

Kiambiu Water and Sanitation (KIWESA) slum project, Nairobi, Kenya



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The global challenge

- **Worldwide, 1.1 billion people lack access to safe water while 2.4 billion people lack access to basic sanitation services**
- **4 million people die annually as a result of this avoidable situation**
- **More than 30% of common recurrent diseases are water and sanitation related**
- **Most of those affected are found in Africa**
- **In Kenya, most of those affected are found in urban slums as a result of high urban population growth – over 5 % annually – due to rapid rural – urban migration**

Kiambiu slum history

- Kiambiu slum is one of the many slums that are situated within the perimeters of Nairobi City (approx 50 slum villages in 2006 – population - 1,000 to >800,000 persons in Kibera)
- Kiambiu slum has a population of 15,000 persons within an area of 0.5 km² (30,000/km²)
- The village derives its name Kiambiu from the Kiswahili word “*mbio mbio*” meaning “to be on the run”
- For many years, the Kiambiu slum dwellers were on the run – chased by Nairobi City Council officers for illegal occupation or by police for involvement in illicit brews e.g. changa

Kiambiu slum history continued

- **By the time KIWESA project project started in 1998, it was virtually impossible to walk around Kiambiu slum since human waste was littered all over**
- **The so called 'flying toilets' (human waste in polythene bags thrown out of the window) was the common mode of human waste disposal**
- **The children were greatly at risk since they would wonder all over the slum thereby contracting diseases**
- **Water supplies were constantly contaminated by the omnipresent human waste all over the slum**

Kiambiu slum profile

- **Safe water, adequate sanitation, electricity, cooking fuel, education, health services, shelter and financial services are in short supply in Kiambiu slum**
- **Most folks are involved in casual labour, petty trading, small scale manufacturing (Jua Kali) and illicit activities e.g. brewing unhygienic drinks**
- **51% of residents in Kiambiu live in overcrowded conditions i.e. > 2 persons/room (the UN standard which constitutes overcrowding)**
- **Males own 72% of structures in Kiambiu slum**
- **56% of the structures in Kiambiu slum are owned by absentee landlords – quite often well connected (senior) people in Nairobi City**
- **Tenurial insecurity has been a major problem for the slum dwellers of Kiambiu Slum**

Kiambiu slum WSS profile

- **95% of Kiambiu slum residents use communal stand pipes for their water supply**
- **Initially, many such water supply systems used old plastic pipes which pose environmental hazards to slum water users – due to leakage and water contamination**
- **> 75% of residents use dilapidated toilets most of which are located close to the nearby Nairobi river (high potential for water pollution)**
- **Kiambiu slum has many clogged drains whose very negative effects are particularly felt during rainy seasons**







KIWESA Project history

- **Kiambiu project is a joint Community and Maji Na Ufanisi project that started in 1998.**
- **Kiambiu Usafi Group literally translated means 'cleanliness group'**
- **The project aims at assisting the community improve its dire water supply and sanitation situation and to secure the slum from land grabbing**
- **The Kiambiu Usafi Group has been investing in permanent structures e.g. sanitation blocks, stone lined drains and water kiosks**
- **As of March 2006, three modern sanitation blocks - (with showers, toilets and water storage tanks) have been strategically put up in Kiambiu**
- **Maji na Ufanisi provides financial and technical support**



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The development process

- **The Kiambiu community has been involved in conceptualization, design, implementation, monitoring and evaluation of the Kiambiu project**
- **Initially, the Kiambiu community was mobilized and organized through general clean ups**
- **This was followed by Participatory Urban Appraisal (PUA) workshops**
- **The community identified lack/poor provision of toilet and water facilities as their most pressing problem**



Key actors in Kiambiu WSS Project

- **Women and men members of Kiambiu Usafi Group while boys and girls comprising the Kiambiu youth Group**
- **Sister NGOs operating in Kiambiu slum**
- **Athi Water Services Board – a new and vibrant outfit created by the recent Water Sector reforms**
- **Private sector agencies e.g. Kenital Solar Ltd**
- **Development partners including Sida, Cordaid, Christian Aid, Ford Foundation, and WaterCan**

Impact of the Kiambiu project

- **Currently, 20% of the Kiambiu residents are able to access clean and affordable drinking water, toilet and bathing services**
- **This has saved on time and cost previously incurred in search of water, bathing and toilet facilities**
- **Incidence of preventable diseases like cholera, typhoid and diarrhea, especially among the children, has reduced noticeably – expenses too**
- **Most of the initial toilets have been voluntarily pulled down by the Kiambiu slum dwellers**
- **The overall environment in Kiambiu slum has improved dramatically**



Social impact of the Kiambiu project

- **In 1998, little success was expected due to the high level of suspicion between the slum dwellers who belong to all the tribes in Kenya**
- **Presence of Kiambiu as a respected Community Based Organization has helped in the enhancement of community integration and social cohesion through dialogue and interaction**
- **There is greater consensus on community matters, values and norms within Kiambiu slum village**
- **Improved understanding and articulation of the structure of leadership through direct participation by the slum community**

