

Tweed Kenya Mentoring Program Volunteer Visit Report

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Kenya

Kenya straddles the equator. It is bordered to the north by arid bushlands and deserts of Ethiopia and Sudan, to the east by Somalia and the Indian Ocean, to the west by Uganda and Lake Victoria and to the south by Tanzania. The main rivers in Kenya are the Athi/Galana and the Tana. Because of Kenya's diverse geography, temperature, rainfall and humidity vary widely.

Kenya's population is over 32 million and is made up of mostly Africans, with small (though influential) minorities of Asians (about 80,000), Arabs (about 40,000) and Europeans (about 40,000).

United Nations statistics (2003):

Life Expectancy at birth:	47 years	(80 years)*
Adult literacy rate (ages 15 and above):	73.6%	
Life expectancy at birth, <i>female</i> :	46.3 years	(82.8 years)*
Life expectancy at birth, <i>male</i> :	48.1 years	(77.7 years)*
Under-five mortality rate (per 1,000 live births):	123	(6)*
Population without access to sustainable improved water (2002):	38%	(0%)*
Population without access to sustainable improved sanitation (2002):	52%	(0%)*

*Australian statistics

Brief history of Nairobi

Nairobi lies at an altitude of 5,500 ft above sea level and has no real variations in the climate. Average temperatures range from 21°C in January to 16°C in July.

The early days

Until the advent of locomotive transport in the late 19th century, Nairobi was just a boggy waterhole for the Maasai people and of little interest to the European colonialists. When the Maasai were devastated by civil wars and a litany of diseases, including rinderpest, cholera and smallpox, the chief of the Maasai was forced to negotiate a treaty with the British allowing them to construct the Mombasa-Uganda railway line right through the heart of the Maasai grazing lands. As the of the East Africa railway was being built, a depot was established on the edge of a small stream known to the Maasai as uaso nairobi (cold water). Nairobi quickly became a tent city and a supply depot, and soon enough developed into the administrative nerve-centre of the Uganda Railway.

With the completion of the railway, the headquarters of the colonial administration was moved from Mombassa to the cooler, small settlement of Nairobi. Now, as the capital of the British Protectorate, the future of the city on the swamp was assured. Once the railway was up and running, wealth began to flow into the city. Today, Nairobi is now a completely modern, colonial creation and almost everything here has been built in the last 100 years. Nairobi is now the largest city between Cairo and Johannesburg. This growth has put enormous pressure on the city's infrastructure.

How does this affect Nairobi residents?

In less than 100 years Nairobi has transformed from an uninhabited plain to metropolis with over 2.5 million inhabitants; at Independence in 1963 the total population was 350,000. With Kenya's population growth rate higher than most others in the world, the effect on Nairobi is alarming with its services already at full stretch and non-existent for those living in informal settlements.

Informal settlements of Nairobi

The slum areas of Nairobi lack connection to city sewerage grid and do not have garbage collection. Most of the waste finds its way into the Nairobi River. A number of the slums are located in wetlands, swamps, flood plains and riparian reserves. The housing structures are semi-permanent, built using iron-sheet, mud, or timber. Majority of the toilet and water taps are detached from living quarters. Clean water is collected from water points (Figure 1), many latrines are situated near streams to facilitate emptying (into the stream, see Figure 2). Two years in Kiambui, ago a young boy slipped while going to the toilet on the river bank, fell into the river and drowned.

As household rubbish is not collected, it is burned (see Figure 3). Roads are not sealed, so it's dusty in the dry season and muddy in the wet season. Houses have no gutters and therefore they do not make use of rainwater – a resource that could be utilised.



Figure 1: Clean water is sold for 1 KSH/ 10 litres (AUS\$1 = 50 KSH – Kenyan Shillings) in Kibera.

The act of 'land grabbing', where a person can buy a title deed by corrupt means, encouraging informal settlements can pop up anywhere without council approval or planning – and therefore no access to running water, electricity or sewerage. People with influence can 'grab land', build a residence and rent it out for an extra income.



Figure 2: A shallow pit toilet being emptied directly into the river at Kiambui



Figure 3: Burning rubbish in Kiambui

Unlike the water situation in Australia, it is access to clean water, rather than lack of water, that is the limiting factor for many communities in Nairobi. For people living in informal settlements, clean water is available from water points. Water is bought and transported in a variety of ways. In most Kenyan society's it is the woman's duty to collect water (though men can also make a living carrying water). Because water is precious, streams are used to do laundry as the cost of water (both money and the time to collect it) forces people to find alternative cheap water sources. Below is a photo of three youth showing me where they used to swim in a natural water hole young boys, now the water is putrid. When the rains flush out the system, it will be used by locals to do laundry.

