



Growing Inclusive Markets

Business Works for Development • Development Works for Business

CASE STUDY

Sub-Saharan Africa • Kenya

Ecotact: Affordable sanitation services in pleasant surroundings

Prepared by • Winifred Karugu
Sector • Sanitation
Enterprise Class • MSME



Executive Summary

Ecotact is a social enterprise that invests in environmental ventures that provide ordinary citizens with the most basic of necessities: affordable sanitation in pleasant surroundings within urban areas with particular emphasis on the most disadvantaged areas such as urban slums. The company bases most of its operations in informal settlements or slums such as Kibera and Mathare in Nairobi. Such settlements have for long lacked basic amenities to the extent that residents often have no access to toilets or washing facilities.

By setting up facilities known as ‘Toilet Malls’, Ecotact now provides affordable sanitation and ablution services used by 48,000 people per day. The malls also serve as retail outlets for basic necessities such as airtime, snacks and shoe shine services. Ecotact began its operations in 2007 and has already completed constructing 45 malls in 10 towns in Kenya on a build-operate-transfer (BOT) basis, with several more in the pipeline. Ecotact’s activities positively impact people’s health, and the urban environment, which is cleaner as a result. Ecotact is also currently constructing facilities in other countries in the region.

The Value Proposition

THE PROBLEM

In 2005 the population of Kenya was estimated at 35.817 million¹, thus placing it 34th largest among the 193 nations of the world. Kenya’s population had increased rapidly since 1950 from 6.07 million to a projected 40.8 million in 2010. It was further estimated that only 48% of Kenya’s population had access to basic sanitation services in the form of proper toilets. The government (including local government) had not invested in public sanitation facilities in the capital city of Nairobi (or other major towns) for over 30 years, yet Nairobi housed some of the largest and most densely populated informal settlements (or slums) in the world.

In line with the spirit of the Millennium Development Goals (MDGs), development agencies have in recent years taken great strides to redress lopsided focus on sanitation. The UN proclaimed 2008 as ‘The Year of Sanitation’, while several other development agencies have overhauled their activities in this area. The United Nation’s declaration of the period 2005-2015 as the ‘International Decade for Action - Water for Life’ served to highlight neglect of sanitation across the world. Global access to safe sanitation did increase² from 54% to 62%

¹ United Nations Population Division, 19th November 2009

² Among the Millennium Development Goals, target 10 pledges to cut in half the proportion of people without sustainable access to safe drinking water



the period 1990-2006³, but this still left 2.5 billion people without access to safe sanitation, a figure which has barely changed in recent years. It is projected that in Sub-Saharan Africa raising access to safe sanitation from 26% to 31%⁴ will be achievable sometime during this new decade. But it is worth noting that about half of the population of South Asia continues to suffer the indignity of open defecation.

Until about two years ago in Kenya, only 138 public toilet units existed in urban centres, towns, cities and the low-income settlements. These were characterized by overcrowding and poor lighting. They were also inaccessible, unhygienic and lacked both privacy and security. As a result, many residents used plastic bags, (otherwise known as the infamous 'flying toilets,' of the slums) to dispose of human waste at night, thrown from residences onto roof tops, wasteland or informal drains. Some slum residents do have access to pit latrines, but these are subject to overflow during periods of heavy rain or flooding. In particular, women seeking privacy often have to pay a small fee to use privately operated, unhygienic pit latrines.

Poor sanitation facilities often lead to ill health. For instance, 30% of Kenya's disease burden is sanitation-related, with many children dying from diarrheal diseases including dysentery, cholera and typhoid.⁵ Such deaths can be prevented through investment in toilets, water and hygiene.

In December 2009, the Assistant Minister for Public Health and Sanitation Mr. James Gesami concurred that toilet cover in Kenya is still low, with latrines available to less than 50% of the population.⁶ According to Hon. Gesami neither government, nor the municipal or even non-governmental organizations (NGOs) seemed willing or able to effectively address the sanitation issue because the issue has not been properly highlighted and therefore adequate resources have not yet been availed to the sector. These conditions portend environmental degradation and disease on a massive scale. Although Kenya and other eastern African countries committed themselves to increased financing for sanitation at the World Summit for Sustainable Development in 2002 - promising to reduce the proportion of people without basic sanitation facilities - the issue has not been prioritized in national budgets since then. It was under these conditions that Ecotact was founded to mitigate the lack of access to safe sanitation.

Development of Ecotact

³ United Nations, 2009

⁴ Ibid.

