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Revitalization: A Case Study of Likoni's Urban Landscape

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Abstract

The idea of having an area undergo revitalization carries with it some hope that a newness of some sort would possibly emerge if at all the end goal is attained. Observations around the world have been made on the impact that comes along with revitalization thus in a bid to not only partake in developing selected areas, policy makers also work tirelessly to bring the experience of such achievements to the locals hence sustaining the sensitivity of the flagship projects. Likoni, located in the southern region of Mombasa County, is one of the vibrant towns along the endowed Kenyan coast region. Recently, it has undergone a series of urbanization protocols although much can still be done to raise her status as a proper hub of urbanization. Being another town in a 'global south' region, it faces numerous challenges both internally and externally hence a limiting factor to its development.

Keywords: Revitalization; Impact; Likoni; Urbanization; Global south.

1. Introduction

Although there is no fitting description of the term urban landscape, it can be argued to be a concrete phenomenon embodied by the quality of the physical factors of the environment whereby a system is formed by the relation between man and his immediate urban environment. There is a need to have this system function efficiently hence the bid to strike a more symbiotic relation between man and his environment whereby mutual benefits will be enjoyed by both.

In the past two decades, the coastal town of Likoni in Mombasa County has undergone a tremendous change in the composition of its urban fabric. This is attributed to the richness of the area in a natural coral reef which is famously used as a building block for houses/man's shelter in this global south region. There has been constant quarrying of this building block among the cartels who own these lands as well as the locals who were entrusted by the government to be custodians of these lands.

The coral reef is a major factor of the natural environment in this region and in that sense, it relates to the nature of the city. When the coral reef was left undisturbed during a better part of the 20th century, the original inhabitants of these lands used to farm as the rich top layer of the ground surface supported agriculture. However, with the coming of urbanization, there was a shift in the social, economic and technical organization of the communities leading to people alienating their initial ways of life to accommodate new interactional approaches.

The 21st century saw man taking up stone quarrying as one of the major economic activities as well as the boom in the construction sector resulting in an uncontrolled mushrooming of houses in the now urban landscape hence a perceived benefit by man due to the income generated and the more definite housing structures. On the other hand, the physical environment was at a loss as due to no mutual effects that came with the increased urbanization process. The impact of this was the rich top ground cover was left destroyed, unfit to support farming in the area, the depleted quarries left bare posing a threat to human livelihood not to mention the constant pollution of the environment that came with the stone quarrying.

According to Paolo Soleri while exploring the countless possibilities of human aspirations coins the term "Arcology" which is a test to demonstrate an alternative human habitat needed for the increasingly perplexing world. He champions for a new urban paradigm geared towards cultural evolution, frugal frequency and a balance with nature; reformulation.

In order for a locality such as Likoni to acquire a new urban paradigm in civilization on its urban landscape, revitalization has to come in to play. In the subsequent scope of this study, there has been an attempt to suggest new protocols which can be used as flagship projects towards promoting the revitalization of the urban landscape in Likoni.

The figure 1 illustrates how intensified stone quarrying as a result of rapid urbanization impacted the environment as well as the urban landscape.

