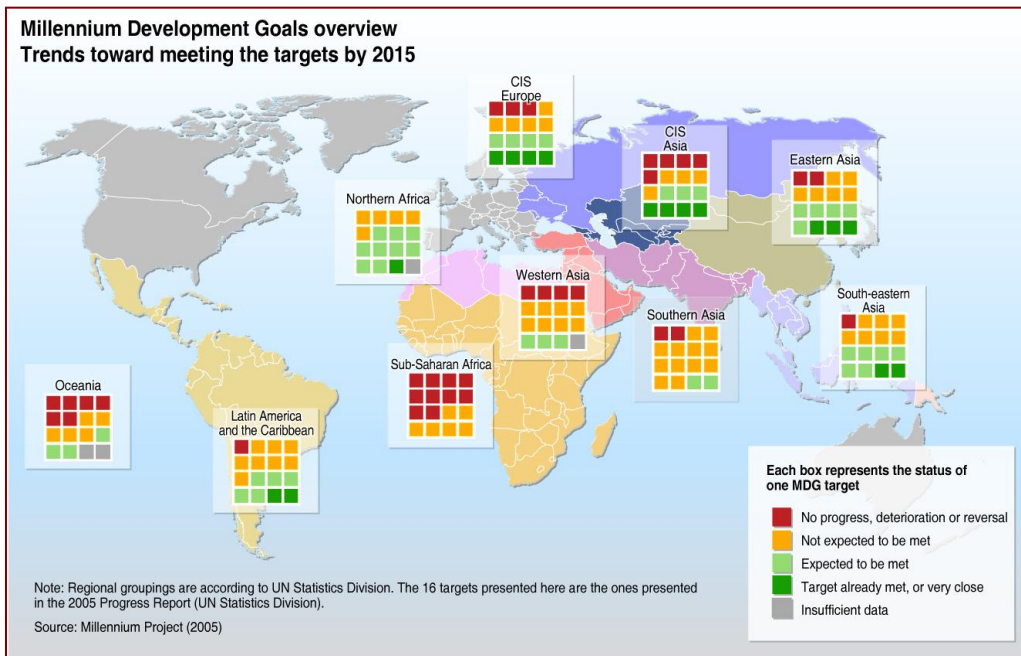

Figure 1 (from: Hugo Ahlenius, UNEP/GRID-Arendal. (2005). Arendal, Millennium Development Goals 2005 Trends. *UNEP/GRID-Arendal Maps and Graphics Library*. http://maps.grida.no/go/graphic/millennium_development_goals_2005_trends.)
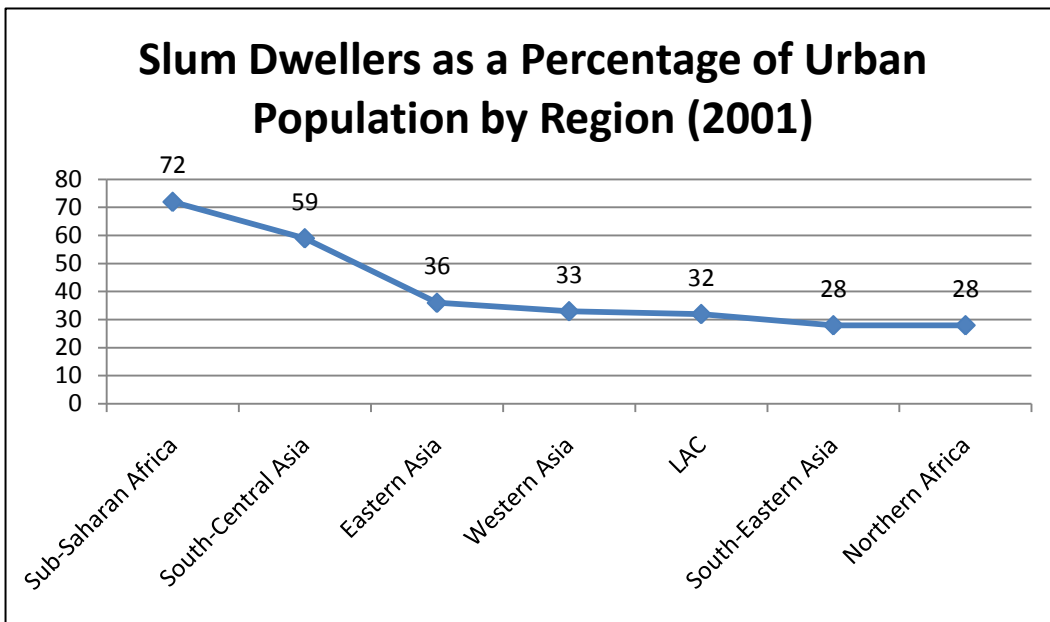