⁵ Ministry of Public Health and Sanitation (2009)

⁶ Mulama, 2009



Ecotact was founded by Mr. David Kuria, a 1997 graduate of Architecture from Jomo Kenyatta University of Agriculture and Technology (JKUAT), and Mr. Kamithi Nganga⁷. Kuria is the Chief Executive Officer (CEO) of Ecotact. His first job after graduation was as an architect with the City Planning Division of the Nairobi City Council (NCC) where he spent four years getting and exposure to city planning. During his time with NCC, Kuria questioned the growing informal settlements that eventually numbered more than 200 in Nairobi, but the senior management of the City Council appeared unconcerned. He, however, occupied his mind with the concept of slum upgrading that entailed improving the housing and living conditions of informal settlements through: provision of proper low budget housing and sanitation facilities, improved road networks and proper lighting within informal settlement and implementing the codes and by-laws required, because the existing ones obviously did not work.

While still at NCC, Kuria had the opportunity to work on a slum upgrading project that was originally meant for Huruma⁸ but was shifted to Kibera, which happens to be one of the biggest informal settlements in Africa. The Nairobi City Council is extremely bureaucratic and subject to adverse political interference due to its structure⁹, and the resources it controls. Decisions appear therefore to be frequently based on the whims of various interest groups rather than existing strategic plans. Inefficient systems within the Council also cause delays in decision making, and in addition to this there is widespread graft.¹⁰ The experience of working for the Council had a profound effect on Kuria who says *“I ended up with deep dissatisfaction and a burning desire to work on projects that really made a difference in improving the urban landscape for low-income communities through environmentally responsible projects in sanitation and housing.”*

Kuria’s next career move was to join the NGO Intermediate Technology Development Group (ITDG), which today is known as Practical Action, where he worked as an environmentalist, dealing with issues of urban environment. For the following eight years as a member of staff, Kuria was subjected to major exposure of a different sort that entailed; resource mobilization, coordination of the environmental activities and monitoring and evaluation. Thus, he went from detached bureaucracy to actively engaging communities in improving their lot. His time with ITDG was spent in improving water quality, sanitation and solid waste management. Kuria says *“I appreciated NGO zeal, enthusiasm and hands-on approach but I was still dissatisfied at some level. My experience while assessing the impact of the projects during the monitoring and evaluation convinced me that the top-down approach did not produce*

⁷ Kamithi Nganga is Co-founder and Chairman of Ecotact. He is an environmental sociologist, a registered environmental specialist; with over 30 year’s experiences in the sector.

⁸ Huruma is a low-income location in Nairobi, while Kibera is one of the biggest slums in East and Central Africa.

⁹ NCC is run by a legislative house of popularly elected councillors who in turn elect the Mayor. The CEO (Town Clerk) is a civil servant employed by NCC. Both the councillors and the CEO answer to the Ministry of Local Government. This model operates in all major towns in Kenya.

¹⁰ <http://www.nairobicity.go.ke/> City Council of Nairobi (first) strategic plan 2006-2010



measurably better results than bureaucracy.” In particular he became doubtful of the ‘donor handout syndrome’ that encouraged targeted communities to become fully dependent on donor funding that was not sustainable in the long run.

One of the projects that reinforced this belief was an effort to upgrade housing in the Mathare¹¹ slums. A well meaning NGO funded mostly by religious organizations engaged on a project in which selected residents were targeted for relocation to decent housing consisting of well constructed flats with clean water, electricity and proper sanitation. The project failed due to many reasons. Political interference assigned the houses to undeserving individuals, while excluding the legitimate intended beneficiaries of the project.¹² Distressed members of the targeted communities saw themselves being displaced to worse conditions than before. Secondly, the targeted communities were not convinced that the project would actually benefit the community, and resolutely campaigned against it. This latter fact was surprising to the benefactors but the residents merely saw impossibly increased costs of living rather than improved standards of living. *“It slowly dawned on me that the targeted residents believed that the social infrastructure they lived in served them well, therefore I came to realize that improved physical infrastructure would not be adequate on its own,”* said Kuria.

Kuria thus developed a new belief system that underscored the notion that optimum service delivery is not attainable either through local government or through NGOs. He believes that government is best placed to formulate policy, regulate economic activities, build infrastructure and perhaps even help scale up models that prove successful. He also believes that NGOs tend to be idealistic and bound to the political and/or ideological agendas of the donor agencies that fund them. In other words, NGOs and the donor agencies often make board room decisions based on their own assumptions on the needs of individuals and communities, thus creating a big disconnect between reality and theory that is hard to bridge.

Kuria therefore began to think that the private sector approach to environmental issues (particularly water and sanitation) was worth trying. In essence, he wanted to engage in social enterprise by identifying a problem and working to solve it. He thus founded Ecotact in 2007 with the aim of tackling the worst problem of all, sanitation in urban slums. He felt that if he could succeed in this, then all other problems could be solved. He started Ecotact without outside financial backing, eager to prove that sanitation can be attacked in a transformative and suitable way. Kuria wanted to tackle a big challenge and sanitation provided a perfect platform because of the behavioural issues involved, as well as the wall of silence that surrounded the problem. Most people had a very negative opinion of public toilets with good reason – they were unspeakable at the best of times. Yet within a year, Kuria had succeeded in changing attitudes tremendously by introducing positive reinforcement, maintaining clean and attractive facilities, having employees look out for careless patrons and educating the

¹¹ Mathare is the largest slum in Kenya (and the East African region) with an estimated 1 million people living in dire conditions that exclude sanitation, safe water, and decent housing.