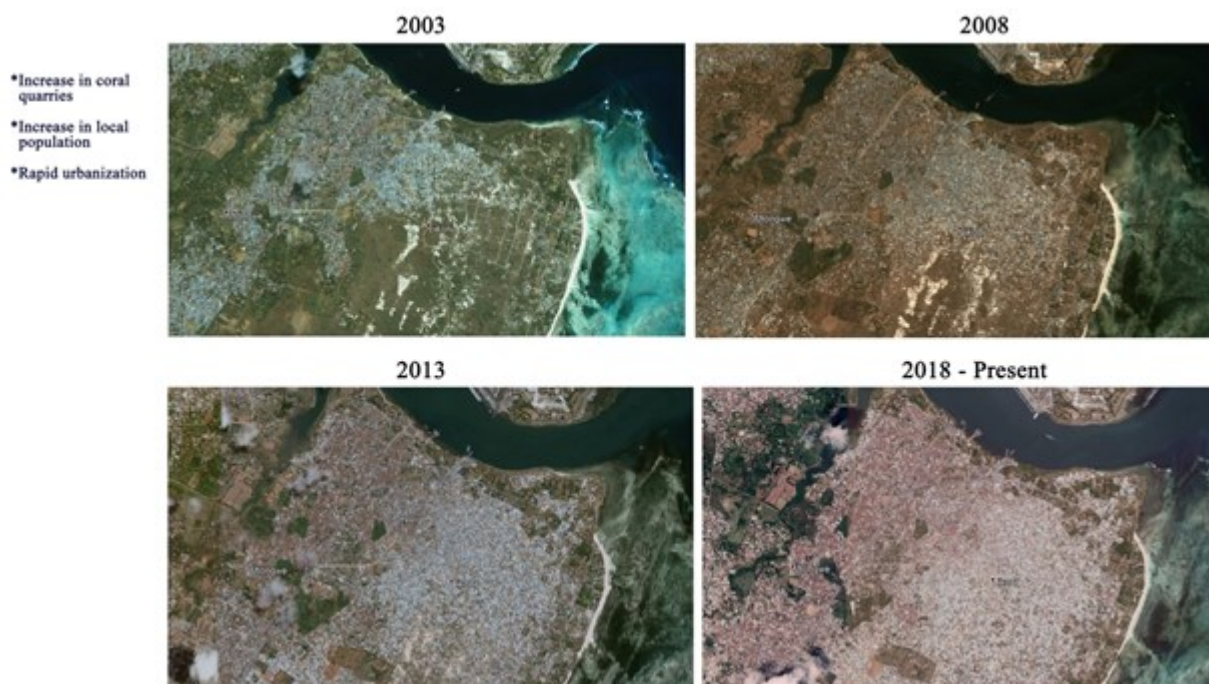


Figure 1. Chronological development of Likoni's urban landscape.

2. Baseline study and defining the potential benefits of Revitalization

2.1. Defining the Potential Benefits of Revitalizing an Urban Landscape

This paper aims at analyzing different possibilities that can be factored in the revitalization process of an urban landscape. As a result, in the case of Likoni, we began with a literature review to assess the potential benefits of revitalization as a process to the various variables that make up an urban landscape. These humans (cultures, society, and economy) and environmental (natural and artificial) variables are extremely powerful since they are closely linked to the establishment of urban regions.

The goal of revitalization is to assist in the creation of efficient cities that promote innovation, a higher quality of life, and improved economic development for people, and this can be accomplished by simply addressing the priorities of urban communities with initiatives that help reorganize the current city structure. These efforts, which are constantly referred to by different labels that are widely used interchangeably, are the ones that add complexity to the broader rehabilitation efforts. Regeneration, Renewal, Redevelopment, Rehabilitation, Conservation, Restoration, Reconstruction, and Refurbishment are the terminology used by Spandou et al. (2012). These particular terms play a great role in our disentangling of the different benefits giving a further understanding of their mutual interdependencies.

In some areas of urbanized centers, it is very evident that there is a level of loss when it comes to the aesthetic appeal that the places initially had before the newness came. With the ever increasing sprawl of houses, the greenery is lost along the way leaving behind concrete jungles that look less appealing in terms of natural elements such as trees, gardens etc. hence it can be argued out to be destructive advancements. In order to curb this sort of interruption of the once thriving natural cover by humans, these areas need to undergo a redevelopment process with the sole aim of beautification hence making these urbanized centers appealing once more.

Rehabilitating urban landscapes can be a great source of both physical and mental health for those inhabiting these areas. For instance, an area that was once left unattended to and had garbage piling due to the increasing less concerned urban center population can be engaged with different initiatives that will see it return the environmental features back to their former conditions and boosting the urban health levels.

Safety in an urban setup is among the key prerequisites when it comes to gauging how sustainable these landscapes can be both to the people, locals and visitors, and the environment, plants and animals respectively as they are all affected by complex factors inherent in urban areas. Here, it is vital that natural, architectural, social, technological etc. factors that form part of the local urban safety provide for reconstruction with the changing times thus this turns out to be beneficial at personal, neighborhood and environmental levels.

Conservation strategies that are put in place by authorities and policy makers can be introduced to the society to enable people develop ecological practices that help in caring for the green areas and elements as well as natural resources. These strategies if done collectively can help foster a sense of community among the locals living in these environments.