Figure 2 (modified from: UN-HABITAT 2003b, p. 15)

With this in mind, three case studies in sub-Saharan Africa have been chosen for this research. The first one is a resettlement project in Johannesburg, South Africa, called Kliptown. This is an on-going project in which families were selected through an application process based on their limited income levels. Once selected, they waited for a period of years while the new homes were built before they were relocated. As of May 2009, one hundred residences had been built, four hundred sixty-five were under construction, and altogether nine hundred thirty-four are planned. The neighborhood into which the people have been relocated is a small portion of an existing golf course that has been redeveloped. The residents are pleased that a rent-to-own plan has been put in place, consisting of 10 years of payments before the title is handed over. Currently, residents pay monthly rent plus a maintenance fee that fluctuates. Additionally, the newly constructed neighborhood is structured as a closed community with security guards at the entrance (Dlamine 2007 & Nkosi 2009).

Unfortunately, this information is from outside sources, so limited conclusions can be drawn about the effectiveness of this resettlement project. Nonetheless, one immediate concern does arise in dealing with relocating parts of one or multiple communities. Previous researchers (see Ross 2005) have found that this process often cuts off critical networks and community, and it has been known to backfire if the people cannot afford the higher rent that the new residence requires. Moreover, while the security guard does provide extra safety, this solution may increase the disconnect between the resettled residents from the social network that they left. On a positive note, it does seem that this project is truly helping people with limited incomes. Based on the interviewed participants, however, it seems that only people with stable jobs were able to apply for new homes, so it is still not addressing the poorest of the poor. One last potential concern is whether or not the houses being built are designed to be culturally and socio-economically appropriate for the people moving into them. This seems to be a critical issue that has not been fully explored as of yet.

Next, Dar Es Salaam, Tanzania, provides an example of improving unplanned and unserviced areas through a comprehensive and multi-project based approach. The proposal for this upgrading plan outlines all four parts of upgrading slums discussed earlier. It also benefits from having support from the government, many NGOs, and many of the stakeholders. This proposal suggests using a multi-level action plan including a call for providing the following:

- ○ planned land;
- ○ basic services such as water, sanitation, road networks, solid waste collection, and social services;
- ○ access to adequate housing through housing finance and increased supply of rental properties; and,
- ○ the capacity to continue upgrading and preventing new unplanned settlements by educating and training residents.

This proposal has already demonstrated community participation and plans to links its actions with on-going programs that are already working to improve slums (UN-HABITAT et al. 2010). Because this plan is still in the proposal stages, it is difficult to theorize about its outcomes, but the evaluation methods called for in the proposal will certainly shed light on whether this multi-project approach is applicable in other locations.

As a last example, Kigala, Rwanda, is an award-winning project[5] that is just now in the planning phases. To begin with, the community has invested in a conceptual master plan to determine where and how to focus their future urban growth. This is important because it allows professionals like landscape architects, architects, engineers, environmentalists, economists, and others to come alongside the community to create a plan that fits the residents' needs as well as larger scale development issues. In this process, the planning team was careful to include the community in order to understand their needs, site-knowledge, and goals. In addition, this plan takes into account the optimal solution for how to structure the city plan based on the existing topography and environmental concerns as well as a design strategy that the community has been implementing for decades. The plan also focused on three needs that the community outlined as

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5 American Society of Landscape Architects 2010 Award of Excellence for Analysis and Planning Category presented to AECOM Design + Planning, Denver, USA, for the Kigali Conceptual Master Plan.

priorities: shelter, transportation, and infrastructure (American Society of Landscape Architects 2010). Unfortunately, because this master plan is also still in the proposal stages, it is difficult to theorize about its outcomes. Nonetheless, it seems that if the community is able to follow the plan set before them, this could prove to be an exciting case study in a few years.

CONCLUSION:

As a result of this research, three things become evident. First, it appears that the inundation of people into new and existing urban slums has been increasing and will most likely continue to do so in future years. This reality should be a driving force in finding solutions that work. Even though this is the case, tracking slum improvements is made difficult by the lack of proper evaluation and recording during and after the process is completed. It is critical that organizations in charge of upgrading slums work together and communicate about failures, challenges, and successes so that progress can more rapidly be made. Secondly, although many organizations have attempted it, there is still no complete nor agreed upon definition to address the phenomenon of urban slums. Lastly, poverty seems to be the most prevalent contributor to the formation of urban slums. This finding certainly supports actions to eradicate poverty, but poverty should be accomplished as part of a multi-faceted approach that also addresses the physical conditions of slums. While these preliminary findings do not cover the breadth of the proposed problem, they do act as a solid foundation from which to continue building.