¹² Kamau and Ngari, 2002



public on how to use the toilets through posters posted in the toilets. This encouraged people from all walks of life to use the facilities. Thus the concept of 'toilet malls' evolved. People were able to buy basics such as airtime, periodicals and even snacks at the same location because of the clean and pleasant surroundings. Kuria's beliefs are mirrored in Ecotact's vision and mission.

Ecotact's Mission: *“Ecotact strives to develop innovative answers to the growing environmental sanitation cry in Africa and globally.”*

Ecotact's Vision: *“Ecotact envisions a world where everyone counts, a world that offers social equity, with appropriate responses to growing environmental and social challenges, and where each individual can make a difference.”*

The Business Model

IKOTOILETS



An Ikotoilet Facility (Photo credit: Ecotact)

Ecotact's first initiative was the Ikotoilet concept which was conceived to harmonize with the landscape and be a 'miniature mall' built to a standard design. The term 'Ikotoilet' is derived from ecological sanitation. 'Iko' is also a Swahili word depicting existing. Ikotoilet is a facility where the users pay a small fee to meet the operational and maintenance costs of the facilities. Ikotoilets integrate other add-ons such as kiosks and shoe polish vendors depending on viability and context in order to ensure sustainability. The founders

conceptualized *“a unique urban streetscape intervention aimed at creating memory and link space and service, thus promoting interactions on the streets.”*¹³ Within the designated space there would be toilets and warm showers, cold refreshments with snacks, shoe shining services, air time vending and newspaper vending. Ecotact is also finalizing details for installation of ATM machines. For the first Ikotoilets the directors solicited vendors in the locations to set up shop in the facilities. But over time this has changed and they now have several enquiries for every potential facility.

Ecotact advertised the tender for building the Ikotoilets and the three contractors duly shortlisted are the ones who construct facilities around the country. An Ikotoilet costs

¹³ Kuria, 2009



US\$25,000 to construct using masonry and factory built concrete fibre. Pre-cast takes about two weeks to complete while masonry takes a further 8 to 14 weeks to complete.

Ecotact wants to evolve to an image synonymous with convenience and quality service. Ikotoilets are run according to “*high hygienic standards, sanitation hospitality and an ambiance of convenience.*”¹⁴ Each Ikotoilet serves an average of 1,000 persons per day at a cost of 5 Kenya Shillings (Ksh) to use the toilet and Ksh 10 to take a hot shower. This translates to US\$0.063 and US\$0.125 respectively. Mr. John Kamau a newspaper vendor on Aga Khan Walk next to the Uchumi Supermarket in Nairobi’s Central business District (NCBD) expressed his appreciation when an Ikotoilet facility was installed nearby. He recounted the poor sanitary conditions of public toilets that had forced them to use fences and street alleys to relieve themselves prior to this. He went on to explain that foul smells were emitted and pedestrians avoided such areas. He explained that the Ikotoilets help keep the environment clean and comfortable for all.

Each facility provides decent employment for a minimum of ten full time operators, including five cleaners, one facility assistant, two shoe shine boys, a newspaper vendor and a security guard. Currently, Ikotoilets provide employment for more than 260 staff. In addition to this the Ecotact headquarters houses 15 members of mostly professional staff.

Ikotoilets incorporate the following:

- Low-flush toilets in both the ladies and gents toilets
- Waterless urinals in gent’s toilets
- Shower facilities
- Water-saving taps and soap dispensers
- Dry toilet system - a facility for urine harvesting and water conservation
- A free-of-charge toilet for the disabled
- Tanks for rainwater harvesting
- A changing area for babies
- Sanitary bins
- Full length mirror
- Music
- Water fountains dispensing UV treated water
- Snack shop
- Shoe shine vendor

Ecotact strives to ensure uniformity in the level of service provision at all Ikotoilet units.

FUNDING

Apart from the income generating activities, the Ikotoilets have since inception generated interest and subsequently drawn funding from various sources. Apart from the personal funds of the two directors, additional funding has come in from Ashoka, Schwab Foundation, the

¹⁴ Kuria, 2009



Dutch Government, Acumen Fund, Rotary International, CSR funding from East Africa Breweries Limited and Safaricom Limited, and the Athi Water Services Board. This has mainly been used to build capacity. In almost all cases the organizations have approached Ecotact, rather than Ecotact approaching them. For example, both Ashoka and the Schwab Foundation conduct stringent annual global searches for worthy collaborators and identified Ecotact in the process of their due diligence. To date, total investment equals US\$1 million. Most of the external funding is in form of ‘patient funds’ that will be repaid as the business grows. In the beginning local commercial banks were reluctant to lend to Ecotact but the banks are increasingly approaching the directors with a view to providing credit. Ecotact has also benefitted through an award of US\$200,000 from Global Water Challenge. All this has made it much easier for the directors to pursue their objectives.