Regenerating the different manmade and natural factors that collectively play a huge role in the urbanizing areas can bring about significant economic advancements that will be beneficial to the great populations at large. Different areas of the urban landscapes that have in the recent past experienced economic challenges need this sort of effort to bring about revitalization whereby the various industries can be revived to ensure thriving societies.

2.2. Baseline Study

Likoni town has for a long time had a history of quarrying activities. Quarrying is the extraction of non-fuel rocks from the earth by use of different methods such as explosion of dynamites or simply by drilling into the earth's surface. The earth's surfaces on which these activities take place are directly proportional to the availability of these rocks in a particular region hence in some areas of abundance it is extensively done as compared to others where it is least available.

1. Depleted quarries: Once the mining activities are over, the quarries are dilapidated leaving behind huge chunks of area with emptiness that little or no attention is paid to ever again. This has today posed a problem of having empty areas of land with parts of the town of Likoni and the outskirts. The sad reality about neglecting the empty holes in the ground is that it poses environmental degradation, a negative influence on the biodiversity of the area, influence on the shape of the land as well as separating the urban fabric of the growing town.
2. Active quarries: There are some areas of Likoni where active quarries are still in existence up to today. In these places, harmful impacts on the overall well-being of both the people and the place are being witnessed. Noise and air pollution for instance has become unbearable as the inhabitants have to put up with the quarrying in the midst of their homes.
3. Limited resources: Due to the gradual shift from indigenous economic activities such as farming to the recent quarrying practice, there has been a noticeable reduction of natural resources in the area. This issue has therefore not only led to environmental threats but also economic and social malfunctioning of the society. The Likoni urban landscape is now experiencing an economic imbalance and a disrupted social knit of the urban community.
4. Poor housing: The people's economic livelihood ranges from 2-4 USD a day from economic activities such as day laboring at the port, quarrying and street vending has led to the inability to acquire favorable housing by the locals. Most of the families live in very tiny shelters that can only accommodate sleeping areas and makeshifts outside the houses to accommodate cooking and dining activities.
5. Health deterioration: The areas have now turned to health hazards to the locals inhabiting the areas. Other than the depleted quarries being used as dumping sites, air pollution is very rampant and the residents who live in this area have often complained about issues related to dust resulting from the mining. Dust is considered to be observable, invasive and having potentially irritating effects associated with quarrying as per Upkong (2012). One other noticeable negative health impact is the stagnant when rain water settles in these huge holes thus providing breeding grounds for mosquitoes and bilharzia. Such health risks have to be addressed carefully through efficient and long lasting solutions that are angled towards sustainable development (KTN News Kenya, 2018).
6. Exhausted arable land: Arable land that was to be cultivated as farming fields to boost both the economy and the increased food production for the people has over the years been destroyed by quarrying activities. In some of the areas either nature carries out its own form of bioremediation where grass cover may grow on the barely fallow edges of the quarries or man replants trees to try and balance the ecosystem.

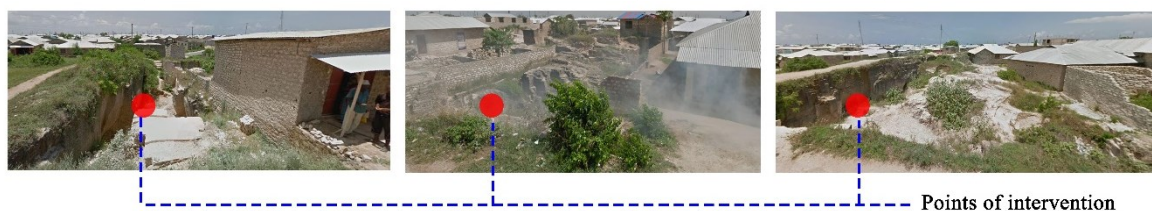


Figure 2. The current state of Likoni's urban landscape.

3. Materials and Methods

3.1. Introduction

This chapter gives a concise explanation on the research methodology used in the study to answer the research question at hand. This entails the research approach and design, the preferred data collection methods and the challenges encountered while utilizing them (Paradis, O'Brien, Nimmon, Bandiera, & Martimianakis, 2016).