The continued efforts of this research will strive to uncover more knowledge about the history, definitions, and causes of slums as well as methods for improving and preventing the formation of new slums. Future research will focus on additional case studies in sub-Saharan Africa as well as selected ones within other parts of the world. Solutions will be sought out that have improved urban slums in order to ascertain which are the most appropriate based on their success (or lack thereof). Success will be measured, in part, by the following criteria: ability to raise the quality of life for residents; ability to involve residents in the planning and implementation processes; ability to meet the residents' perceived needs in a culturally appropriate way; and, ability to be carried out to completion.

ACRONYMS:

EGM	Expert Group Meeting
MDG	Millennium Development Goals
UN	United Nations
UN-HABITAT	United Nations Human Settlements Programme

ACKNOWLEDGEMENTS:

REFERENCES:

American Society of Landscape Architects. 2010. "Kigali conceptual master plan." 2010 ASLA professional awards: Analysis and planning. http://www.asla.org/2010awards/515.html.

BBC. 2009. "World Debate- Housing the Future 1 of 6." (BBC World News Documentary). Produced January 8, Available on YouTube, http://www.youtube.com/watch?v=nc1epVS-CdE&feature=related.

Brand, S. 2006. "Stewart Brand on squatter cities." (TED presentation). http://www.ted.com/talks/stewart_brand_on_squatter_cities.html.

Brand, S. 2010. How slums can save the planet. *Prospect, 167*, Feature article. http://www.prospectmagazine.co.uk/2010/01/how-slums-can-save-the-planet/

Dlamini, N. 2007. "Joshco celebrates its successes" August 2. http://www.joburg.org.za/
content/view/1448/204/.

Fotso, J., Ezeh, A., Madise, N., & Ciera, J. 2007. "Progress towards the child mortality millennium development goal in urban sub-Saharan Africa: the dynamics of population growth, immunization, and access to clean water." *BMC Public Health*, *7*:218. http://www.biomedcentral.com/1471-2458/7/218

Gascoigne, Bamber. "History of the Industrial Revolution." *History World*. Accessed April 21,

2010. http://www.historyworld.net/wrldhis/PlainTextHistories.asp?groupid= 375&HistoryID=aa37&gtrack=pthc)

Howard, Ebenezer, and Frederic J. Osborn. 1946. *Garden cities of to-morrow*. London: Faber and Faber Ltd.

Huchzermeyer, M., and A. Karam. 2006. *Informal settlements: a perpetual challenge?* Cape Town: UCT Press.

Neuwirth, R. 2007. "Squatters and the cities of tomorrow." *Cities, 11*(1): 71-80.

Newton, N. T. 1971. *Design on the land: The development of landscape architecture*. Cambridge: Harvard University Press.

NGO (Non-Governmental Organization) Forum for Urban Water and Sanitation. n.d. "What is a slum?" http://www.ngoforum.net/index.php?option=com_docman&task=doc _view&gid=6

Nkosi, B. 2009. "This is where my heart is – my home." May 26. http://www.joburg.org.za/content/view/3884/204/.

Onyango-Obbo, C. 2009. Kibera: "It's rich city folks who need slums most." *Daily Nation.* http://www.nation.co.ke/oped/Opinion/-/440808/621414/-/4lv0hf/-/index.html.

Tibaijuka, A. 2005. "Cities without slums." *Our Planet*. *16*(1): 12-13.

Ross, F. 2005. "Urban development and social contingency: A case study of urban relocation in the Western Cape, South Africa." *Africa Today 51*(4): 19-31.

UN-HABITAT (United Nations Human Settlement Programme). 2002. Expert group meeting on slum indicators, October. Revised draft report, UN-HABITAT, Nairobi, Kenya.

UN-HABITAT (United Nations Human Settlements Programme). 2003a. Slums of the world: The face of urban poverty in the new millennium? Working paper, UN-HABITAT, Nairobi, Kenya.

UN-HABITAT (United Nations Human Settlements Programme). 2003b. *The challenge of slums: Global report on human settlements, 2003*. London: Earthscan Publications.

UN-HABITAT (United Nations Human Settlements Programme). 2007a. Slum dwellers to double by 2030: Millennium Development Goal could fall short. Feature/Backgrounder, UN-HABITAT, Nairobi, Kenya.

UN-HABITAT (United Nations Human Settlements Programme). 2007b. What are slums and why do they exist? Feature/Backgrounder, UN-HABITAT, Nairobi, Kenya.

UN-HABITAT (United Nations Human Settlements Programme) et al. 2010. Citywide action plan for upgrading unplanned and unserviced settlements in Dar es Salaam. (Advanced version prepared for the partners conference on 3 May, 2010 in Dar es Salaam.)

Ward, S. V. 2004. *Planning and urban change*. London: Sage Publications.