Ikotoilet facilities have diverse income generating activities drawing money from; user fees received from bathroom charges, advertising revenues from corporate clients that advertise on the Ikotoilet premises and rent derived from the leasing out space to micro-entrepreneurs who in turn operate their business there. This revenue covers operational and administrative costs of Ecotact. The annex includes the Profit and Loss Statement of a single Ikotoilet facility in Nairobi’s NCBD.

Build-Operate-Transfer (BOT)



Construction of an Ikotoilet (Photo credit: Ecotact)

Ikotoilets are developed using the build-operate-transfer (BOT) model, whereby Ecotact enters into agreement with municipal councils through which it bears the cost of constructing the Ikotoilet on municipal land¹⁵ and further is granted the right to run the facilities on a commercial basis for a period of five years to ensure recovery of the investment. The facilities will eventually be turned over at no cost to the municipal councils to either run on their own account or lease them out depending on their inclinations. Ecotact has already

secured BOT rights in 15 Municipal Authorities in Kenya, whose locations are selected in accordance to need, population, accessibility, and adequate sewerage system and is working to secure several more. During the time that Ecotact runs the Ikotoilets, they expect to develop a follow up plan that entails quality control to ensure sustained quality management after the handover. Ecotact also intends to develop a comprehensive guide to social

¹⁵ The deal with the municipals is that Ecotact does not have to pay lease charges for the land since the municipals avail the land, Ecotact builds the facilities and operates the business for a period of five years after which the facilities revert to the municipals.



investment in which all the requisite procurement, planning and approval procedures are diligently followed.

However, in a few cases the model is not BOT but rather Ecotact has leased land from Kenya Railways for a period of ten years. This model includes three facilities in Nairobi and one each in Nakuru and Kisumu towns.

Ecotact has also begun to franchise Ikotoilets. Franchisees average Ksh 500,000 (US\$6,500)¹⁶ profit per annum. So far there are four franchisees running eight facilities. The franchisees approached Ecotact and not the other way round, and there are several more potential franchisees currently under consideration. Most of them have heard about or observed Ikotoilets in operation, and become interested. Once a potential franchisee approaches the company, Ecotact conducts due diligence to enable them to decide accordingly. In particular, they are interested in the resume of the entrepreneur in question, i.e. whether he or she has engaged in business before. The directors prefer not to enter into contracts with new entrepreneurs. The franchisees do not partake in the cost of building. They are merely responsible for running the facilities and maintaining the brand. Ecotact has developed a model whereby it invests in the construction of the facilities develops a management guide and quality matrix and franchises out the management of individual facilities to selected entrepreneurs in the concerned municipalities. In addition to this Ecotact has embarked on a scheme in which they train budding youth entrepreneurs with a view to eventually running facilities as businesses.

Ecotact has also engaged in building facilities for schools with the aim of maintaining Ikotoilet facilities on behalf of the schools and in turn selling biogas to the schools for fuel.

IMAGE CHANGE

Ecotact is addressing a problem that society was reluctant to address. The middle and upper classes had adequate access to clean sanitation facilities but low-income people had very limited access. The slums were notorious for the appalling conditions that existed there. The municipal councils were failing in this responsibility and the problem was getting increasingly worse. Until Ecotact came on the scene no one appeared to be willing to address the problem head-on due to the negative connotations, hence a need for an image change. Ecotact is therefore working to make Ikotoilets fashionable and synonymous with beauty. In order to achieve this Ecotact hires the services of professional landscaping and interior design companies. Ecotact is also collaborating with the international network of Miss Earth in developing a community outreach model that will be used to reach out to the local community to educate and demonstrate the beauty and value of hygienic sanitation. Community outreach initiatives include road shows, and the use of top comedians, acrobats and other popular entertainers as change agents. In addition to this, Ecotact has also deliberately engaged leaders of various religions to ensure that any socio-religious barriers are minimized in

¹⁶ Facilities earn an average of Ksh 2.2 million per annum (approximately US\$30,000).



sanitation promotion. Recently promising results have been achieved through an approach known as ‘community-led sanitation’¹⁷ which promotes behaviour change through peer group condemnation of open defecation as an anti-social habit. Ecotact has largely succeeded with this image change during the two years they have been in operation and it is now likely that other private entrepreneurs will enter this market.

