## Gok (government of kenya) interventions: kibera

Parts of the World, Africa



The lack of water infrastructure poses a threat in the slums. Water vendors connect two legal plastic pipes to Nairobi's main water network, and then it is sold at kiosks in 20-litre jerry cans. The pipes are of low quality with small diameters that bring in limited volumes of water. Additionally, because the pipes are in close proximity to the sewage canals, residents are at risk of waterborne diseases. Steel pipes are of higher quality as they have large diameters, therefore, higher volumes of water can come in. However, there are concerns that because they are seen to have a more intrinsic value, they risk being stolen. Residents are growingly concerned with the accessibility, cost and quality of water. There is limited access to water points as these are located far from their houses and landlords sometimes ration therefore only making water available a few times a week at specific times. For the ones that have accessibility to water, the prices are not favorable especially in relation to income levels. Inhabitants use sewage water, borehole and rainwater, and take water from broken pipes so that they can bath and wash, making the water highly contaminated as it is also collected from the Nairobi dam. Kenya already is categorized below the defined minimum water per capita requirement. To make matters worse, in 2007, the Kenyan government stated that sustainable access to water had dropped by 20%, particularly in the poor settlements where approximately 50% of the population live.

A recent BBC report has found government interventions are being put in place to rejuvenate the area by providing permanent structures and sewage systems, Architects from around the world have also reciprocated this all over the world, the latest SelgasCano, who most recently announced their

pavilion is to be dismantled and will be repurposed to house a school in Kibera.

With the growing media attention, NGOs such as Umande Trust have intervened and invested in upgrading the sanitation facilities. One example has been the implementation of Biogas toilets. This helps provide energy through methane and biogas. It utilizes the human waste which is in abundance around the settlement, due to the lack of sewage systems, producing fertilizer and gas which is then suitable for heating, lighting and cooking. Moreover, life within the settlement holds further constraints such as restricted mobility within the community because of a deficiency in formalized public transportation, leading to lengthy commutes often by foot creating isolating parts of the settlement. Locals consequently rely on the informal transportation system known as "Matatus." They are an inexpensive, chaotic and most often the only choice of means of transport within these areas. However, due to rising concerns for public safety, measures by the GoK are being put in place to potentially ban these, which may prove to be detrimental to locals, but also business all over Kenya.

Nairobi's informal settlements are segregated into different divisions, with Kibera slums being one of the largest slums in Africa as it inhabits approximately 1 million people today. Kibera currently generates approximately 640, 000 euros per month. It is split into different villages with varying populations, positioned approximately 5 kilometers away from the central business district and sits on 2. 5 square kilometers.

Kibera for many years when first conceived was often thought that it would dissolve almost immediately and not become a prevalent part of Nairobi culture. However, over a century later, cultures have formed and the idea of the settlement disappearing within the next 10-15 years has almost certainly vanished. These communities have derived from rudimentary structures that envelope their existence. Corrugated iron sheets and mud walls depict the vernacular of this space and yet, a complex network of illicit infrastructure, creating this delicate ecosystem entirely dependent on tapping into the main Nairobi network.

Kibera's residents face several main challenges: clean water supply, improved sanitation, low-cost housing, solid waste management, effective healthcare, security, energy accessibility, appropriate schooling and an overall deficiency of urban infrastructure. Furthermore, the slum is severely contaminated through heavy pollution from human refuse, garbage, dust, human and animal faces, which is more propelled through inadequate sewage and drainage systems. Due to this, residents are vulnerable to many diseases and it is estimated that 20% of Kenyans with HIV reside in Kibera.

The GoK in collaboration with two other stakeholders, introduced two programmes, the Kenya Slum Upgrading Program (KENSUP) in 2002 and the Kenya Informal Settlement Project (KISIP) in June 2011. The focal role of these initiatives was to acknowledge the problems faced and create strategies within the informal settlements to improve the livelihoods of its inhabitants. It also included assisting in housing improvements, income generation and physical and social infrastructure development. The

estimated target is to improve 1. 6 million households within informal settlements (5. 3million dwellers) by 2020 at a total cost of around KShs 883. 76 billion or USD 8. 5 billion.