Current State of Nairobi Rivers

Rivers in Nairobi (probably all over Kenya) are not a high conservation priority. With pressures from an exponentially expanding populations, the 'rivers' I saw in Nairobi were essentially drains for solid

domestic waste (the bulk being plastic bags), liquid waste from industry (eg. blood from abattoirs, oil from street mechanics (known as Jua Kali) and raw sewerage from community pit latrines and household toilets.



Figure 4a: Nairobi Dam (over run with water hyacinth) was once the water supply for Nairobi and was used for recreational sailing and water skiing, and Kibera Slum in the background.



Figure 4b: Nairobi dam in 1968. (photo courtesy of Peter Jackson)

Nairobi Dam (figure 4a) was once a water source for Nairobi (figure 4b). Today it is overrun with water hyacinth and acting as a biological filter for waste from settlements such as Kibera upstream. Other parts of the catchment are also suffering under the population pressures. Waste from four abattoirs at Dagoretti at the headwaters of the Nairobi River is severely polluting the river. The abattoirs have been served a notice from the National Environmental Management Authority (NEMA) to treat waste before it leaves their property or they will be shut down. However, due to it being an important industry in the local area, and politicians reaping some of these financial benefits, the abattoirs have been assured that they won't be shut down even if they don't comply with NEMA's demands.



Figure 5: The Nairobi 'River' (drain might be more accurate), about 200m from the headwaters. The dark 'water' is blood and waste from 4 abattoirs, further down stream untreated human waste is piped into the river. The water table is only a few metres below the surface and vegetable crops for human consumption are being watered from the ground water and river water.

What the Tweed-Kenya Mentoring Desk is doing

With Olita's community development experience and John's engineering experience, the Tweed-Kenya mentoring desk is succeeding to improve living standards and educate the Nairobi community, as well as improving the riverine habitats in the Nairobi River catchment.

Improving living standards by:

- Projects planned to improve water access,
- Projects planned to increase sanitation facilities
- Projects planned to Implement waste recycling (also generates an income/youth employment)

Community Education

Delivered via social and cultural events on topics such as:

- Environment
- HIV/AIDS
- Governance
- Fundraising options

Improving Riverine Habitat

- Inspiring and supporting community clean ups
- Offering advice for tree planting and sourcing trees
- Reducing river pollution by increasing sanitation, implementing waste collection and lobbying industries polluting the river

Networking

- Assisting communication within and among youth groups across Nairobi
- Liaising with government departments – Nairobi City Council, Nairobi Water and Sewerage Company
- Liaising with NGOs – Green Belt Movement, Nature Kenya/Friends of City Park, Maji na Ufanisi
- Collaborating with Universities – Kenyatta University

Bringing TKMP stakeholders from across Nairobi to work together:

In my first week volunteering with the TKMP, the desk coordinator, Olita, hosted a tour of the Nairobi catchment, inviting youth representatives from across Nairobi informal settlements, NEMA, REG and Kenyatta University environmental students. The tour focussed on the upper catchment (Kavuthe River) in the area known as Dagoretti that includes some peri-urban and urban settlements. All participants expressed a positive and eye-opening experience. Many of the youth were surprised to learn that they were not the only ones polluting the river. The tour reinforced to NEMA what the problem was and witnessed the enthusiasm of the youth to get involved. The University students were shocked to discover the degraded state of the river in their own city. It was decided that efforts to rehabilitate the river would focus on this area – carrying out work at the headwaters reduces the risk of upstream events negatively impacting on the work done. This project will act as a pilot – a learning experience and a training venture for those involved to continue the work in other areas of the catchment. The take home message was that 'we are all living downstream' and therefore we need to work together for a better environment.

Inspiring Youth:

- Bringing youth together at social events
- Educating youth about leadership and community rights
- Notifying youth of funding possibilities
- Assisting youth in writing grant applications (e.g. AusAIDs Direct Aid Program)
- Opportunities for attending conferences (e.g. *Riversymposium*)

Lending support to Kenya's National Environmental Management Authority (NEMA)

Unfortunately, NEMA has no power to enforce any environmental laws and therefore cannot reprimand environmental polluters. Currently, NEMA has field officers throughout Kenya (including the Dagoretti

Catchment), but no inspectors. Inspectors will have the power to enforce the environmental laws, but have not yet taken up their positions (they have been gazetted, but not passed through parliament yet) This is has resulted in many unhappy NEMA employees – wanting to enforce laws for a cleaner environment. I met the NEMA field officer in Waithaka, on many occasions, Wilkister. She has not been supplied with a computer, or given an allowance to make field visits. She has many letters from the community complaining about their environment, but is unable to investigate any. The TKMP is supporting Wilkister and other NEMA environmental officers by involving them in the project, introducing them to motivated youth groups and helping out where possible. Wilkister was very impressed with the youth representatives that attended the Dagoretti Catchment Tour with her.