CONSERVATION INNOVATIONS

Before founding Ecotact, David Kuria had long experience with NGOs engaged in urban environment issues and had occasion to think deeply about the problems involved as well as meet stakeholders and innovators in the sector in order to come up with the Ikotoilet. His co-founder Dr. Kamithi Nganga is an expert in environment impact assessment, also contributed innovative sanitation facility.

The Ikotoilet model has innovative conservation applications including the complete ‘Dry-Toilet System’¹⁸, a bio-digestion system and urine harvesting system. Other water saving innovations include: the use of waterless urinals, low-flush cisterns and water-saving taps.

The use of waterless urinals reduces water consumption. The urine is harvested from the waterless urinals then segregated and sold to companies for onward production of fertilizer. Some facilities already use human solid waste to generate methane gas, which not only reduces sewage disposal, but also serves as an alternative energy source. Ikotoilet is keen on exploring and demonstrating potential for nutrient and energy recovery from sewage as a cheaper alternative source of energy. In line with this, Ecotact has funded a doctorate program at the Jomo Kenyatta University of Agriculture and Technology (JKUAT) specializing in urine harvesting.

CONSTRAINTS

Ecotact had to work through negative attitudes to sanitation from government, the municipals and citizens themselves. Most were unwilling to address this very unpleasant problem. But this is changing rapidly as several high profile politicians and other public personalities are lending their aid to this cause. Hon. James Gesami, Kenya’s Assistant Minister for Public Health and Sanitation emphasized the changing landscape by saying, “*Sanitation is a newly thought-out issue and we have not given adequate resources but through advocacy and judicious publicity sanitation issues are being brought to light.*”¹⁹

There are still social obstacles to be overcome in providing sanitation to all. For instance, in several parts of East Africa, it is taboo for fathers-in-law to share a latrine with daughters-in-law, or likewise for mothers-in-law to share with sons-in-law. Thus, if there is only one latrine in a home, those who cannot share the facility opt for open defecation, polluting the

¹⁷ www.communityledtotalsanitation.org/

¹⁸ Developed in partnership with Roto Moulders.

¹⁹ Mulama, 2009



environment. However, the directors are confident that with time and greater public awareness, all these constraints will be overcome.

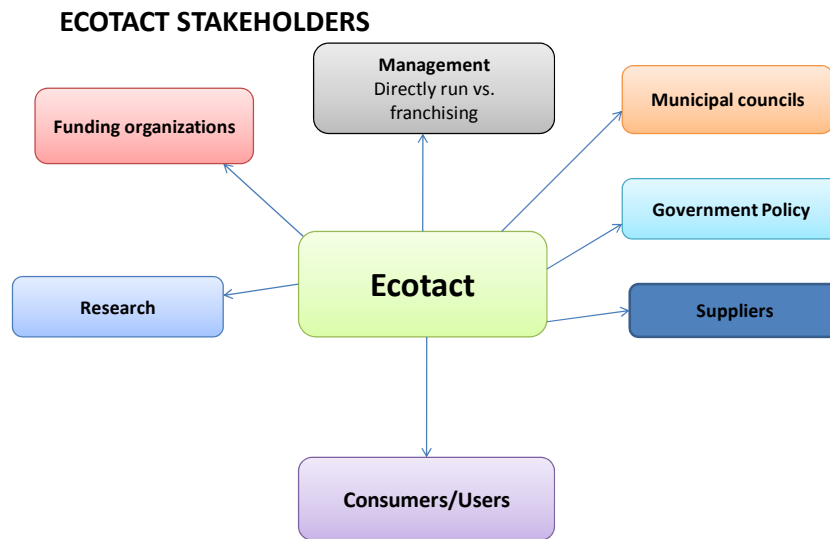
The Actors

Due to its innovative nature, commitment and clarity of focus, Ecotact has engaged in several positive collaborations both at the local and international level. Ecotact's collaborations and partnerships focus on the unique synergy that can be achieved between social enterprises and conventional business. Such partnerships add value in corporate new market brand repositioning, providing deeper engagement in solving social problems and reinforce a country's talent retention strategy.

Ecotact partners with many different organizations including:

- The Ministry of Public Health and Sanitation, Kenya
- The Acumen Fund
- Global Water Challenge (GWC)
- East African Breweries Limited (EABL) Foundation. EABL is the biggest beer brewer in the EAST African region.
- Municipal Authorities across Kenya
- Water and Sanitation for Urban Poor (WSUP)
- Practical Action is a development charity that seeks to reduce vulnerability of the poor.
- Umande Trust is an NGO concerned with water and sanitation
- Pamoja Trust is a charity concerned with homelessness and urban poverty
- Maji na Ufanisi is an NGO concerned with water and development
- World Bank, Water and Sanitation Program
- National Environment Management Authority (NEMA)
- The European Union through the Netherlands Directorate-General of Development Cooperation (DGIS)
- The Safaricom Foundation. Safaricom Kenya is a mobile telephone service provider and one of the most successful companies in Sub-Saharan Africa.