Economic impact of Kiambiu WSS project

- **Each 24 cubicle sanitation block costs US \$ 13,000 to construct – given by Maji na Ufanisi as a grant**
- **Given the lengthy community consultation processes that underlie the construction of a sanitation block, it takes 3 months to complete one block**
- **On average, the community collects US \$ 1,400 per month from water sales, toilet usage and showering in the 3 sanitation blocks**
- **The group pays salaries amounting to US \$ 236 per month for the different sanitation attendants**
- **US \$ 157 is used for running costs per month**
- **The Kiambiu CBO has a bank account where it keeps the balance = US \$ 1007 per month**

Economic impact of the project contd

- **The Kiambiu project has created many jobs for the slum community in Kiambiu e.g. construction, water vending, toilet cleaning and office administration jobs**
- **Interestingly, most of the construction jobs have been taken up by women**
- **The project has generated sufficient money from the sale of water and the utilization of toilet and shower facilities**
- **A number of slum-based entrepreneurs have started investing in smaller scale sanitation blocks as an income generation activity**
- **The CBO is currently in the process of being converted into a private company which will give shares and dividends to its members**

Environmental impact of the project

- **Before the Kiambiu project, the slum village was littered with human waste combined with domestic waste**
- **Currently, the village has become clean with monthly clean ups being organized by the Kiambiu Usafi Group members**
- **The Kiambiu youth group has been particularly active in the weekly cleanups. They have also started a garbage management project**
- **The youth group supplies waste bags to over 500 households on a weekly basis at a fee of Kshs.10 per month (1.5 \$ per month)**
- **The youth group is currently negotiating for sustainable solid waste transport from Nairobi City Council**

Capacity building by the Kiambiu WSS project

- **Capacity building is one of the key components of all Maji na Ufanisi interventions**
- **The Kiambiu CBO members have been trained in operations and maintenance, book keeping, record keeping, report writing and monitoring and evaluation**
- **Maji na Ufanisi uses exchange visits, workshops, seminars and customized training for capacity building of the participating communities**
- **The communities are also involved in the production of audio visual products that highlight their work**

Sustainability of the Kiambiu WSS project

- **The Kiambiu community is highly passionate about the KIWESA project - important prerequisite for its sustainability**
- **There is a strong sense of ownership of the WSS structures**
- **The very poor Kiambiu community contributes its own resources for the construction of the WSS facilities**
- **Solar energy is being used to provide lighting of the sanitation blocks – enabling the facilities to be open up to midnight therefore making more money for the CBO**
- **Girls and women are now able to use the toilet blocks at night**

Replicability of the Kiambiu WSS project

- **The multifaceted benefits (e.g. health, medical, financial, social) and overall success of the Kiambiu WSS intervention enhances its adoption and replicability by other urban informal settlements**
- **Many development agencies e.g. Nairobi City Council have expressed great interest to replicate the Kiambiu sanitation block**
- **The Kiambiu community has frequently been invited to demonstrate to other urban informal settlements how to design, manage and maintain such sanitation blocks**
- **Maji na Ufanisi has facilitated documentation of the entire process**

Innovativeness of the Kiambiu WSS project

- **Strategic location and construction of permanent WSS structures in slums is innovative - it makes it very difficult for government authorities to evict slum dwellers**
- **In Kiambiu slum, the permanent sanitation blocks have literally held back land grabbing**
- **The recent partnership between private companies e.g. Kenital Solar Ltd and Kiambiu Usafi Group brokered by Maji na Ufanisi is an innovative model which will harness useful resources from the Private Sector**

Challenges facing the Kiambiu project

- **The major problem facing the project is availability of space for constructing the sanitation blocks - most of the available spaces have already been 'grabbed' by well connected persons**
- **Fears of eviction and / or relocation by the government**
- **High unemployment rates forcing some of the residents to engage in crime thus causing insecurity**
- **Poor infrastructural outlay particularly water, toilets, roads and electricity**
- **Poor allocation of government resources for slum development. NB All the slums in Nairobi which house over 50 % of Nairobians occupy approximately 5 % of residential land**

Future plans for Kiambiu Slum village

- **Over the next 2 years, Maji Na Ufanisi plans to assist Kiambiu Usafi Group construct 4 more sanitation blocks, 16 water kiosks and 6 main drains**
- **This will significantly reduce the distance to water supply and toilet facilities**
- **Continue to engage more private sector actors in support of the slum WSS work in Kiambiu slum**
- **Athi Water Services Board intends to use Kiambiu slum village for experimenting the use of pre-paid water meters which enable lowering of the tariffs leading to increased clean water consumption in the slums**

Lessons learnt from KIWESA Project

- **Improved water and sanitation are the most important needs of slum dwellers in Nairobi.**
- **They are also seen as the two most logical entry points to overall development of the slums in Kenya**
- **The provision of clean water and sanitation services in Nairobi slums has had a noticeable impact in reducing the incidence of typhoid, cholera and diarrheal diseases**

Lessons learnt from KIWESA Project continued

- **There is an urgent need for the provision of Water and Sanitation services in urban informal settlements while waiting for government planned services**
- **There are very many opportunities to create jobs and thereby augment incomes as well as improve livelihoods in the urban slums**
- **Many private companies that want to help (as part of their social responsibility) are unable to go directly to the slum communities unless they have a reliable intermediary like Maji na Ufanisi**