Figure 6: Football field in Kiambui. Land grabbing to build houses has encroached on the playing field. All that is left is a small, uneven area next to the river and the pit latrines.

My Visit as a volunteer

I offered expertise in the area of river rehabilitation. Working closely with Olita, we came up with a project that integrates river health, community health and the youth communities of Nairobi's informal settlements. This will be achieved by using river health as an indicator for community health. It appears that many development projects in the past have focussed on environment, or sanitation or waste or community health as separate entities.. The focus of the Tweed-Kenya Mentoring Program identifies the link between communities and its environment and aims to tackle the problem holistically.

A healthy river can be the indicator of a healthy community. Currently, human waste and household rubbish ends up in the rivers, not only polluting the environment, but posing a health risk to residents as a route of spreading diseases such as diarrhoea, typhoid and cholera. Improved access to clean water will enable residents (especially women and girls) to be more productive, focussing their time on other activities such as education, rather than collecting water. Therefore, a healthy community will have sufficient and effective sanitation and waste management services reducing pollution entering rivers. This program aims to access the youth via their social activities as the avenue for disseminating education and information.

The proposed project will initially focus its effects on a small river reach at the headwaters of the Nairobi River. Youth from many of the slums will take part with the vision that this pilot program can be replicated in other parts of the catchment by the youth participating in the pilot program (having been trained and lessons learned).

Once the project proposal was formulated, Olita and I approached many of the aid agencies in Nairobi including AusAID, the Ford Foundation, UNDP and Veolia Foundation. The aid agency representatives we spoke to about the project were very positive and impressed by the concept, however, getting money from them will be another matter.

Olita introduced me to life in the informal settlements of Nairobi and I met many youth groups, and NGOs (Green Belt movement, Maji na Ufanisi and Friends of City Park) and representatives of NEMA.

I also assisted the youth write funding proposals for AusAID's Direct Aid Program (gives up to US\$5 000) and assisted in the submission of an abstract for the 2006 Riversymposium with sponsorship. An attempt was made to assist a NEMA representative write an abstract for the Riversymposium and apply for sponsorship, but finding time proved to be a problem.

Towards the end of my visit the Zietlow family of Murwillumbah had offered to sponsor the talented young soccer player, Mwangi. I met with Mwangi's family and answered their questions about Australia and the Tweed Shire.

The Youths of Nairobi

Unemployment is very high in Kenya, with many of the youths well educated (some with university degrees), without jobs to go to. To keep themselves occupied, many of them have started initiatives to serve their community.

Youth Groups visited:

Initiative for Sports and Social Acts (ISSA), Kibera

Kiambui Youth Group, Kiambui

Riruta Environmental Group (REG), Riruta

Youth Group focussed on improving water access in the suburb of Satellite, Satellite

Dagoretti4kids – youth looking after young runaways, finding them sponsorship for clothes, food and school fees. This group is in association with Scouts (<http://www.dagoretti4kids.org>)

Red Cross, Waithaka

Many youth volunteering their time as soccer coaches

All youth and groups are keen to take part in helping their communities and its environment. Inspired by the Great Nairobi River Youth Soccer Tournament, the Kiambui Youth group initiated a community clean up and tree planting day

Organisations visited

NEMA

Green Belt Movement

Ford Foundation

United Nations Development Program

Friends of the Nairobi Arboretum

Nature Kenya/Friends of City Park

Riruta Environmental Group

Maji na Ufanisi

Kenyatta University – Lecturers and students

AusAID

Carolina for Kibera

Thika Rotary Group

One concern of the program, is the lack of government support. However, the new government is improving. I think with community education, they can be empowered to demand (and demonstrate locally if needed) industries (such as the abattoirs at Dagoretti) in their community to stop polluting their environment.

Future Project Considerations:

How can domestic waste, such as plastic bags and household waste, be kept out of the rivers? Litter traps need to be considered when new drains are designed/installed. Can they be retrofitted to old drains?

How should non-biodegradable plastic bags be disposed of safely? At the moment the Kenyans burn them. Perhaps an air monitoring component should be included in the program?? Many community members near rubbish burning areas suffer from respiratory illnesses or irritations.

Potential Nairobi-Tweed community links not yet made:

Links with Red Cross could be possible and links with scouting groups could support programs like Dagoretti4kids.

PROBLEMS faced by the TKMP:

The **high cost** of getting uniforms out of customs means that a uniform donation might also need a monetary donation. The uniforms are very appreciated and held in high regard by the youth.

Lack of money for interventions – there is more than enough motivated and capable people to carry out any project the Tweed-Kenya Mentoring program requires, but money is lacking. Fundraising and approaching the aid agencies is needed.