The actors can be categorized as shown in the following diagram:



Source: Author

GOVERNMENT

The Ministry of Public Health and Sanitation in Kenya's mission is 'to provide effective leadership and participate in provision of quality public health and sanitation services that are: equitable, responsive, accessible and accountable to Kenyans.'²⁰ The National Environment Management Authority (NEMA) is a government parastatal established to exercise general supervision and co-ordination over all matters relating to the environment. Ecotact received the Environmental Impact Assessment license that granted it to run its business.

Ecotact contacts and engages the municipal councils across Kenya to provide land for Ikotoilets and facilitate the BOT model. Partnerships with various companies and agencies have resulted in funding for the various projects undertaken. For example, the East African Breweries Limited (EABL) Foundation under its corporate social responsibility programme has funded construction of Ikotoilets to the tune of Ksh 25 million (US\$313,000). EABL is the biggest beer brewer in East African region. The Safaricom Foundation of the mobile service provider Safaricom Kenya, which is one of the most successful companies in Sub-Saharan Africa, is also supporting construction of an eco-toilet in Nakuru.

FUNDERS

Acumen Fund has invested in the construction of the Ikotoilets. According to its website²¹ the Acumen Fund "is a non-profit global venture fund that uses entrepreneurial approaches to

²⁰ Ministry of Public Health and Sanitation, <http://www.publichealth.go.ke/>

²¹ Acumen Fund, <http://www.acumenfund.org/>



solve the problems of global poverty.” Acumen Fund has had significant success investing in small scale businesses that impact positively on the poor.

The Global Water Challenge (GWC) is a coalition of multiple organizations that include the United Nations Foundation, Ashoka, UNICEF and the Coca Cola Company among others. The aim of GWC is to accelerate access to safe drinking water and sanitation for the most vulnerable communities. GWC engages in advocacy with government and donor agencies on behalf of Ecotact.

Funding from the World Bank has enabled replication of the Ikotoilets as well as construction of sanitation/abolition blocks within informal settlements. The European Union through the Netherlands Directorate-General of Development Cooperation (DGIS) has provided Ecotact with funding that has facilitated the partnership with Maji Na Ufanisi, an NGO concerned with water and development and Pamoja Trust, a charity concerned with homelessness and urban poverty. Ecotact is currently negotiating phase 2 of the World Bank funding which if all goes well will amount to US\$1.5 million. This will go towards scaling up Ikotoilet construction.

CIVIL SOCIETY AND RESEARCH INSTITUTIONS

Ecotact also partners with various NGOs and Community Based Organizations (CBOs) that train and sensitize the communities on sanitation and proper waste management in order to fulfil its mission. For example, Water and Sanitation for Urban Poor (WSUP) partnered with Ecotact to engage in research on sanitation in urban and peri-urban areas.

SUPPLIERS

Ecotact is in partnership with Roto Moulders Ltd, a local company specializing in plastic containers and related products to supply water tanks at a subsidized rate. These in turn are used to store harvested rain water. The UV Trojan East Africa company supports the provision of the ultraviolet (UV) drinking water fountain for the public in Ikotoilets, while Ecotact also has a contract with Tropical Promoters to provide the shoeshine infrastructure for the shine centres.

Impact

SOCIAL

Ecotact has heralded a new standard of hygiene in targeted communities, reducing urban pollution from human waste, generating employment opportunities for poor people and restoring dignity by the provision of sanitation services among urban poor.

Ecotact is constantly being approached by municipals, politicians and even major corporations with a view to initiating Ikotoilets in various locations. All indications are that this model is both replicable and scalable. So far no competitor has entered this market but



from the interest so far generated especially by potential franchisees, it is likely that this will change in the near future.

Customer satisfaction surveys indicate that 67% of people using Ikotoilets are happy with the service. An important output of this new emphasis has been the calculation that sanitation projects deliver highly impressive economic returns, especially if lower healthcare costs, less disruption to schooling and higher work productivity are taken into account. Of the 33% who were not satisfied the main issues included; cost because however minimal there are those who find it difficult, and the fact that Ikotoilets are few and far between and sometimes they have to walk for long distances to access a facility.

ECONOMIC

About 50,000 people use Ikotoilet facilities on a daily basis and they not only provide employment for 260 people, they also provide opportunities for micro-business such as kiosk establishment and shoe shine vendors. All Ikotoilets have a small shop owned by traders. Ecotact projects the establishment of another 200 Ikotoilets within the next five years.

Ikotoilets have grown from none to 45 within two years and growth continues unabated. New facilities will soon be established in neighbouring countries of Uganda and Tanzania. To date there are 45 toilet malls, all except one in Kenya. The latest one just opened in Zanzibar, Tanzania in September 2009. Several more Ikotoilets are in the pipeline under an ambitious project to reach 100 facilities within the next 12 months.