3.2. Research Design

Research design can best be described as a “plan or blueprint for conducting a study with maximum controls over the factors that may interfere with the validity of the findings (Burns and Grove, 2003 p. 195). Inasmuch as this definition was coined from the field of nursing, its merits in any research design in other fields like engineering and architecture holds a lot of meaning. Mr Parahoo attempts to define research design as “a plan how, when and where data are to be collected and analyzed” (Parahoo, 2014 p. 142). Thus, it was vital that a proper research approach that would be relevant to the target area be developed so as to ensure that the data collected would go a long way in providing the needed insights as far as the research question is concerned.

The approach used to develop this study is based on a phenomenological recognition/observation. With reference to the nature of our topic, the methods used in this paper are descriptive, relying on the library method, and qualitative to collect and extract needed data and information from available resources. The theoretical analysis part of the research was therefore developed for assessment on the example given as the case study.

3.3. Qualitative Research

This is an approach to research in which the phenomena of interest are being collected in a manner that does not require a mathematical touch to it. According to Hennik et al, this can be best described, “as an approach that enables a researcher to best describe people’s experiences in detail using a specific set of research methods such as in-depth interviews, focus groups discussions, observation, content analysis, visual methods, and life histories and biographies” (Hennink et al., 2020, p. 10). The research made use of the following approaches to qualitative research.

3.3.1. Observation

According to (Paradis, O'Brien, Nimmon, Bandiera, & Martimianakis, 2016), this method makes use of the senses namely vision, hearing, touch and smell; this method allows the researcher to record the firsthand experiences and document it. The study made use of this in the quest to answer the research question. This took place at random times so as to ensure that the people around the area of study are observed in their most natural selves rather thus eliminating chances of pretense that would have inevitably led to misrepresentation of the actual situation. The number of observations was dictated by the questions that were to be answered in the whole activity. Some of the questions that governed the observations were;

- What is the attitude of the residents towards the ongoing mining activities?
- Are there any health problems facing the population as a result of the mining?
- Is there a solution to the waste lands problem?
- What do the local people think regarding the land reclamation and rehabilitation strategies?
- What are the recommendations of the people regarding land reclamation and rehabilitation strategies?

3.3.2. Interviews

Interviews help in gathering information from a one-on-one perspective with the help of prepared questions. The researcher usually has the option of selecting a structured or an unstructured (Paradis, O'Brien, Nimmon, Bandiera, & Martimianakis, 2016). The research made use of a structured interview which was used by the researcher to obtain views from particular areas of interest. Some of the questions are as follows;

- Do you think the government does an excellent job of supporting the efforts aimed at reclamation and preservation of former mining areas?
- Are there any challenges you faced as a resident of this area before the land rehabilitation was done? If yes, mention a few.
- Is the environmental protection approach set up by the concerned companies and the government still operating as usual? What is the condition of?
- If the environmental protection approach is still running as usual, is there a program or procedure carried out by the company/government in protecting new settlers who are still coming into the area?
- Has the company/government issued a specialized policy to deal with any health issues that came up from their mining operations in that area?
- Are the settlers open to help in the land reclamation and rehabilitation procedures being undertaken?
- If no, what are their reasons for not participating?
- Do you think setting up parks as a land rehabilitation approach is a good idea as far as creating a few job opportunities for the locals is concerned?
- Are you happy with the rehabilitation efforts that are being made?

On the other hand, the research also incorporated an unstructured interview that was aimed at getting the respondents to talk of the issues affecting them from their own standpoint without restrictions from the

interviewer’s script. This was essential in the efforts to obtain an understanding of the situation on the ground (Paradis, O'Brien, Nimmon, Bandiera, & Martimianakis, 2016).

4. Discussion

The goal of this study was to investigate the possibilities of revitalizing Likoni town whose urban landscape has been greatly affected by the presence of active and depleted quarries. We specifically examined the transitional development the town has had for over two decades now with reference to its environments and the inhabitants of this particular area.