Managing expectations of the youth that are associated with the TKMP. Many are very eager and willing to help, but with limited funds for interventions, Olita's challenge is to keep them motivated, without raising their expectations.

Special Thanks to Mike Rayner for helping organise my volunteering, the Ogonjo Family for showing me the real Nairobi and keeping me safe, Rose and her family for accommodation, and Rotary groups – X and Y. And especially Olita for teaching me so much about Nairobi, community development and myself.

References

UN statistics (<http://hdr.undp.org/statistics/>):

Australia - <http://hdr.undp.org/statistics/data/countries.cfm?c=AUS>

Kenya - <http://hdr.undp.org/statistics/data/countries.cfm?c=KEN>

Ajua



Ajua is a board game found all over east Africa. Ajua is the name given to the game as it is played in western Kenya and eastern Uganda. Ajua is played as national game in Kenya Inter Municipality Cultural and Sport Association (KIMSCA) and is now also played at regional level. The board is made of piece of wood and has eight holes on both sides. At the end of the sides there is a larger hole called a banker, where a person keeps the marbles that he has won instead of carrying them on his hands and also keeps the markers.

The board is split in two and there are two players, the eight holes closest to you are yours and the other eight are your opponent's. Markers are used for marking your marbles on the opponent's side during play, so that the opponent does not pick them up.

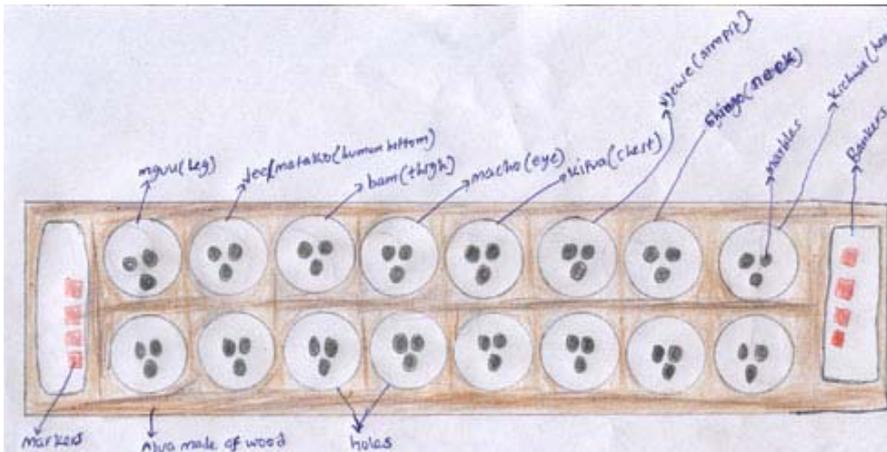
The aim is to have the most balls at the end of the game. The game finishes when neither play can continue to move balls around the board.

To start, three marbles are placed in each hole to establish you both have the required and equal number of balls. You then make a formation (varying the number of balls in your holes, holes can be left empty) and carry enough balls in your hand to ensure you pick up balls from your

opponents hole containing balls (this changes each time, depending on their formation).

The winner is usually the best of five games. Games are counted with a dice kept at your bank (the bank on your left).

The holes on the board called mbiro, have different names as shown below



- First hole "mguu" - leg.
- Second hole "jee/matako" - buttocks.
- Third hole "bam" - thigh.
- Fourth "macho" - an eye.
- Fifth hole "kifua" - chest.
- Sixth hole "nyewe" - armpit.
- Seventh hole "shingo" - neck.
- Eighth hole "kichwa" - head.

The balls are called ngeta. Ngeta are seeds from a particular tree in Kenya

How to Play Ajua:

Always start on your left and continue in a clockwise direction.

After formations have been made, pick up enough balls that enables you to deposit a ball in each hole and ends on an opponents hole with a collection of balls. Pick up all the balls and continue to deposit a ball in each hole, starting from the hole after the hole that you picked up from. If you run out of balls on a hole with a collection of balls, pick up all the balls (eat) and continue to deposit balls, until you run out of balls (sleep or marry).

Ajua actions explained:

Eating – If you finish (run out of balls in your hand) on an empty hole on your side and the hole opposite (opponents) has balls you 'eat' (pick up and claim) the balls in your opponents hole – all the balls in holes of your opponents that correspond to empty holes on your side. **Sleep** – when you finish (run out of balls in your hand) on an empty hole, you sleep. It is now your opponents turn. **Marry** – when you finish on your opponents side (run out of balls in your hand) and there is one ball in that hole. You 'marry' and mark the hole as yours. All future balls deposited in that hole remain there (or in your bank) and are yours - your opponent can not pick these up. NB – no one can 'marry' until either player has 'eaten'.

To take your turn again, pick up from the most left hole on your side (remember you can't pick up from married holes)