ENVIRONMENTAL

Apart from ensuring a cleaner environment and facilitating green technologies in sanitation, Ecotact has contributed greatly to positive changes in informal settlements. By reducing the amount of raw sewage that is currently polluting the Nairobi River, it has reduced exposure to waterborne diseases that pose a major threat to public and environmental health. Diarrheal disease alone is a top cause of death in Kenyan children under the age of five years. Further, Ecotact has improved the urban landscape for low-income communities through environmentally responsible projects in sanitation and housing.

Ecotact is also working on a program with EM Kenya²² and the Kenya Agricultural Research Institute (KARI) to develop the processes for conversion of urine to urea for agricultural use under the Water and Sanitation Program (WSP-WB) of the World Bank. KARI is a parastatal that engages in all forms of agricultural research from various stations across Kenya.

RECOGNITION

Kuria was named Africa Social Entrepreneur of the Year 2009 by the Schwab Foundation at the World Economic Forum for his work in urban sanitation. He is the first person in Sub-Saharan Africa to receive such an award. David Kuria also showcased the work of Ecotact at

²² EM Kenya is a business that sells organic inputs



the Clinton Global Initiative annual meeting in September 2009. Kuria is also a Kenyan Ashoka Fellow²³; and the Ikotoilet received the Ashoka recognition in 2007. He also won first prize in the 2008 ‘Change Makers Competition’ of the Global Water Challenge, and was inducted into the Hall of Fame of Sanitation.

Future Outlook

Ecotact is growing rapidly with many more Ikotoilets being opened in various towns across the country. Soon after inception, Ikotoilets began to receive a lot of attention in the print media and many prominent politicians including the Vice-President and Deputy Prime Minister, have agreed to promote Ikotoilet installation in their home towns, thus ensuring greater media coverage. The company is increasingly venturing into the East African regional market and Kuria foresees the Iko-village and Mukulima Initiative as major activities in the future.

Ecotact regrets the fact that it has no competitors so far and is looking forward to the entry of other players in this market because they believe it will raise standards in the industry. Ecotact is ready to provide technical support to any competitors who enter this market.

Ecotact will soon publish a data base compilation of all of the key actors in sanitation in Kenya to assist its work in identifying partners and locations as it is scaling up its operations.

FUTURE INNOVATIONS – IKO-VILLAGE

Ecotact is looking at future innovations including the Iko-village. The Iko-village is still at the concept stage and is envisaged as a social housing model that optimizes ecological sanitation to its full potential. Ecological sanitation (ecosan) will offer a new philosophy of dealing with what is presently regarded as waste and wastewater. Ecosan is based on the systematic implementation of reuse and recycling of nutrients and water as a hygienically safe, closed-looped and holistic alternative to conventional sanitation solutions. Ecosan systems enable the recovery of nutrients from human faeces and urine for the benefit of agriculture, thus helping to preserve soil fertility, assure soil fertility for future generations, minimize water pollution and recover bio-energy. Ecosan ensures that water is used economically and that it is recycled in a safe way to the greatest possible extent for purposes such as irrigation or ground water recharge. There is a municipal waste management initiative that explores opportunities to invest in women as waste pickers financing their activities into viable and vibrant economic ventures through social incubation framework²⁴ and documenting the best practices for

²³ Ashoka is the global association of the world's leading social entrepreneurs—men and women with system changing solutions for the world's most urgent social problems. Since 1981, Ashoka have elected over 2,000 leading social entrepreneurs as Ashoka Fellows, providing them with living stipends, professional support, and access to a global network of peers in more than 60 countries

²⁴ The Social Incubator of Communities aims to give assistance to low-income communities with the objective of achieving acceptable levels of growth and developing economic, social, cultural and



environmental conservation for the Nairobi River Basin Program on behalf of the United Nations Development Programme (UNDP). Ecotact will participate in the documentation of best practices.

Another future project is the Mkulima²⁵ Initiative – a vision for agriculture in Kenya - aimed at assisting small scale farmers in the arid and semi-lands (ASALs) to improve production. The pilot for this is already under way and the concept entails using the Ecotact model to invest in the entire farming value chain. The initiative targets women who are availed an eight of an acre, a greenhouse, drip irrigation, seeds, agronomical support and marketing support. The investment cost is recovered over an appropriate period of time and the profits are shared by Ecotact and the women at the ratio of 30%:70%.

environmental aspects. This is possible to attain by training entrepreneurs, by generating and improving a solid base of new ventures, and stimulating the development of new social technologies.

²⁵ Mukulima is a Swahili word meaning farmer.