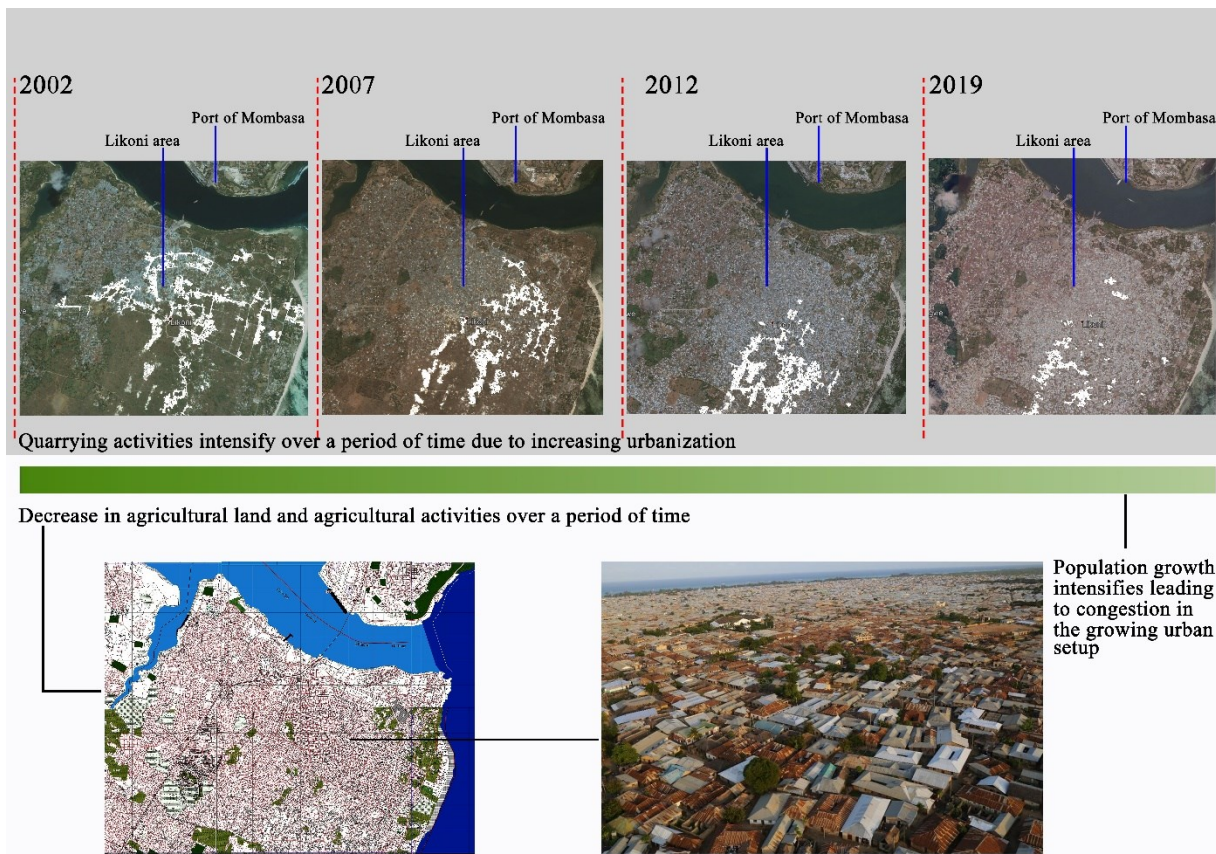


Figure 3. Observable effects of urbanization in Likoni town.

The findings revealed that the urban landscape contains deformities as a result of quarrying activities which occurred to sustain a need of building block due increased urbanization first in the island of Mombasa then within the town itself. This uncontrolled build-up phase might have been primarily as a result of the fast growing population that had in the earlier days enjoyed a surplus in agricultural yield. It is so obvious that there is a division among the locals as some champion the quarrying activities to date irrespective of the complaints and negative impacts it has brought to the urban space whereas some play a vital role in trying to be the custodians of the environment and standing up to defend the environment.

5. Conclusions

If we are to be prepared to confront global concerns as we prepare for the uncertain future, we must first understand the history of urban renewal. It all starts with an understanding of the continually shifting patterns that have a significant impact on the current condition, so we may respond in more intelligent and humane ways. The suggestions presented in this study are intended to illustrate the preservation of the historical cultural landscape as well as new ways of utilizing the urban landscape's depleted sites.

Furthermore, any type of transformation occurring in an urban landscape must revolve around human and environmental development, whether in the areas of construction, resource exploitation, transportation, and mining, for example, so that potential negative impacts associated with livable spaces are minimized at any given time. In light of this, the authors argue that urban landscape regeneration necessitates a critical mindset capable of thoroughly analyzing, criticizing, and finally determining a course of action to guide change in a community.

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Conflict of Interests

The Authors declare no conflict of interest.

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