References

INTERVIEWS

- Kuria David, CEO of Ecotact. Interviewed September 2009, December 2009 and 22nd March 2010 in Ecotact Headquarters
- Nganga, Kamithi, Chairman of Ecotact. Interviewed in August 2009, November 2009 and January 2010 in Ecotact Headquarters
- John Kamau, Newspaper Vendor. Interviewed on 11th November 2010 Aga Khan Walk, Nairobi

PUBLICATIONS

- Knox Shanley. Toilets become Nairobi's hottest social spots: June 05 2009.
- Kamau, Hannah and Ngari Jobson (2002) Assessment of the Mathare 4A Development Program against the sustainable livelihoods approach. Working Paper 4. http://www.chs.ubc.ca/archives/files/Assessment_Mathare-4A-Development-Against-Sustainable-Livelihoods-Approach.pdf

WEBSITES

- Kenya Alliance of Residents Association Website, <http://www.kara.or.ke> (consulted 5 April 2010).
- United Press International University Media Alliance Website, http://www.upi.com/Science_News/Global-Water/2009/06/09/Toilets-become-Nairobis-hottest-social-spots/12434599302227/
- Global Water Challenge Website, <http://www.global...ws-detail.php?id=894> (consulted 23 December 2009).
- Acumen Fund Website <http://www.acumenfund.org/investment/ecotact-limited.html>, consulted 12 December 2009, *Ecotact Website* <http://www.ecotact.org/> (consulted 19 November 2009).
- United Nations Population Division, www.un.org/esa/population/unpop.htm (consulted 19 November 2009).
- United Nations: Water for Life, www.un.org/waterforlifedecade/, consulted 22 November 2009
- Community Led Total Sanitation Website www.communityledtotalsanitation.org/ (consulted 5 April 2009).
- Ashoka, Ashoka Fellows, David Kuria, <http://www.ashoka.org/fellow/4356> (consulted 12 April 2010).
- Enviro Conserve Africa, Ecotact Launch Ikotoilet, <http://www.enviroconserve.org/article.php?Article=41&Mag=22&Topic=&Subtopic> (consulted 13 April 2010)
- Global Water Challenge, Eco-Tact Limited: "Iko-Toilet" Thinking Beyond a Toilet <http://www.globalwaterchallenge.org/programs/projects-detail.php?id=814> (consulted 12 April 2010).



- Ministry of Public Health and Sanitation, <http://www.publichealth.go.ke/> (consulted 12 April 2010).
- Mulama, Joyce (2009) Kenya: Sanitation – this is the way we live, allafrica.com/stories/200906110797.html
- Safaricom Foundation, Environmental Conservation Partners, <http://www.safaricomfoundation.org/index.php?id=351>, (consulted 12 April 2010).
- Practical Action, History, <http://practicalaction.org/about-us/history>, (consulted 12 April 2010).
- Nairobi City Council Official Website Strategic Plan and Council Policy http://www.nairobicity.go.ke/index.php?option=com_docman&task=cat_view&gid=27&Itemid=97
http://www.nairobicity.go.ke/index.php?view=article&catid=16%3Abusiness&id=25%3Acity-council-of-nairobi-strategic-plan-2006-2010&option=com_content&Itemid=37 (consulted 25 April 2010).



Annexes

Annex 1: Map showing Ikotoilet locations across Kenya



Source: www.ecotact.org/



Annex 2: Ikotoilet locations in Nairobi's central business district



Source: www.ecotact.org/

Annex 3: Year 2010 Ikotoilet budget per facility



														-
Total Expected Expenses	<u>148.42</u> <u>0</u>	<u>132.34</u> <u>Z</u>	<u>129.84</u> <u>Z</u>	<u>121.26</u> <u>1</u>	<u>121.261</u>	<u>121.261</u>	<u>153.629</u>	<u>125.056</u>	<u>125.056</u>	<u>124.711</u>	<u>124.711</u>	<u>124.711</u>	<u>124.711</u>	<u>1,552,270</u>
														-
Expected Profit/Loss	141,28 1	157,35 4	159,85 4	180,73 9	180,739	180,739	181,371	209,944	209,944	207,289	207,289	207,289	207,289	2,223,831
														-

Notes to the budget

1. During rainy and cold seasons it is expected that income will increase.
2. Some direct costs like Tissue cost are estimated to be directly related to income
3. Painting is proposed to be done twice per year

The case was completed in July 2010 and released in 2011.

The information presented in this case study has been reviewed by the company to ensure its accuracy. The views expressed in the case study are the ones of the author and do not necessarily reflect those of the UN, UNDP or their Member States.

Copyright © 2011
United Nations Development Programme

All rights reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted, in any form by any means, electronic, mechanical, photocopying or otherwise, without prior permission of UNDP.

Design: Suazion, Inc. (NJ, USA)

For more information on Growing Inclusive Markets:
www.growinginclusivemarkets.org or gim@undp.org

United Nations Development Programme
Private Sector Division, Partnerships Bureau
One United Nations Plaza, 23rd floor
New York, NY 10017, USA